



DEPARTMENT OF
HOUSING AND HUMAN CONCERNS
COUNTY OF MAUI

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February 13, 2014

Director
Office of Environmental Quality Control
Department of Health, State of Hawai'i
235 South Beretania Street, Room 702
Honolulu, Hawai'i 96813

FILE COPY

MAR 08 2014

OFFICE OF ENVIRONMENTAL QUALITY CONTROL
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PROCESSED

Dear Director:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR PROPOSED HALE MAHAOLU EWALU SENIOR RESIDENTIAL HOUSING PROJECT AT TMK (2)2-3-066:019 AND 020, PUKALANI, MAKAWAO, MAUI, HAWAII

The County of Maui, Department of Housing and Human Concerns has reviewed the Draft Environmental Assessment (EA) for the subject project, and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish notice of availability for this project in the next available Office of Environmental Quality Control (OEQC) Environmental Notice.

Enclosed is a completed OEQC Publication Form, two copies of the DEA-AFONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word. If there are any questions, please contact Colleen Suyama of Munekiyo & Hiraga, Inc. at (808) 244-2015 if you have any questions.

Sincerely,

JO-ANN T. RIDAO
Director of Housing and Human Concerns

Attachments

- xc: Roy Katsuda, Hale Mahaolu (w/one copy of Draft EA)
- Earl Kono, Riecke, Sunnland, Kono Architects, Ltd. (w/one copy of Draft EA)
- Colleen Suyama, Munekiyo & Hiraga, Inc. (w/out attachments)

K:\DATA\HaleMahaolu\KulamaluSrHsnglDraft EA\DraftEA DHHDept.trans.doc

AGENCY ACTIONS
SECTION 343-5(B), HRS
PUBLICATION FORM (FEBRUARY 2013 REVISION)

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

14 FEB 24 PM 12:52

RECEIVED

Project Name: Hale Mahaolu Ewalu Senior Residential Housing Project
Island: Maui
District: Makawao
TMK: (2)2-3-066:019 and 020
Permits: 201H Approval, Construction Permits
Proposing/Determination Agency: County of Maui
(Address, Contact Person, Telephone) Department of Housing and Human Concerns
2200 Main Street, Suite 546, Wailuku, Hawaii 96793;
Contact Person: Jo Ann T. Ridao, Director; Telephone: (808) 270-7805

Accepting Authority: Not Applicable
(for EIS submittals only)

Consultant: Munekiyo & Hiraga, Inc.
(Address, Contact Person, Telephone) 305 High Street, Suite 104, Wailuku, Hawaii 96793: Contact Person: Colleen Suyama, Senior Associate; Telephone: (808) 244-2015

Status (check one only):

- DEA-AFNSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day comment period ensues upon publication in the periodic bulletin.
- FEA-FONSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- FEA-EISPN** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day consultation period ensues upon publication in the periodic bulletin.
- Act 172-12 EISPN** Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- DEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
- FEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- Section 11-200-23 Determination** The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.
- Section 11-200-27 Determination** The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously

accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

__Withdrawal (explain)

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

The Hale Mahaolu Ewalu Senior Residential Housing Project proposes to utilize the existing grade and fill on the project site and construct three (3) two- and three-story apartment buildings containing one- and two-bedroom units for seniors and a three-bedroom unit for a resident manager totaling 61 housing units. Also, a one-story 7,518 sq. ft. senior center, one-story 4,428 sq. ft. adult day care center, 83 parking stalls, two (2) loading zones, and landscaping are planned. Previously identified burials, presumed to be of Chinese origin, are located on Parcel 19. The burial site will be kept in situ with a landscaped open space buffer zone separating it from the housing units. The buffer zone will be in accordance with a preservation plan approved by the State Historic Preservation Division (SHPD).

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Draft Environmental Assessment

HALE MAHAOLU EWALU SENIOR RESIDENTIAL HOUSING PROJECT (TMK (2)2-3-066:019 and 020)

**Prepared for:
Hale Mahaolu**

**Approving Agency:
Department of Housing and Human Concerns**

February 2014

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CONTENTS

	<u>Page</u>
List of Acronyms	i
Executive Summary	iii
I. PROJECT OVERVIEW	1
A. PROJECT LOCATION, CURRENT LAND USE, AND OWNERSHIP	1
B. BACKGROUND	1
C. PROPOSED ACTION	4
D. PROJECT NEED	9
E. CHAPTER 343, HAWAII REVISED STATUTES REQUIREMENTS	11
F. PROJECT COSTS AND SCHEDULE.....	11
II. DESCRIPTION OF EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES.....	12
A. PHYSICAL ENVIRONMENT.....	12
1. Surrounding Land Uses.....	12
2. Climate.....	13
3. Topography and Soil Characteristics	14
4. Flood and Tsunami Hazards	17
5. Flora and Fauna.....	17
6. Wetlands and Streams.....	20
7. Archaeological and Historic Resources	20
8. Cultural Resources	23
9. Air and Noise Quality	27
10. Scenic and Open Space Resources	28
11. Traditional Mountain Access.....	28
B. SOCIO-ECONOMIC ENVIRONMENT.....	29
1. Regional Setting.....	29
2. Population	29
3. Economy and Labor Force.....	30
4. Housing.....	31
C. PUBLIC SERVICES	32
1. Police.....	32
2. Fire	32
3. Medical Services.....	33

4.	Solid Waste	33
5.	Education	34
6.	Recreational Facilities.....	34
D.	INFRASTRUCTURE	35
1.	Roadways.....	35
2.	Water.....	36
3.	Wastewater.....	37
4.	Drainage.....	38
5.	Electrical, Telephone Services and Cable Television.....	39
E.	CUMULATIVE AND SECONDARY IMPACTS.....	39
III.	RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS	41
A.	STATE LAND USE DISTRICTS	41
B.	HAWAII STATE PLAN.....	41
C.	GENERAL PLAN OF MAUI COUNTY	43
1.	Countywide Policy Plan.....	44
2.	Maui Island Plan	46
	POPULATION	47
D.	MAKAWAO-PUKALANI-KULA COMMUNITY PLAN.....	49
E.	COUNTY ZONING.....	52
F.	COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES.....	54
IV.	SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED	63
V.	ALTERNATIVES TO THE PROPOSED ACTION.....	64
A.	PREFERRED ALTERNATIVE	64
B.	NO ACTION ALTERNATIVE.....	64
C.	DEFERRED ACTION ALTERNATIVE.....	64
D.	DESIGN ALTERNATIVES.....	64
VI.	IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES	65
VII.	SIGNIFICANCE CRITERIA ASSESSMENT	66
VIII.	LIST OF PERMITS AND APPROVALS	71
IX.	AGENCIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS.....	72
X.	REFERENCES	i

LIST OF FIGURES

	<u>Page</u>
Figure 1. Regional Location Map.....	2
Figure 2. Site Location Map.....	3
Figure 3. Conceptual Site Plan.....	5
Figure 4. Typical Senior Residential Housing	6
Figure 5. Senior Center	7
Figure 6. Adult Day Care	8
Figure 7. Soil Association Map.....	15
Figure 8. Soil Classification Map.....	16
Figure 9. State Land Use District Classifications.....	42
Figure 10. Community Plan Land Use Map.....	50

LIST OF APPENDICES

Appendix A.	Ordinance No. 2623
Appendix A-1.	Department of Planning Letter Dated November 14, 2012
Appendix B.	Burial Preservation Plan
Appendix B-1.	October 23, 2013 Letter from State Historic Preservation Division
Appendix C.	Development Plans
Appendix C-1.	Kulamalu LLC Letter dated October 14, 2013
Appendix D.	Market Study
Appendix E.	Preliminary Engineering Report
Appendix F.	Preliminary Drainage Report
Appendix G.	Botanical and Fauna Survey
Appendix H.	Cultural Interviews
Appendix I.	Traffic Assessment

List of Acronyms

AFNSI	Anticipated Findings of No Significant Impact
AMI	Area Median Income
AIS	Archaeological Inventory Survey
ARS	Archaeological Reconnaissance Survey
BMP	Best Management Practice
CATV	Cable Television
CHAS	Comprehensive Housing Affordability Strategy
CFS	Cubic Feet Per Second
DAR	Division of Aquatic Resources
DBEDT	Department of Business Economic Development and Tourism
DCI	Dowling Company, Inc.
DLIR	Department of Labor and Industrial Relations
DLNR	Department of Land and Natural Resources
DWS	Department of Water Supply
EA	Environmental Assessment
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Findings of No Significant Impact
GPD	Gallons per Day
GPM	Gallons per Minute
HAR	Hawaii Administrative Rules
HRS	Hawaii Revised Statutes
HWSC	Hawaii Water Service Company
HCZMP	Hawaii Coastal Zone Management Program
ISWM	Integrated Solid Waste Management
KnB	Keahua Silty Clay Loam
KnhC	Keahua Cobbly Silty Clay Loam
MLIBC	Maui Lanai Islands Burial Council
MG	Million Gallon
MGD	Million Gallons per Day
MIP	Maui Island Plan
PER	Preliminary Engineering Report
PHRI	Paul H. Rosendahl, Ph.D., Inc.
RGB	Rural Growth Boundary
ROW	Right-of-Way
rRK	Rock Land
rRR	Rough Broken Land
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Places
SMA	Special Management Area
STB	Small Town Boundary
TMK	Tax Map Key
UGB	Urban Growth Boundary

UHMC University of Hawaii Maui College
USDA U. S. Department of Agriculture
USFWS U.S. Fish and Wildlife Service
WTP Water Treatment Plant

Executive Summary

Project Name: Hale Mahaolu Ewalu Senior Residential Housing Project

Type of Document: Draft Environmental Assessment

Legal Authority: Chapter 343, Hawaii Revised Statutes

Anticipated Determination: Anticipated Finding of No Significant Impact (AFNSI)

Applicable Environmental Assessment review “Trigger”: Use of County funds

Location: Pukalani, Makawao District, Maui
TMK (2)2-3-066:019 and 020

Landowner: Hale Mahaolu

Applicant: Hale Mahaolu
200 Hina Avenue
Kahului, Hawaii 96732
Contact: Roy Katsuda, Executive Director
Telephone: (808) 872-4100

Approving Agency: County of Maui
Department of Housing and Human Concerns
One Main Plaza, Suite 546
2200 Main Street
Wailuku, Hawaii 96793
Contact: Jo-Ann T. Ridao, Director
Telephone: (808) 270-7805

Consultant: Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793
Contact: Colleen Suyama, Senior Associate
Phone: (808) 244-2015

Project Summary: Hale Mahaolu is proposing the Hale Mahaolu Ewalu Senior Residential Housing Project on approximately

4.0 acres of land identified as Tax Map Key (2) 2-3-066:019 and 020 (“project site”), Pukalani, Makawao District, Maui, Hawaii. The project site is located at the southeast corner of the Ohia Ku Street and Ohia Lehua Place intersection. Access to the project site will be from Ohia Ku Street. North of the project site is the Kulamalu Town Center, east is an existing parking lot and park, south is an un-named tributary of Kaluapulani Gulch and to the west are the University of Hawaii Institute of Astronomy and Kulamalu Hilltop Subdivision.

The Hale Mahaolu Ewalu Senior Residential Housing Project proposes to utilize the existing grade and fill on the project site and construct three (3) two- and three-story apartment buildings containing one- and two-bedroom units for seniors and a three-bedroom unit for a resident manager totaling 61 housing units. Also, a one-story 7,518 sq. ft. senior center, one-story 4,428 sq. ft. adult day care center, 83 parking stalls, two (2) loading zones, and landscaping are planned. Previously identified burials, presumed to be of Chinese origin, are located on Parcel 19. The burial site will be kept in situ with a landscaped open space buffer zone separating it from the housing units. The buffer zone will be in accordance with a preservation plan approved by the State Historic Preservation Division (SHPD).

The property is located within the State Urban District. The property is designated as Public/Quasi-Public by the Makawao-Pukalani-Kula Community Plan and is zoned “P1, Public/Quasi-Public” district.

The Hale Mahaolu Ewalu Senior Residential Housing Project proposes to seek funding through the County of Maui. This is a trigger for compliance with Chapter 343, Hawaii Revised Statutes (HRS) environmental review requirements. As such, an Environmental Assessment (EA) is being prepared in accordance with Chapter 343, HRS and Chapter 200 of Title 11, Hawaii Administrative Rules (HAR).

The proposed project is being processed in accordance with Section 201H-38, HRS. Section 201H-38, HRS promotes the delivery of affordable housing by

allowing the exemption of endorsed projects from
“...all statutes, ordinances, charter provisions, and
rules of any governmental agency relating to planning,
zoning, construction standards for subdivisions,
development, and improvement of land and the
construction of units thereon.”

I. PROJECT OVERVIEW

I. PROJECT OVERVIEW

A. PROJECT LOCATION, CURRENT LAND USE, AND OWNERSHIP

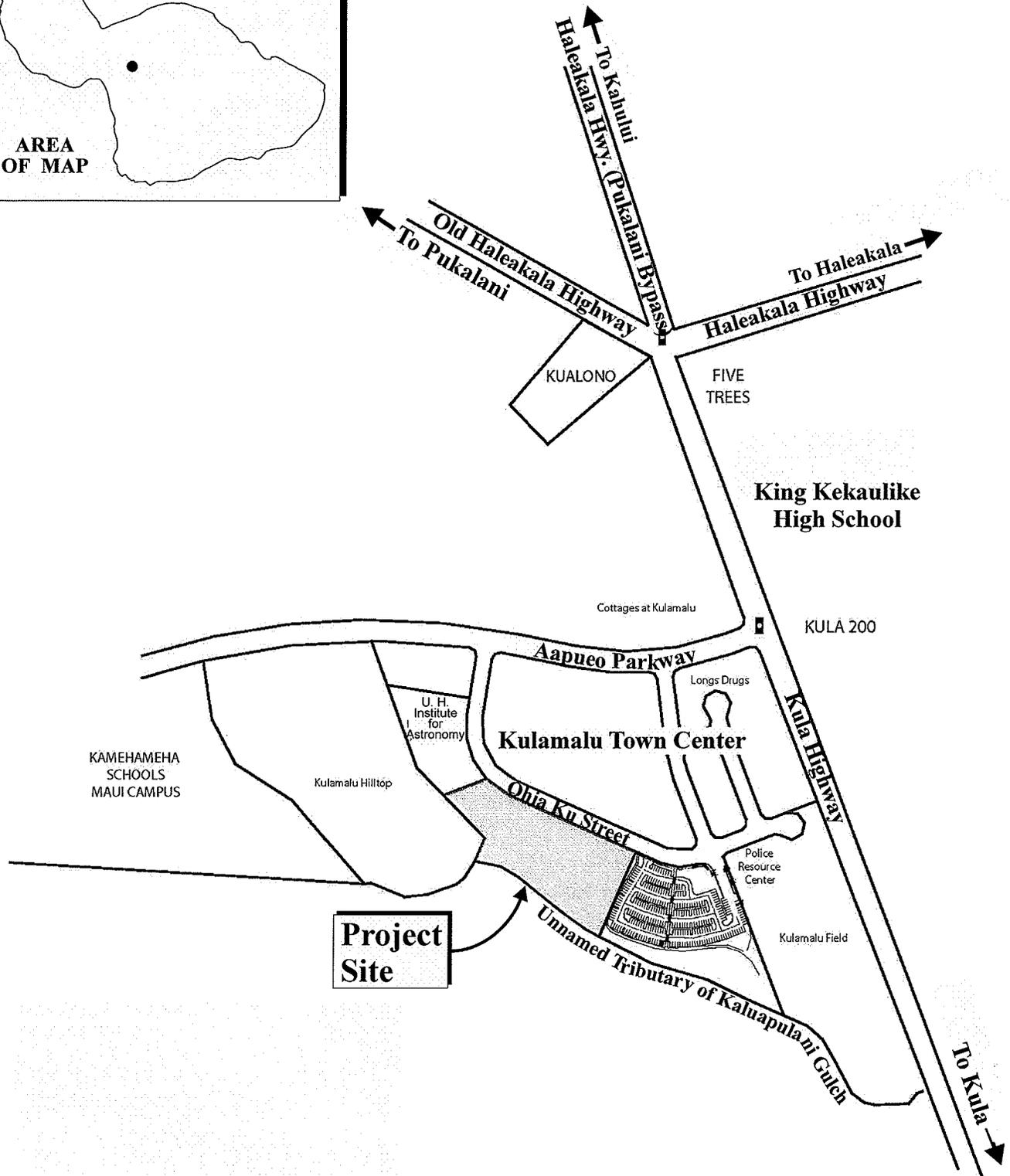
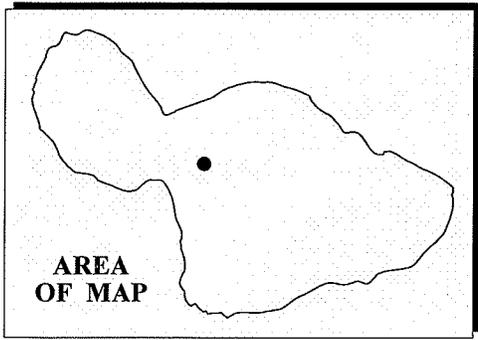
The applicant, Hale Mahaolu is proposing the Hale Mahaolu Ewalu Senior Residential Housing Project on approximately 4.0 acres of land identified as Tax Map Key (2) 2-3-066:019 and 020 (hereafter identified collectively as “Project Site” or “Parcel 19” and “Parcel 20”), Pukalani, Makawao District, Maui, Hawaii. The project site is currently vacant and located at the southeast corner of the Ohia Ku Street and Ohia Lehua Place intersection. Access to the project site will be from Ohia Ku Street. North of the project site is the Kulamalu Town Center, to the east is an existing parking lot and park, south of the site is an un-named tributary of Kaluapulani Gulch and to the west are the University of Hawaii Institute for Astronomy and Kulamalu Hilltop Subdivision. See **Figure 1** and **Figure 2**.

The project site is located within the State Urban District. The properties are designated as Public/Quasi-Public by the Makawao-Pukalani-Kula Community Plan and are zoned “P1, Public/Quasi-Public” district by Ordinance No. 2623 adopted on December 16, 1997. See **Appendix “A”**. By letter dated November 14, 2012 the Department of Planning confirmed that the conditions of zoning have been complied with. See **Appendix “A-1”**.

Hale Mahaolu is a nonprofit organization dedicated to providing quality affordable housing in Maui County. Hale Mahaolu currently owns and/or manages approximately 1,000 units of affordable elderly housing throughout Maui County.

B. BACKGROUND

The project site is located within the Kulamalu Commercial Subdivision developed by the Dowling Company, Inc. (DCI). The Kulamalu Commercial Subdivision includes the Kulamalu Town Center, Kulamalu Field and parking lot, University of Hawaii Institute for Astronomy, and Kulamalu Hilltop Subdivision. Refer to **Figure 1** and **Figure 2**. In 1997, prior to development of the Kulamalu Commercial Subdivision, DCI obtained land use amendments for the project. Amendments from the Makawao-Pukalani-Kula Community Plan were obtained through Ordinance Nos. 2619, 2620 and 2621. The project site is designated “P, Public/Quasi-Public”.



Source: Dowling Company, Inc.

Figure 1

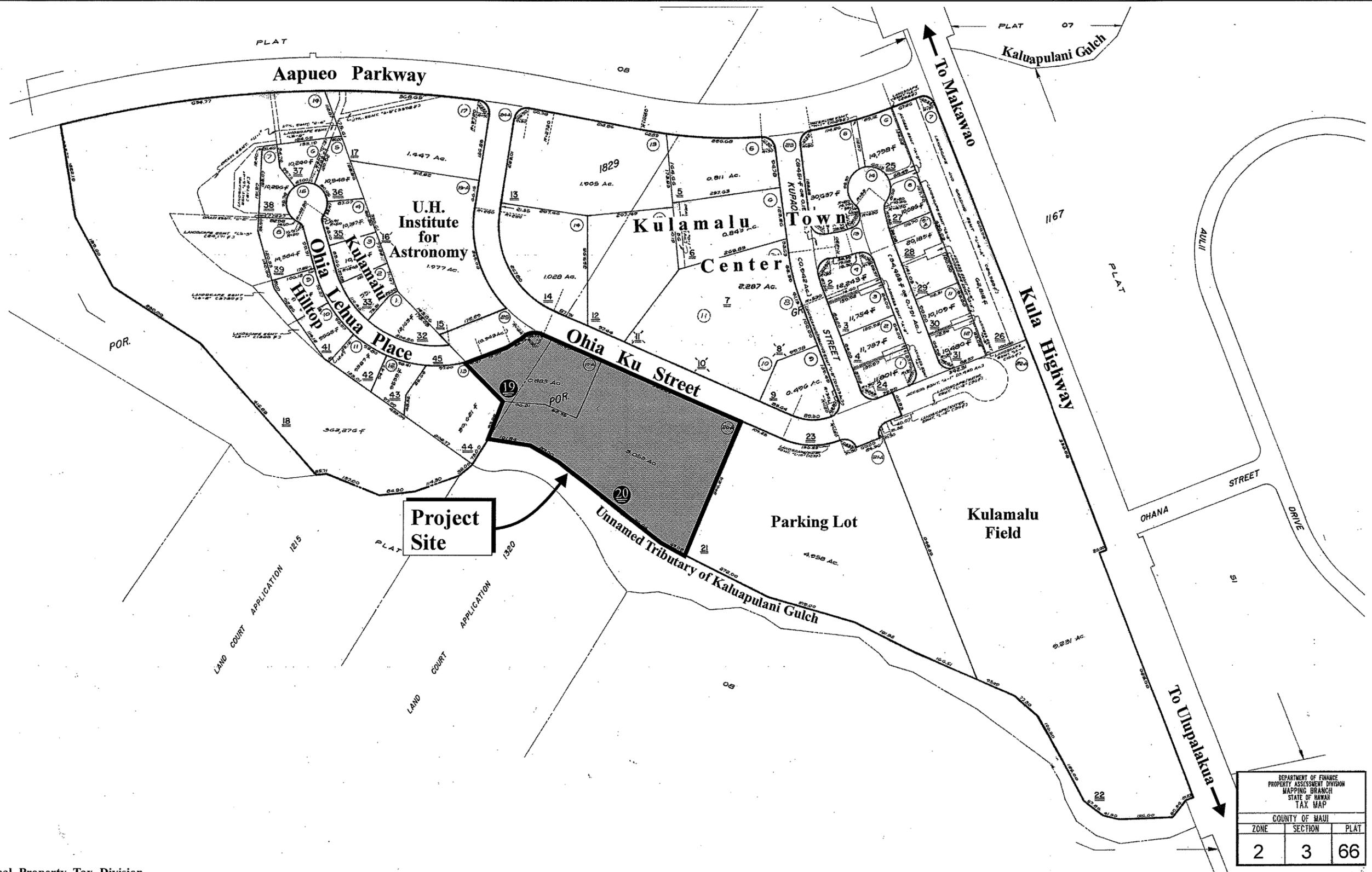
Hale Mahaolu Ewalu Senior Residential Housing Regional Location Map

NOT TO SCALE



Prepared for: Hale Mahaolu

MUNEKIYO & HIRAGA, INC.



DEPARTMENT OF FINANCE
PROPERTY ASSESSMENT DIVISION
MAPPING BRANCH
STATE OF HAWAII
TAX MAP

COUNTY OF MAUI		
ZONE	SECTION	PLAT
2	3	66

Source: County of Maui, Real Property Tax Division

Figure 2

Hale Mahaolu Ewalu Senior Residential Housing Site Location Map

NOT TO SCALE



Prepared for: Hale Mahaolu



Concurrently, changes in zoning from the “R-2, Residential District” to “A-1, Apartment District” (Ordinance No. 2618), “P-1, Public/Quasi-Public District” (Ordinance No. 2623), “PK-1, Park District” (Ordinance No. 2625) and “BCT, Country Town Business District” (Ordinance No. 2626); from the “R-2, Residential District” and “Open Space District” to “P-1, Public/Quasi-Public District” (Ordinance No. 2622); and from the “Open Space District” to “R-2, Residential District” (Ordinance No. 2624). The project site is zoned “P-1, Public/Quasi-Public District” by Ordinance No. 2623.

Construction of the Kulamalu Commercial Subdivision included the infrastructure improvements, fronting the project site as well as previous grading work, including the existing fill material. Also, during subdivision construction the burials located on the project site were inadvertently discovered. Consultation was conducted with the State Historic Preservation Division (SHPD) and the Maui/Lanai Island Burial Council to develop a Burial Preservation Plan. See **Appendix “B”**.

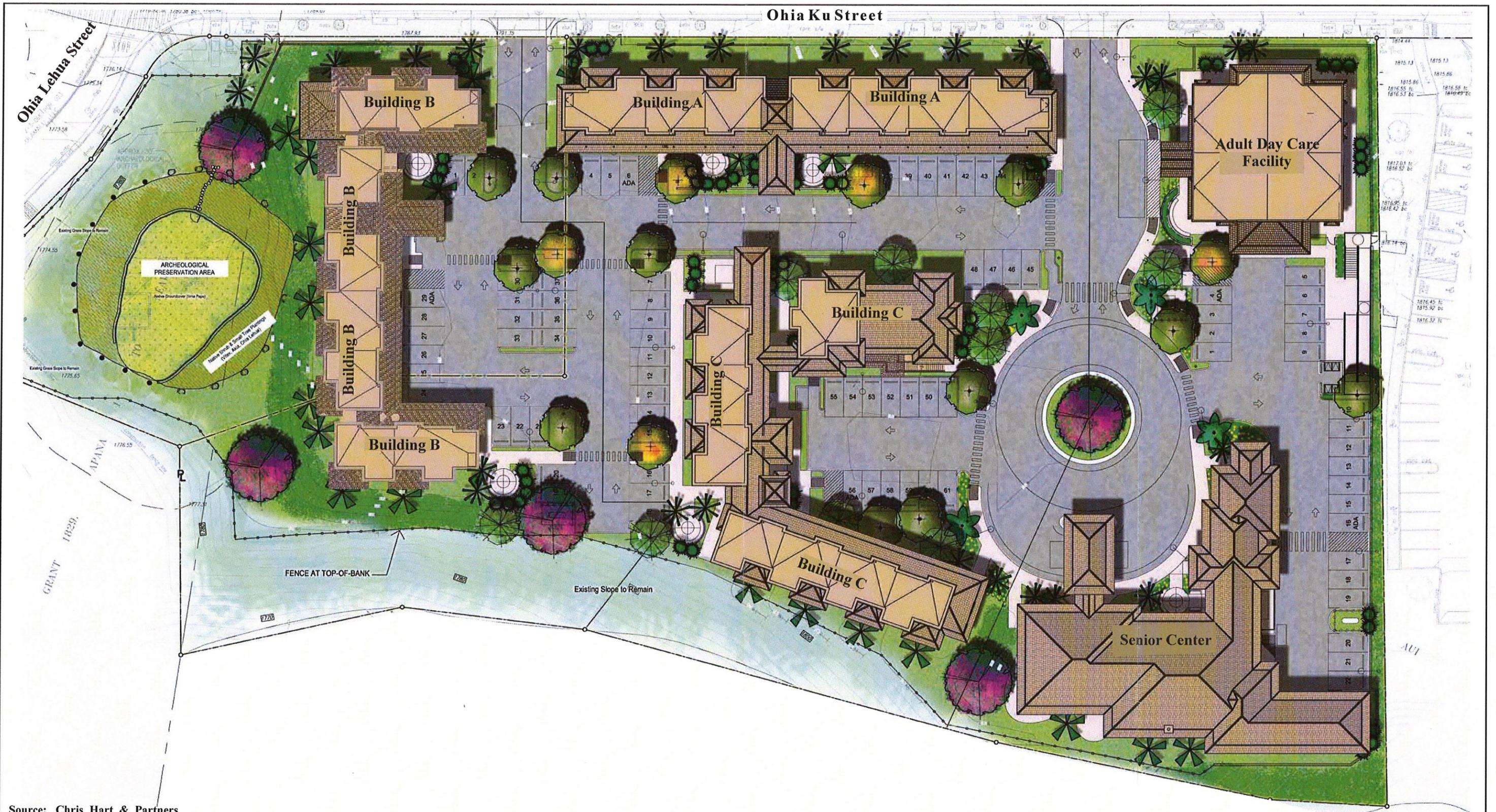
C. PROPOSED ACTION

The Hale Mahaolu Ewalu Senior Residential Housing Project proposes to utilize the existing grade and fill on the project site and proposes the construction of three (3) two- and three-story apartment buildings containing one- and two-bedroom units for seniors and a three-bedroom unit for a resident manager totaling 61 housing units. Also, a one-story 7,518 sq. ft. senior center, one-story 4,428 sq. ft. adult day care center, 83 parking stalls, two (2) loading zones, and landscaping are planned. See **Figure 3, Figure 4, Figure 5, Figure 6, and Appendix “C”**.

Previously identified burials, presumed to be of Chinese origin, are located on Parcel 19. The burial site will be kept in situ with a landscaped open space buffer zone separating it from the housing units. The buffer zone will be in accordance with a preservation plan approved by the State Historic Preservation Division (SHPD). Refer to **Appendix “B”**.

The Hale Mahaolu Ewalu Senior Residential Housing Project has been developed to meet the criteria for a Section 201H-38, HRS project by the applicant. Section 201H-38, HRS promotes the delivery of affordable housing by allowing the exemption of a project from:

...all statutes, ordinances, charter provisions, and rules of any governmental agency relating to planning, zoning, construction standards for subdivisions, development and improvement of land and the construction of units thereon.



Source: Chris Hart & Partners

Figure 3

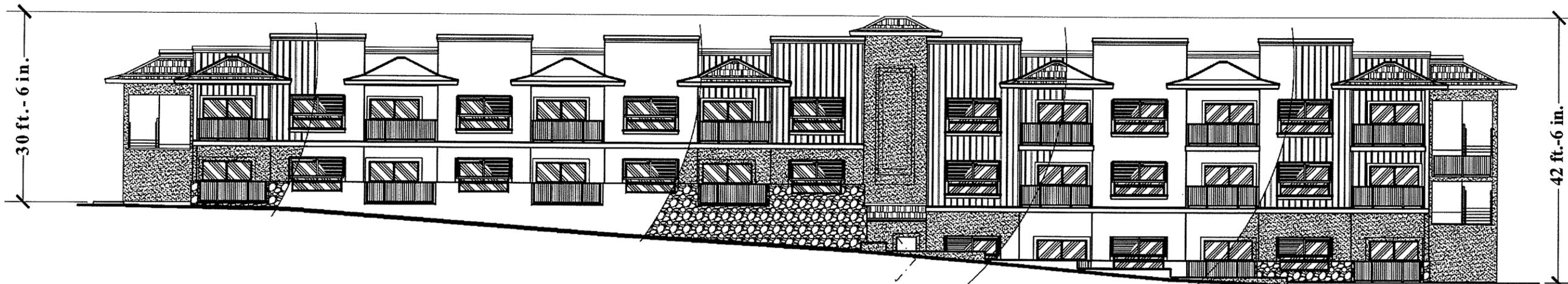
Hale Mahaolu Ewalu Senior Residential Housing
Conceptual Site Plan

NOT TO SCALE

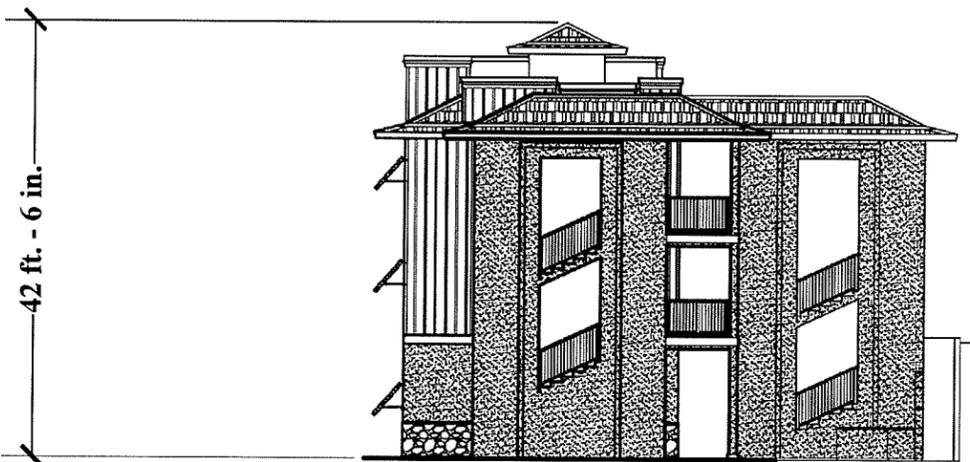


Prepared for: Hale Mahaolu

MUNEKIYO & HIRAGA, INC.



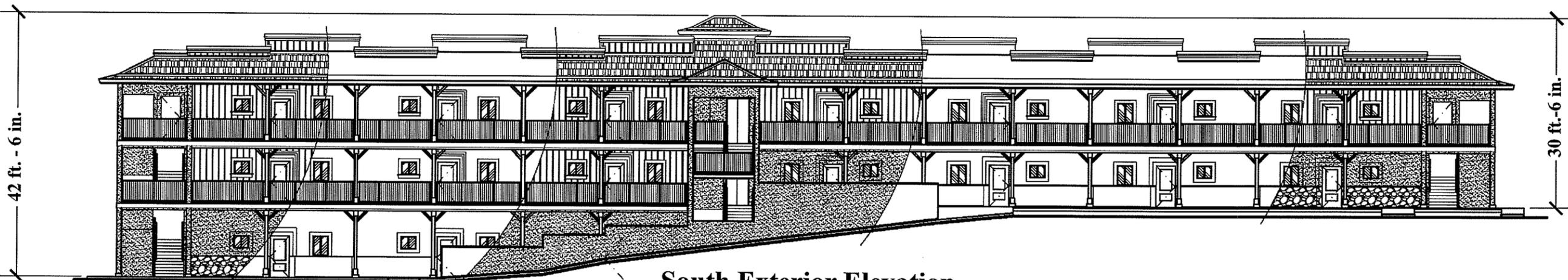
North Exterior Elevation



West Exterior Elevation



East Exterior Elevation



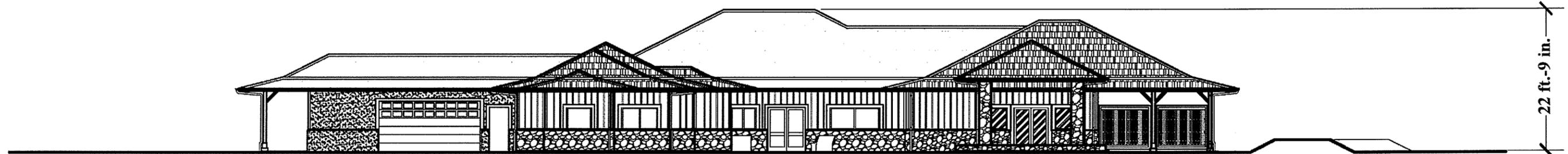
South Exterior Elevation

Source: Riecke Sunland Kono Architects, Ltd.

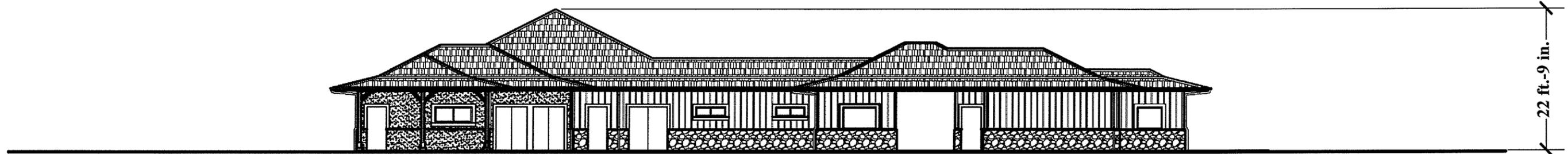
Figure 4

Hale Mahaolu Ewalu Senior Residential Housing
 Typical Senior Residential Housing

NOT TO SCALE



North Exterior Elevation



East Exterior Elevation



West Exterior Elevation



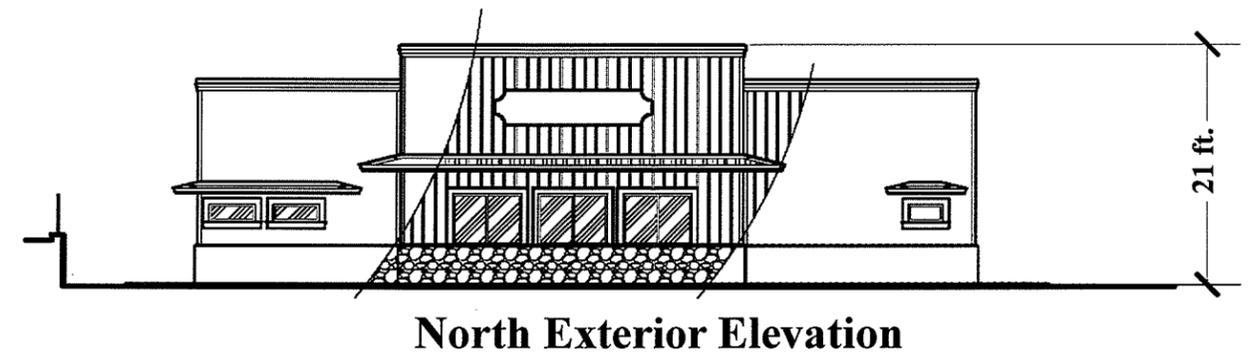
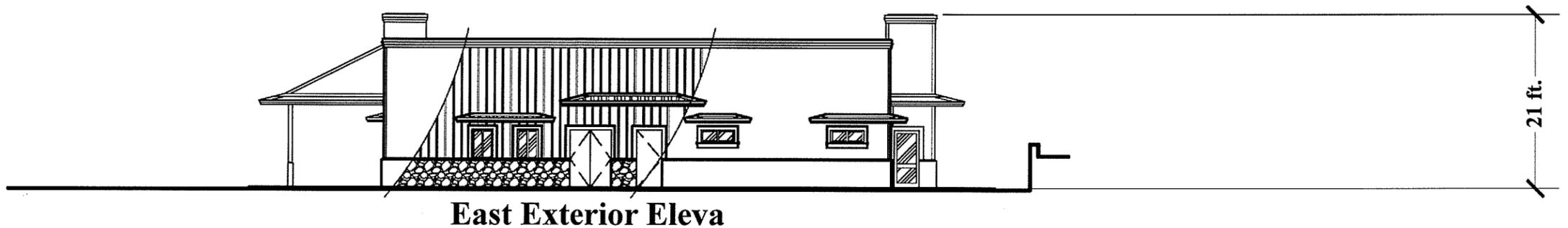
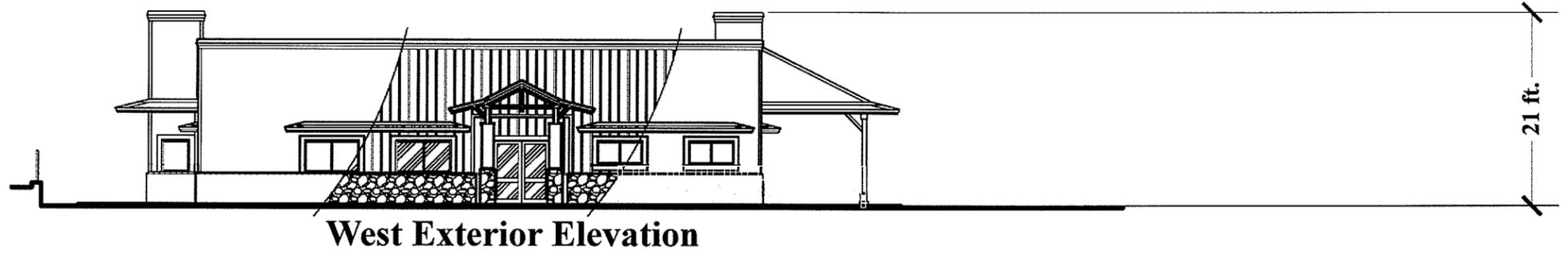
South Exterior Elevation

Source: Riecke Sunnland Kono Architects, Ltd.

Figure 5

**Hale Mahaolu Ewalu Senior Residential Housing
Senior Center**

NOT TO SCALE



Source: Riecke Sunland Kono Architects, Ltd.

Figure 6

**Hale Mahaolu Ewalu Senior Residential Housing
Adult Day Care**

NOT TO SCALE

As such, a Section 201H-38, HRS application will be filed with the Maui County Council to request exemptions from County requirements in order to support the timely implementation of the project, without compromising public health, safety, or welfare considerations.

D. PROJECT NEED

Population trends show that growth in the resident population will continue over the next 20 years. In 2010, the island of Maui's resident population was 144,444 people and is expected to grow by 29 percent to 186,300 residents by 2030. Households on the island are expected to grow at an even faster rate, increasing by 40 percent to 70,100 households in 2030. The island's elderly population is expected to follow the population and household trends over the next few years. In 2010, seniors age 65 years and older comprised 13 percent of all residents on the island. Seniors living alone represented 7 percent of all households on the island in 2010 (U.S. Census Bureau, 2010). Of seniors age 62 and older, 27 percent, or approximately 3,150 households, are renters. Senior renter households are lower-income and many experience housing cost burden. Comprehensive Housing Affordability Strategy (CHAS) data published by the U.S. Department of Housing and Urban Development for the County of Maui indicates that 73 percent of elderly (62 years and older) renter households are extremely low-, very low-, or low-income. The majority of extremely low-, very low- and low-income elderly households are cost burdened, meaning they pay more than 30 percent of their income towards housing costs (U.S. HUD, 2006-2010). See **Appendix "D"**.

The Hawaii Housing Planning Study 2011 for the County of Maui identified the need for 412 new units of senior housing between 2012 and 2016, including 134 multi-family rental units for households earning less than 80 percent of area median income (AMI). See **Table 1**.

Table 1. Needed Elderly Housing for Maui County, 2012 Through 2016

	HUD Income Classification		
	Under 80 Percent	Over 80 Percent	Total
Ownership Units			
Single-Family	50	62	112
Multi-Family	10	45	55
Rental Units			
Single-Family	54	0	54
Multi-Family	134	57	191
Total	248	164	412
Sources: Housing Demand Survey, 2011 and Hawaii Housing Model, 2011. Note: Needed units are those units needed to eliminate pent-up demand and accommodate new household formation, by preferred tenancy and unit type.			

According to the Hawaii Public Housing Authority, state-wide elderly families account for one-fifth of households on the public housing waitlist. The Hawaii Department of Business, Economic Development and Tourism (DBEDT) predicts that by 2030 there will be an additional 142,000 elderly households across Hawaii. In order to accommodate the large number of elderly residents, DBEDT has forecasted the state-wide need for close to 55,000 new housing units equipped with amenities designed to serve elderly households by 2030. Within Maui County, it is projected that by 2030 there will be 6,979 new elderly households which will require approximately 2,644 new housing units, of which 673 units are estimated to be rental units (Hawaii Housing Planning Study, 2011).

There is a limited number of affordable senior housing properties on the island of Maui with minimal vacancy. There are nine (9) affordable senior housing properties providing 677 studio and one-bedroom units. The majority of these units are restricted for persons age 62 years and older and most are reserved for households earning 50 percent of AMI or less. Vacancies typically occur as a result of normal turnover only and there is a lengthy waitlist of at least 100 people for each property. Kalama Heights and Roselani Place, the only two (2) market rate senior housing properties on the island, offer a distinct level of service and are at a much higher price point than the proposed Hale Mahaolu Ewalu Senior Housing Project. Refer to **Appendix “D”**.

The demand for affordable senior housing is high due to the number of waitlisted households, the growth of the elderly population, and seniors that fall within the low- and very low-income levels. Refer to **Appendix “D”**.

The 40-unit two-story Hale Mahaolu Eha project on Makawao Avenue is the only rental housing project available to seniors in the Makawao-Pukalani-Kula region. Also, the nearest adult day care center is the Hale Mahaolu Elima Senior Housing project located in Kahului, approximately 12 miles away. As the upcountry population ages, there is a need for assisted senior living facilities in the region. The proposed project will provide additional senior residential housing and much needed adult day care center and senior community center.

The proposed project will be designated for 100 percent affordable elderly housing. Preliminarily, the affordable elderly housing units will be available to those persons age 62 years and older with an annual income equal to or less than 60 percent of AMI.

E. CHAPTER 343, HAWAII REVISED STATUTES REQUIREMENTS

The project proposes to seek funding through the County of Maui. As such, the proposed action is a trigger for the preparation and processing of an Environmental Assessment (EA) pursuant to Chapter 343, Hawaii Revised Statutes (HRS). Based on the scope of the proposed project, this EA is being prepared in accordance with Chapter 200 of Title 11, Department of Health Administrative Rules, Environmental Impact Statement Rules. Accordingly, this document addresses the project’s technical characteristics, environmental impacts and alternatives, and advances findings and conclusions relative to the significance of the proposed action. The approving agency for the EA is the County of Maui, Department of Housing and Human Concerns.

F. PROJECT COSTS AND SCHEDULE

The estimated cost for the Hale Mahaolu Ewalu Senior Residential Housing Project is approximately \$25 million. The implementation of the project will commence after the required construction plan approvals and permits are secured. Assuming all necessary approvals are obtained, construction is expected to begin in April 2015 and constructed in phases depending on the availability of funds.

**II. DESCRIPTION OF
EXISTING CONDITIONS,
POTENTIAL IMPACTS, AND
PROPOSED MITIGATION
MEASURES**

II. DESCRIPTION OF EXISTING CONDITIONS, POTENTIAL IMPACTS, AND PROPOSED MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Surrounding Land Uses

a. Existing Conditions

The Hale Mahaolu Ewalu Senior Residential Housing project site is located in the Pukalani region on the western slope of Haleakala. The Pukalani area is characterized by a combination of urban, rural and agricultural uses. The project site is located in the Kulamalu Commercial Subdivision in Pukalani at the southeast corner of the Ohia Ku Street and Ohia Lehua Place intersection. The area surrounding the project site is comprised of commercial, public/quasi-public, recreational and single-family residential uses. North of the project site is the Kulamalu Town Center, which contains the CVS/Longs Drugs Store and other commercial facilities. To the east is an existing parking lot and Kulamalu field, south of the project site is an un-named tributary of Kaluapulani Gulch and to the west are the University of Hawaii Institute for Astronomy building and Kulamalu Hilltop Subdivision which has been developed with residences. Refer to **Figure 1**.

b. Potential Impacts and Proposed Mitigation Measures

The proposed action is to construct needed senior affordable residential housing in the Makawao-Pukalani-Kula region in accordance with the Kulamalu Country Town design guidelines to be architecturally compatible with the surrounding uses. Preliminary design review by the Kulamalu Design Committee was conducted and the project plans were approved on October 14, 2013. See **Appendix C-1**. The proposed project is not anticipated to adversely affect the surrounding area.

2. Climate

a. Existing Conditions

Pukalani's climate is typical of most mountainous areas in Hawaii, with conditions varying by altitude and wind direction. Low land areas are generally typified by arid to semi-tropical climate, while higher elevations are characterized by more temperate conditions. (Atlas of Hawaii, 1998)

The Pukalani region has a mean annual rainfall of 963.8 millimeter as measured at station gage 21. January and December are typically the region's wettest month, while June is typically the driest month (Rainfall Atlas of Hawaii, 2013). Due to its elevation, temperatures are relatively cool for the Pukalani region, with average annual temperatures ranging from 53 degrees to approximately 76 degrees as measured at the Kula Branch Station (National Weather Service, 2013).

b. Potential Impacts and Proposed Mitigation Measures

According to the United States Environmental Protection Agency (EPA), the development of cities and suburban areas has a tendency to increase temperatures slightly as compared to surrounding natural land cover. This "heat island" effect, as it is often denoted, refers to urban air and surface temperatures that may be higher than nearby rural or undeveloped areas (U.S. EPA, 2013).

In order to minimize the potential of an elevated heat island profile, landscaping measures are being incorporated into the project plans. For example, shade trees and landscape vegetation will be planted throughout the project site to take advantage of the natural cooling effects of shading and the evaporative effects of water from the soil and leaves. It is anticipated that these measures will serve to offset the potential heat effect of the buildings and pavement in the proposed project. As a result, the proposed project is not anticipated to significantly affect climatic conditions in the area.

3. Topography and Soil Characteristics

a. Existing Conditions

Underlying the project site is soil belonging to the Waiakoa-Keahua-Molokai association found in elevations ranging from nearly sea level to 1,500 feet. See **Figure 7**. The Waiakoa-Keahua-Molokai soil association is found on low uplands and consists of nearly level to moderately sloping, well-drained, moderately fine textured soils. This association is used for sugarcane, pineapple, pasture, wildlife habitats and homesites.

Soil underlying the project site consists of Keahua silty clay loam with 3 to 7 percent slopes (KnB) and Keahua cobbly silty clay loam with 7 to 15 percent slopes (KnhC), and rough broken land (rRR) along the gulch. See **Figure 8**. KnB soils consist of a surface layer of dark reddish brown silty clay loam about 10 inches thick. Permeability is moderate and runoff on this soil is slow with an erosion hazard that is slight. KnhC soils are characterized by slow to medium runoff with an erosion hazard that is slight to moderate. Rough broken land consist of very steep land in gulches with slopes of 40 to 70 percent, runoff is rapid and geologic erosion active (USDA, Soil Conservation Service)

The average slope of the project site is approximately 7 percent and slopes from east to west. See **Appendix “E”**.

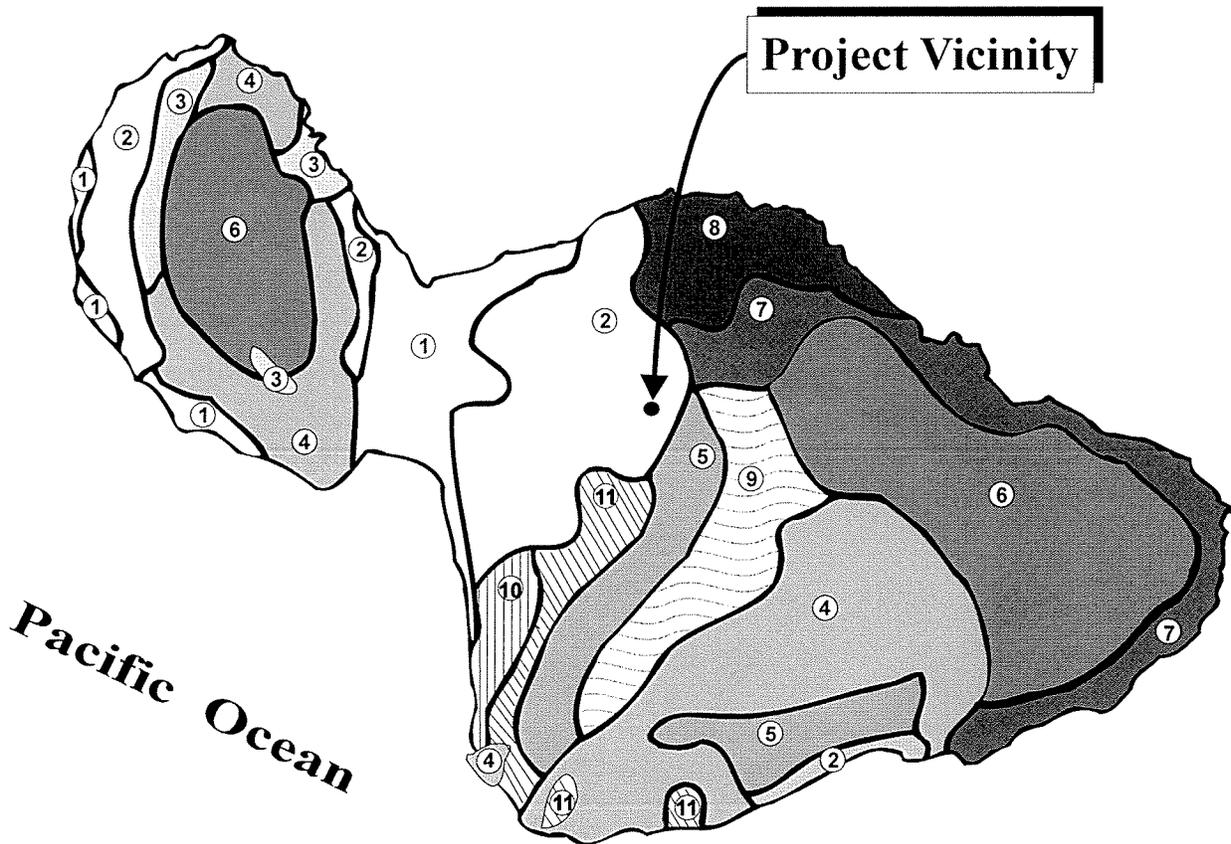
b. Potential Impacts and Proposed Mitigation Measures

During construction of the Kulamalu Subdivision, the project site was previously graded and filled. The project proposes to utilize the existing grade and fill on the site to minimize excessive cut and fill work. However, there will be cut and fill to make accessible access throughout the site possible. The cut material will be used in the full areas to minimize the transport of fill to the project site.

To prevent soil erosion during site work, the applicant will implement Best Management Practices (BMPs) in order to control dust, erosion, and sedimentation. BMPs such as stabilized entrances at the site ingress and egress, silt and dust fences, inlet and catch basin filters and temporary sediment basins will be implemented. Slopes and exposed areas will be watered, mulched, sodded, or planted to reduce windblown and stormwater erosion.

LEGEND

- | | |
|--|-------------------------------------|
| ① Pulehu-Ewa-Jaucas association | ⑦ Hana-Makaalae-Kailua association |
| ② Waiakoa-Keahua-Molokai association | ⑧ Pauwela-Haiku association |
| ③ Honolua-Olelo association | ⑨ Laumaia-Kaipoi-Olinda association |
| ④ Rock land-Rough mountainous land association | ⑩ Keawakapu-Makena association |
| ⑤ Puu Pa-Kula-Pane association | ⑪ Kamaole-Oanapuka association |
| ⑥ Hydrandeps-Tropaquods association | |



Source: USDA, Soil Conservation Service

Figure 7

Hale Mahaolu Ewalu Senior
Residential Housing
Soil Association Map

NOT TO SCALE



Prepared for: Hale Mahaolu



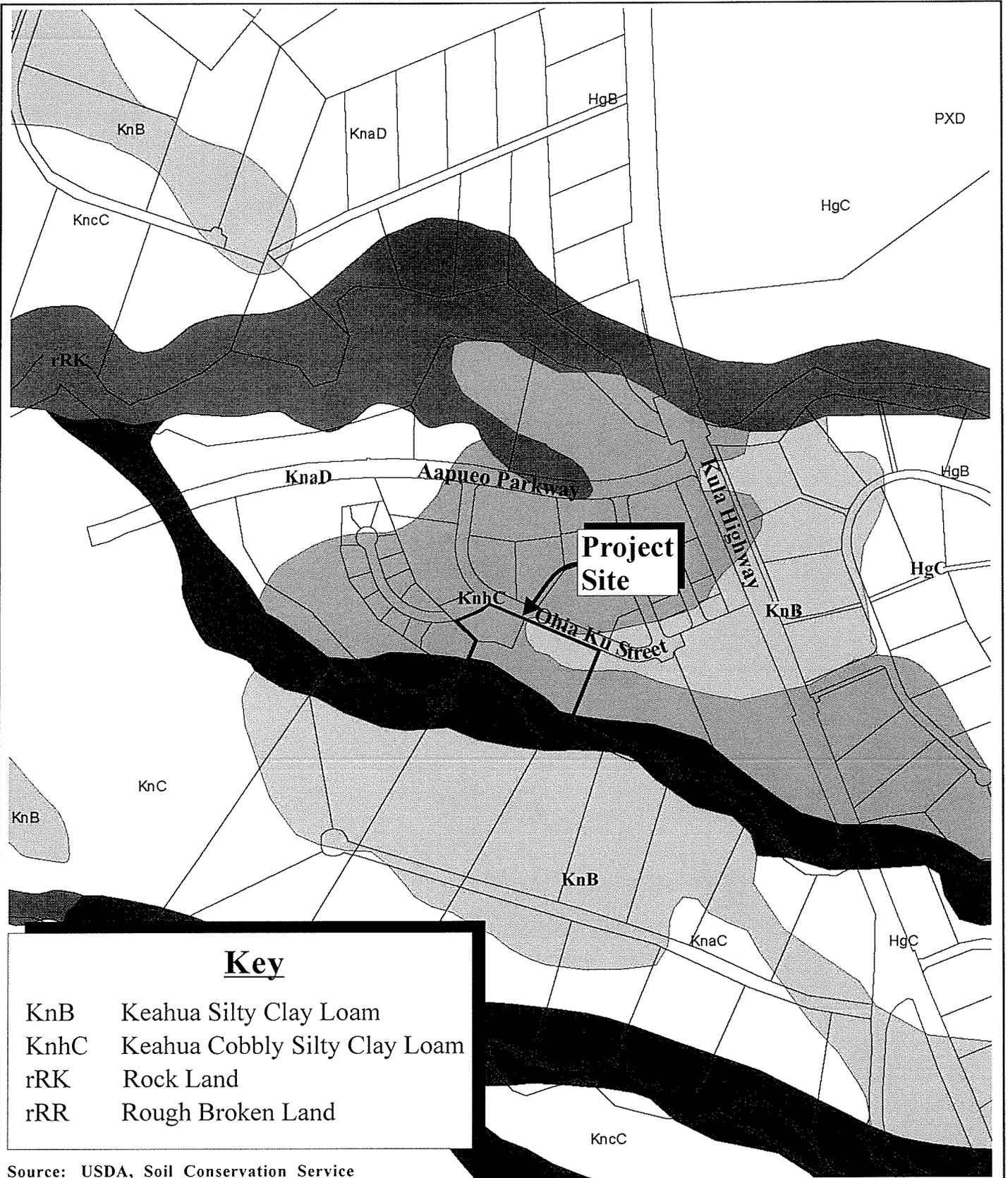


Figure 8

Hale Mahaolu Ewalu
Senior Residential Housing
Soil Classification Map

NOT TO SCALE



Prepared for: Hale Mahaolu



While terrain will be locally modified during construction, the proposed improvements are not anticipated to adversely alter topographic characteristics in the vicinity. No work is currently planned within the unnamed tributary of Kaluapulani Gulch, south of the project site. After construction is completed, the areas disturbed will be grassed, as soon as practicable.

4. Flood and Tsunami Hazards

a. Existing Conditions

As noted by the Federal Emergency Management Area (FEMA) Flood Insurance Rate Map (FIRM) for Maui Island, the project site is located in Zone X, an area determined to be outside the 0.2 percent annual chance floodplain. See **Appendix “F”**. Consultation with the State Department of Land and Natural Resources (DLNR), Engineering Division confirmed the project site is located in Zone X.

In addition, the project site is situated outside of the tsunami zone, designated tsunami evacuation areas, and is not located in any known hazard zone.

b. Potential Impacts and Proposed Mitigation Measures

The proposed housing project is located outside of any flood hazard zone, tsunami inundation zone, designated tsunami evacuation zone, and natural hazard zone. There are no threats from flooding, coastal wave action or natural hazard. No adverse impacts with regards to flood, tsunami or natural hazards are anticipated with implementation of the proposed action.

5. Flora and Fauna

a. Existing Conditions

During construction of the Kulamalu Commercial Subdivision in 2000, the project site was graded and filled. Since then, vegetation has re-established itself on the project site.

A botanical and fauna survey of the project site was conducted by biologist Robert Hobdy. See **Appendix “G”**. The project area is vegetated for the most part with low level sub-shrubs and grasses. Most

common are: Rhodes grass (*Chloris gayana*), Guinea grass (*Megathyrsus maximus*), Natal redtop (*Melinis repens*), keeled goosefoot (*Chenopodium carinatum*), fireweed (*Senecio madagascariensis*), tumble mustard (*Sisymbrium altissimum*), hedge mustard (*Sisymbrium officinale*), glycine (*Neonotonia wightii*) and lesser snapdragon (*Misopates orontium*). Somewhat less common were: *Amaranthus hybridus* (no common name), yellow star thistle (*Centaurea melitensis*), cocklebur (*Xanthium strumarium*), cheeseweed (*Malva parviflora*) and silk oak (*Grevillea robusta*).

A total of 70 plant species were recorded on the property during the survey. Of these, only three (3) species were native, the widespread and common koali awahia (*Ipomoea indica*), 'ilima (*Sida fallax*), and 'uhaloa (*Waltheria indica*), which are all indigenous in Hawaii. Fauna at the site were limited to two (2) mammal species consisting of the axis deer (*Axis axis*) and domestic dog (*Canis familiaris*). Although not observed during the survey, rats (*Rattus* spp.) and mice (*Mus domesticus*) feed on seeds, fruits and herbaceous vegetation, while mongoose (*Herpestes auro punctatus*) and cats (*Felis catus*) would hunt for these rodents.

A special effort was made to look for any occurrence of the native Hawaiian hoary bat. No bat activity was detected. Also, bird life in the area was relatively sparse with seven (7) species of non-native birds observed which are common to Hawaii.

During the survey, no habitat of the Blackburn's sphinx moth (*Manduca blackburni*), moth or their larvae were observed on the site.

b. Potential Impacts and Proposed Mitigation Measures

There are no rare, threatened, endangered, nor protected species under either the federal or State of Hawaii endangered species programs of flora or fauna at the project site. Additionally, there was no presence of critical habitat identified at the project site. While a limited amount of grading work will occur at the project site, the area has been heavily disturbed by previous grading and fill work that was conducted on Parcel 19 and Parcel 20 during the development of the Kulamalu Commercial Subdivision in 2000. Refer to **Appendix "G"**.

The U.S. Fish and Wildlife Service (USFWS) commented that four (4) species protected by the Endangered Species Act of 1973 could be impacted by the proposed project. As such, the USFWS offered the following recommendations:

- The Blackburn's sphinx moth may breed and feed within the project area and recommended a biologist survey the project area. Biologist Robert Hobdy conducted a survey of the project area and did not find any habitat of the Blackburn's sphinx moth, moth or larvae.
- The Hawaiian petrel (*Pterodroma sandwichensis*) and Newell's shearwater (*Puffinus newelli*) may transit through the project area while flying between the ocean and nesting sites in the mountains during their breeding season (March through December). The USFWS recommended that no outdoor flood lighting be installed and project-related lights minimized and shielded. Also, motion sensors and timers should be installed to minimize periods of illumination.
- The Hawaiian goose or nene (*Branta sandvicensis*) may be present in the vicinity of the project area at any time of the year due to its range and foraging behavior. The USFWS recommended that a qualified biologist survey the project area prior to the initiation of work during the Hawaiian goose breeding season (November through April) or after any subsequent delay of work of three (3) or more days. If a nest is discovered within a radius of 150 feet of proposed construction activity, or a previously undiscovered nest is found within said radius after work begins, all work should cease immediately and the USFWS contacted for further guidance. Moreover, if a Hawaiian goose appears within 100 feet of ongoing work at any time during the construction phase, all activities should be temporarily suspended until the bird moves off to a safe distance of its own volition.

Hale Mahaolu and project contractors will implement the above referenced mitigation measures. As such, the proposed project is not anticipated to have significant adverse impacts on biological resources.

6. **Wetlands and Streams**

a. **Existing Conditions**

There are no existing wetlands or streams in the immediate vicinity of the project site. The project site is located between an un-named tributary of Kaluapulani Gulch immediately south and Kaluapulani Gulch north of the Kulamalu Commercial Subdivision. Refer to **Figure 2**. According to the Department of Land and Natural Resources (DLNR), Division of Aquatic Resources (DAR), Kaluapulani Gulch is not identified as a perennial stream (State DLNR DAR, 2008).

b. **Potential Impacts and Proposed Mitigation Measures**

The project site is situated north of the unnamed tributary. Storm runoff currently flows to the west across the project site. However, approximately 2.21 cubic feet per second (cfs) of runoff sheet flows into the unnamed tributary. Increased runoff from the project site will be collected onsite within an underground collection system and connected to the existing drainage system located in Ohia Ku Street and conveyed to the existing retention basin southwest of the project site. As such, increased runoff will not enter into the unnamed tributary. Refer to **Appendix "F"**.

Further, BMPs for erosion and sediment control will be implemented during construction such as construction of temporary diversion ditches or swales away from graded areas, thoroughly watering graded areas to reduce windblown erosion, installation of silt fences, and other measures to minimize or prevent sediments from leaving the construction site. Given the absence of wetlands, proposed implementation of BMPs, and construction of an onsite drainage collection system, no adverse impacts to these environmental parameters are anticipated.

7. **Archaeological and Historic Resources**

a. **Existing Conditions**

The project site is located in the Kulamalu Commercial Subdivision. Prior to development of the Kulamalu Commercial Subdivision, an Archaeological Reconnaissance Survey (ARS) and an Archaeological Inventory Survey (AIS) were prepared in 1996 by Paul H. Rosendahl,

Ph.D., Inc (PHRI). The February 1996 ARS was for a 250-acre parcel in Kulamalu, which included portions of Parcel 19 and 20. The ARS identified two (2) sites, a petroglyph (Site 1707-1) and a wall (Site 1707-2), neither of which is located on the project site. The 1996 ARS recommended that the petroglyph be preserved with interpretative development. According to the 1996 ARS, due to its location (rainfall, elevation, soil, etc), it is likely the area was used for dryland cultivation and habitation during the Prehistoric Period. As such, the 1996 ARS recommended archaeological monitoring (PHRI, February 1996).

The March 1996 AIS of a 44-acre parcel for the Pukalani Terrace Subdivision III, containing a small portion of Parcel 20 of the project site adjacent to the parking lot, noted a single previously unrecorded site, State Inventory of Historic Place (SIHP) Site No. 50-50-10-4181, containing four (4) component features which were not located on the project site. The March 1996 assessment of the site determined it was no longer significant and no further work was necessary (PHRI, March 1996).

During archaeological monitoring of the site for the construction of the Kulamalu Commercial Subdivision, inadvertent burials were discovered on the project site. The burials are presumed to be of Chinese origin and are identified as SIHP Site No. 50-50-10-5173 located on Parcel 19. Site No. -5173 comprises of eight (8) coffin pit burials with associated fire pits. Previous discussions with the former owner (Dowling Company) and the Maui-Lanai Islands Burial Council (MLIBC) determined that the burials will remain in situ along with other non-burial features comprising of a pre-Contact fire pit (Site No. -5469) and former irrigation ditch (Site No. -5470). Refer to **Appendix "B"**.

At this time, all burial features and associated grave goods have been preserved in place and/or reinterred within the established preservation area and are protected by a vertical buffer comprised of 8 to 20 feet of fill and two (2) horizontal buffers consisting of a 5-ft. interior buffer and 30-ft. exterior buffer.

b. Proposed Impacts and Proposed Mitigation Measures

In consultation with Dana Naone Hall, a Burial Preservation Plan has been prepared by Archaeological Services Hawaii, LLC and approved by the DLNR, State Historic Preservation Division (SHPD). Refer to **Appendix**

“B” and see **Appendix “B-1”**. The Preservation Plan includes short-term (construction period) and long-term preservation measures. The short-term or interim measures before and during construction involve demarcation of the 30-foot exterior buffer zone with orange construction fencing. During construction, the construction fencing may be adjusted to accommodate construction activity provided no alterations may be implemented without prior consultation and approval by the archaeological consultant. All adjustments will be revised by the end of each work day.

Long-term measures include preservation of the site in perpetuity. Within the larger 30-foot exterior buffer zone, there will be a 5-foot interior buffer from the outermost identified burials where access will be restricted and no structures will be placed except for a low rock wall or fence marking the perimeter of the interior buffer. Subsurface utility lines and other uses shall be routed outside of the interior buffer area to prevent harm to the historic sites, however, subsurface irrigation is permissible, but may not exceed 1.5 ft. in depth. Landscaping may include grass and/or groundcover. No deeply rooted shrubs or trees shall be planted within the interior buffer zone. All landscaping shall be maintained at all times. The burial features shall be marked on the surface by a boulder or concentration of cobbles.

The larger exterior buffer will be measured from the outermost identified burials with a perimeter marked by either immovable boulders, or wooden posts set in concrete, placed at even intervals 15 ft. apart. No subsurface utilities may be placed within the exterior buffer, with the exception of irrigation which shall not exceed 1.5 ft. below surface. Landscaping may include grass, groundcover, shrubs, and shade trees, preferably native trees while shrubs or hedges shall be drought tolerant species. All plantings shall be maintained at all times. In the event future sitting areas (i.e., benches and tables) and/or walking paths are desired in the future, these will be allowed within the exterior buffer area.

A bronze plaque shall be affixed to a large boulder, stone platform, or pedestal type structure along the perimeter of each buffer zone. The bronze plaque will be inscribed with the following:

**Historic Chinese Cemetery Site 50-50-10-5173
And
Pre-Historic Native Hawaiian Cultural Site 5469
Please Respect This Area**

Access within the interior of the 5-foot interior buffer zone is for lineal and/or cultural descendants, as well as for maintenance purposes. A 3-foot wide opening for access shall be placed along this interior buffer zone. Access to the exterior buffer zone is permitted.

Within 90 days of acceptance of the Burial Treatment and Preservation Plan by SHPD, the preservation area will be surveyed and a metes and bounds description for the preservation area shall be recorded by the landowner, along with the Burial Preservation Plan with the State Bureau of Conveyances. Hale Mahaolu is in the process of recording the metes and bounds description and Burial Preservation Plan.

The previous grading and fill work on the project site deposited up to approximately 20 feet of fill in portions of the project site. Minimal grading is proposed, as such, it is unlikely burials will be inadvertently encountered. Archaeological monitoring is not recommended.

8. Cultural Resources

a. Existing Conditions

The project area is located in the *Aapueo ahupuaa* of the Makawao district on the island of Maui. The arrival of whalers in the 1840s stimulated great demand for Irish and sweet potatoes. Potatoes were taken to Lahaina and sold aboard ships. The California gold rush also resulted in great demand from prospectors for potatoes, other vegetables, sugar, molasses and coffee. Farmers were doing so well that many Hawaiians were going into business for themselves, shipping their goods to San Francisco. Maui fields were referred to as “Nu Caliponi” or “New California.” However, prices began to drop and the popularity of growing potatoes began to decline (Munekiyo & Hiraga, Inc., 2008).

In the 1840s, many Chinese from Honolulu, Kohala and China moved to the Kula region and acquired land by lease or deed from Caucasian ranchers or Hawaiian homesteaders for farming. The Territorial government leased the land to ranchers who then subleased to the Chinese.

In addition to Irish potatoes, they planted corn, beans, onions, Chinese cabbage, round cabbage, sweet potatoes, wheat and other grains, and cotton. Farmers often bartered their farm produce for payment on leases, in lieu of monetary transactions. Bartering was a common practice during this period. In the Kula area, there were three (3) stores that often bartered for goods on other islands (Munekiyo & Hiraga, Inc., 2008).

During the mid-19th century, the Chinese population further expanded. Kula consisted of Chinese and English schools, Christian churches, a Chinese society, gambling houses, opium dens, general stores, farms and cattle ranches. Keokea was often referred to as “Chinatown” and many would travel to the area on Sundays and holidays from the outlying areas of Kanaio, Ulupalakua and Waiakoa.

In the 1880s, large sections of crown land in lower Kula were leased for grazing for the booming cattle industry. Around the end of World War I, the Territorial government released a large amount of land to the public for purchase. Homestead lands were available to all American citizens at least 21 years old. As a result of this policy, the Chinese population began to decline. In addition to loss of land to parceling, the Chinese population left the area due to a severe drought that devastated crops and livestock, soil depletion due to years of harvesting and tilling and a lack of educational opportunities (Munekiyo & Hiraga, Inc., 2008).

In order to obtain an in-depth cultural perspective for the proposed project area, interviews with informants were conducted during the preparation of the Draft Environmental Assessment. See **Appendix “H”**. Summaries of the interviews are provided below.

Louis George Cambra, Jr.

Louis Cambra currently resides in Pukalani on the Pukalani (north) side of Kaluapulani Gulch and the Kulamalu commercial subdivision where CVS Longs is located. He was born in Puunene at Spanish B Camp and is of Portuguese and Puerto Rican descent.

Before moving to Pukalani, Mr. Cambra resided in Kahului and used his property as pasture for his cattle until he built his residence. He also currently leases land from the State of Hawaii to use a portion of Kaluapulani Gulch for cattle grazing. He recounted that he hunted deer in

the gulches for many years and currently holds an eradication permit. Unlike the old days, today you need to obtain permission to access the gulch for hunting. He is unaware of any traditional access in the area and did not think that any existed since the properties along the gulch extend to the center of the gulch and permission is needed from the landowner.

He recalled that originally, the land below his property was owned by Manuel Phillips who subdivided the property to give to his family members such as the Boteilho families. Since then, more subdivisions have occurred and houses were built in the area.

In the gulches, especially the larger Kaluapulani Gulch between his property and the Kulamalu project, he was advised by Charlie Maxwell that there are many cultural sites. He recalled that near the large boulders in the Kaluapulani Gulch there are a number of petroglyphs that still exist. He took some friends into the gulch and was able to locate the petroglyphs. He was also told by Mr. Maxwell that there are cultural sites located in the smaller gulch next to the Kula-side of the Kulamalu project. It is Mr. Cambra's understanding that additional petroglyphs are located in this gulch.

During the time the State was considering the Kihei to Upcountry Road, the vacant property on the Pukalani side of his property was being considered for an alternate route. He contacted Dana Hall to come and see the area. The roadway would have affected the cultural sites in the gulch, as well as a heiau on the adjacent property. Dana and Isaac Hall opposed the alternative route which was eventually dropped by the State.

He also recounted that when Mr. Maxwell was alive, he wanted to create a cultural area in the Kulamalu project with the cooperation of the project developer, Everett Dowling. Unfortunately, Mr. Maxwell passed away before it could be accomplished.

Mr. Cambra noted that the gulch is overgrown with Christmas berries and shrubs and there were a lot of bees during his last visit into the gulch. Regarding native plants, he recalled being told that there were trees used for medicinal purpose in the gulch. He was unsure the name of these trees and doubted if they still existed since the deer frequent the gulches and will eat everything.

He does not oppose the proposed project since it is for the elderly. However, he felt it was important to ensure that the elderly are able to rent these units. He would have concerns if this was housing for mainland buyers. Mr. Cambra felt that there are too many houses being bought by mainlanders and local people are unable to buy a house.

Aric Nakashima

Aric Nakashima is a long-time resident of the Pukalani area and operates the Pukalani Superette with his brother Miles Nakashima. Pukalani Superette is a local landmark in the area. The store was founded by Mr. Nakashima's grandparents, Takeo and Kome Tanizaki, and was originally named Tanizaki Store. The present store was built circa 1955 when the name of the store was changed to Pukalani Superette

Mr. Nakashima currently lives at the family home on Ikea Place in Pukalani which was one of the first half-acre lots created prior to development of Pukalani Terrace. He also lived in the Kula 200 project across of Kulamalu in the late 1990s when the area below the highway was still in pasture. Today, the area is developed with a lot of houses.

As a child growing up in the area, he remembers playing in the pineapple fields and the plantation ditch between the pineapple fields and sugarcane fields below Pukalani since there were no parks in Pukalani. He and his friends also used to play within the gulches below Kula Highway surrounding the project area. He remembers there were kiawe trees growing in the gulches and a lot of weeds but is unaware of any native plants in the area.

Mr. Nakashima remembers Uncle Charlie Maxwell explaining that the gulch area contained historic and cultural sites that should be protected. According to Mr. Nakashima, there were petroglyphs within the gulches and he was told the caves in the walls of the gulches were used for Hawaiian burials and not to enter the caves. Other than what was told to him by Uncle Charlie, he is not aware of any other cultural practices in the area.

Mr. Nakashima did not voice any concerns regarding the proposed project.

b. Potential Impacts and Proposed Mitigation Measures

Although the Hale Mahaolu Ewalu Senior Residential Housing project is located adjacent to the un-named tributary of Kaluapulani Gulch, site work currently is not planned within the gulch area. As such, the project is not expected to impact any of the historic and cultural sites that may still remain intact in the nearby gulches as recounted by the cultural interviewees.

9. Air and Noise Quality

a. Existing Conditions

There are no point sources of airborne emission in the immediate vicinity of the project site. The air in the Pukalani region is of good quality, with existing airborne pollutants attributable to automobile exhaust from the region's roadways, primarily Kula Highway. Noise generated in the vicinity of the project site may be attributable to natural (e.g. wind) conditions and traffic along local roadways.

b. Potential Impacts and Proposed Mitigation Measures

Airborne particulates, including dust, may be generated during site preparation and construction of the project. Dust control measures such as dust fences and regular watering and sprinkling will be implemented to minimize wind-blown emissions. Graded and grubbed areas will be vegetated to mitigate dust-generated impacts. In the long term, the proposed project is not expected to adversely impact local and regional ambient air quality. The proposed residential and public/quasi-public uses are not anticipated to produce any air quality impacts.

Ambient noise conditions will be temporarily affected by construction activities. Construction equipment and power tools are anticipated to be the dominant noise-generating source during construction. As with air emissions, construction noise will be minimized through use of applicable BMPs. Construction work will be limited to weekdays and daylight work hours to minimize construction impacts on nearby residents.

In the long term, no significant adverse impacts to ambient noise conditions are anticipated. The proposed uses are similar in nature to the

nearby commercial, public/quasi-public, residential and recreational uses, such that no significant changes in ambient noise levels are anticipated.

10. Scenic and Open Space Resources

a. Existing Conditions

Scenic resources in the area include Haleakala to the east and the West Maui Mountains and central valley area of Maui to the west. The project site is located above the Kulamalu Hilltop Subdivision and west (makai) of the existing Kulamalu Field and parking lot below Kula Highway. The area makai of Kula Highway is developed with a mixture of commercial, residential, recreational and public uses consisting of one- and two-story structures with no structure exceeding a maximum height of 35 feet. The sloping topography and open space gulch areas provides visual relief to the built environment.

b. Potential Impacts and Proposed Mitigation Measures

The project site is not part of any scenic corridors. Due to the distance from Kula Highway, existing landscaping (i.e., trees) and sloping topography, the proposed two- and three-story building heights with a maximum height of approximately 44 feet is not expected to affect views from Kula Highway. An exemption from the 35 feet maximum height will be included in the 201H-38 Hawaii Revised Statutes application for the project. The proposed project is not anticipated to generate significant impacts to the visual character of the surrounding area.

11. Traditional Mountain Access

a. Existing Conditions

Previous surveys of the Pukalani region indicated there is archaeological evidence to support claims of a considerable population in the upcountry area of early Hawaiians. However, other than the existing inadvertently discovered Chinese burials and non-burial features found on Parcel 19, no other archaeological sites, nor any cultural or historical material were discovered on the project site. The cultural impact assessment interviews also did not indicate the project site was used, or is currently used for cultural practices. There are no known traditional mountain access trails within the project site. Refer to **Appendix “H”**.

b. **Potential Impacts and Proposed Mitigation Measures**

As previously mentioned, no known traditional mountain access trails within the immediate vicinity of the project site were identified. The undeveloped un-named tributary of Kaluapulani Gulch located adjacent to the project site provides access through the area with the permission of landowners. However, no construction activities within the un-named gulch are proposed with the affordable elderly housing project. It is, therefore, anticipated that the proposed project will not adversely impact traditional mountain trails.

B. SOCIO-ECONOMIC ENVIRONMENT

1. **Regional Setting**

a. **Existing Conditions**

The project area is located in the Pukalani, Makawao region on the northwestern slope of Haleakala. The Pukalani area is characterized by a combination of urban, rural and agricultural uses. The project site is currently vacant and located at the southeast corner of the Ohia Ku Street and Ohia Lehua Place intersection. Access to the project site will be from Ohia Ku Street. North of the project site is the Kulamalu Town Center, to the east is an existing parking lot and park, to the south is an un-named tributary of Kaluapulani Gulch and to the west are the University of Hawaii Institute for Astronomy and Kulamalu Hilltop Subdivision.

b. **Potential Impacts and Proposed Mitigation Measures**

The proposed project is considered compatible with the surrounding urban land uses. The regional character of Pukalani and the Kulamalu development will not be adversely impacted by the Hale Mahaolu Ewalu Senior Residential project which is architecturally designed in accordance with the Kulamalu Country Town design guidelines.

2. **Population**

a. **Existing Conditions**

The population of the County of Maui has exhibited relatively strong growth over the past decade. Maui County population has grown from

128,094 in 2000 to 154,834 in 2010, which represents a 21 percent growth over ten (10) years (U.S. Census 2010).

In 2010, the population of the island of Maui was 144,444 with approximately 25,500 residents of the island's population living in the Makawao-Pukalani-Kula area (U.S. Census, 2010). Growth in Maui County is expected to continue as baseline population forecasts for the year 2020 reflect a Makawao-Pukalani-Kula population of 27,640, as well as an island-wide and County-wide population of 162,370 and 174,450, respectively (County of Maui Planning Department, June 2006).

Statewide, approximately 18 percent of the population are age 62 or older. As the baby boomers age, elderly persons are projected to account for more than 25 percent of Hawaii's population (Hawaii Housing Study, 2011).

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is for 61 senior housing units primarily for elderly residents on Maui island, in particular in the Makawao-Pukalani-Kula area and, as such, is not foreseen to be a population generator. Rather, the project is expected to accommodate the increasing elderly population in Maui, who are 62 years or older. The proposed project is not anticipated to have a significant adverse impact on the resident population of Maui County.

3. Economy and Labor Force

a. Existing Conditions

The Makawao-Pukalani-Kula region, with its fertile soil and cool climate conditions, has resulted in successful produce and flower cultivation for export to domestic and international markets. The vast lands of pasture grass has also enabled cattle ranching and alternative ranching activities, such as goat, sheep and llama herding, which contribute to the economy.

As of November 2013, Maui County's non-seasonally adjusted unemployment rate stood at 4.9 percent, a reduction of 1.3 percent from November 2012. Similarly, Maui Island's non-seasonally adjusted unemployment rate for November 2013 stood at 4.9 percent, a reduction of 0.6 percent from November 2012 (DLIR, January, 2014).

b. **Potential Impacts and Proposed Mitigation Measures**

On a short-term basis, the project will support construction and construction-related employment. Accordingly, the project will have a beneficial impact on the local economy during the period of construction.

From a long-term perspective, the proposed action will provide affordable housing to seniors who are on a fixed income in the Makawao-Pukalani-Kula region and elsewhere on Maui, as well as employment for the adult day care center staff, and housing management staff.

4. **Housing**

a. **Existing Conditions**

In 2010, seniors age 65 years and older comprised 13 percent of all residents on the island. Seniors living alone represented 7 percent of all households on the island in 2010 (U.S. Census Bureau, 2010). Of seniors age 62 and older, 27 percent, or approximately 3,150 households, are renters. Senior renter households are lower-income and many experience housing costs burden. Comprehensive Housing Affordability Strategy (CHAS) data published by the U.S. Department of Housing and Urban Development for the County of Maui indicates that 73 percent of elderly (62 years and older) renter households are extremely low-, very low-, or low-income. The majority of extremely low-, very low- and low-income elderly households are cost burdened, meaning they pay more than 30 percent of their income toward housing costs (U.S. HUD, 2006-2010).

The Hawaii Housing Planning Study 2011 for the County of Maui identified the need for 412 new units of senior housing between 2012 and 2016, including 134 multi-family rental units for households earning less than 80 percent of the area median income (AMI). Refer to **Table 1**.

b. **Potential Impacts and Proposed Mitigation Measures**

The Hale Mahaolu Ewalu Senior Residential Housing project is expected to provide 61 affordable rental housing units targeted to seniors primarily in the Makawao-Pukalani-Kula region. The increased inventory of affordable senior housing is expected to have a positive impact on the needed housing inventory and help to satisfy the demand for affordable senior rental housing in the area.

C. PUBLIC SERVICES

1. Police

a. Existing Conditions

The County of Maui's Police Department is headquartered in Wailuku. The Maui Police Department consists of several patrol, investigative and administrative divisions. The Wailuku or Central station, which serves the Haiku, Paia, Makawao, Pukalani and Kula regions, is situated approximately 13 miles northwest of the project site. A police substation is located in Pukalani, east of the project site in the Kulamalu Town Center. Refer to **Figure 1**.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is not expected to extend the existing service area limits for police service and is not anticipated to have a significant impact on police service in the area.

2. Fire

a. Existing Conditions

Fire prevention, suppression and protection services are provided by the County Department of Fire and Public Safety. The Makawao Station, which serves the region, is located off Makawao Avenue, 1.3 miles northeast of the project site. The Kula and Paia fire stations lend additional firefighting support to the Pukalani region.

b. Potential Impacts and Proposed Mitigation Measures

Adequate fire suppression is to be provided to the project site from an 8-inch internal fire suppression line. Also, the buildings will have fire sprinklers. The proposed project is not expected to extend the existing service area limits for the Makawao Station and is not anticipated to have any significant adverse impact on fire services in the area.

3. **Medical Services**

a. **Existing Conditions**

Maui Memorial Medical Center, the only major medical facility on the island, is located approximately 13 miles to the northwest of the project site. Licensed for 231 beds, this facility provides acute, emergency, general, and obstetric care services. Several medical and dental care facilities are located in Makawao and Pukalani to serve Upcountry residents.

Also, Kula Hospital and Clinic is situated about 9 miles south of the project site. The hospital serves as a critical access hospital that provides long-term care for residents and a 24-hour emergency room. An out-patient clinic for the area's residents operates from 8:00 a.m. to 4:30 p.m. on weekdays.

b. **Potential Impacts and Proposed Mitigation Measures**

The proposed action is not anticipated to affect the service capabilities of medical service operations and is not expected to extend the existing service area limits for emergency services.

4. **Solid Waste**

a. **Existing Conditions**

Solid waste generated in the Upcountry region is transported to the Central Maui Landfill off of Pulehu Road, approximately 14.7 miles west of the project site. Other than the Hana Landfill, the Central Maui Landfill is the only disposal site on the island of Maui which accepts County-hauled residential waste, commercially-hauled commercial waste, and self-hauled waste. A County supported green waste recycling facility is also located at the Central Maui Landfill. A new expansion to the Central Maui solid waste landfill facility is planned to ensure continuing service capacity for island residents and visitors.

Privately owned facilities, such as the Maui Demolition and Construction Landfill and the Pohakulepo Concrete Recycling Facility, accept solid waste and concrete from demolition and construction activities. These facilities are located at Maalaea, southwest of the project site, near

Honoapiilani Highway's junction with North Kihei Road and Kuihelani Highway. A green waste recycling facility is present at the Central Maui Landfill.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is not anticipated to affect the service capabilities of the County's residential solid waste collection system. Solid waste from the project site shall be handled by a private contractor. Also, as requested, a construction waste management plan will be developed and implemented by Hale Mahaolu. According to the County of Maui Integrated Solid Waste Management (ISWM) Plan, the existing Central Maui Landfill has adequate capacity to accommodate residential and commercial waste needs through the year 2026 (ISWM Plan, 2009).

5. Education

a. Existing Conditions

The State Department of Education (DOE) operates five (5) public schools in the Upcountry region. They are: King Kekaulike High School for grades 9 to 12, Kalama Intermediate School for grades 6 to 8, and Kula Elementary, Makawao Elementary, and Pukalani Elementary Schools for grades K to 5. There is also an elementary, middle, and high school primarily for persons of native Hawaiian ancestry, operated by Kamehameha Schools, located in Kulamalu, west of the project site. The region is also served by privately operated facilities, such as Haleakala Waldorf School (Grades K to 8) and Seabury Hall (Grades 6 to 12).

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is for senior citizens age 62 and older and is not anticipated to affect educational facilities in the region.

6. Recreational Facilities

a. Existing Conditions

The nearest park is the Kulamalu Field east of the project site consisting of an athletic field and parking lot which provides active recreation for residents in the Kulamalu project and surrounding region. In addition, the Pukalani area includes the Mayor Hannibal Tavares Community Center

and Upcountry Pool at the southwest corner of the Old Haleakala Road and Pukalani Street intersection. The Mayor Hannibal Tavares Community Center and Upcountry Pool includes a community center and meeting rooms, aquatic center and swimming pool, active sports fields for softball and soccer, tennis and basketball courts, playgrounds, restrooms and parking.

Also, the Eddie Tam Memorial Center is located on Makawao Avenue while the Kula region is served by the Kula Community Center, Kula Park, and Harold Rice Park.

Situated along the higher elevations of Haleakala are Polipoli State Park and Haleakala National Park, offering camping, hiking, and sight-seeing opportunities.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project will serve seniors and a community center is planned within the housing project to accommodate the recreational needs of its residents. The proposed project is not anticipated to affect recreational facilities or demands for such facilities in the Pukalani region.

D. INFRASTRUCTURE

1. Roadways

a. Existing Conditions

The project is accessed off of Kula Highway, a two-lane State roadway via the signalized intersection with Aapueo Parkway. Kula Highway, along with a portion of Haleakala Highway, is part of State Route 37, which originates near Kahului and proceeds in a generally southbound direction. Aapueo Parkway is a two-lane roadway within an 80-foot right-of-way that also provides access to the campus of Kamehameha School Maui, two (2) residential projects, a CVS/Longs Drugs store, several office buildings, the Kulamalu Field, and several other vacant parcels.

Access to the project site is through Ohia Ku Street which intersects with Aapueo Parkway. Traffic on Ohia Ku Street can also access Aapueo Parkway via a roundabout and Kupaoa Street; both streets are in 60-foot wide rights-of-ways.

b. **Potential Impacts and Proposed Mitigation Measures**

A traffic assessment was prepared by traffic consultant Julian Ng to identify the potential impact of the Hale Mahaolu Ewalu Senior Residential project. See **Appendix “I”**. The assessment concluded the traffic impact of the proposed project is less than 100 vehicles in the peak hours, or less than a threshold suggested for the preparation of a traffic impact study report. It should be noted that the project is for the elderly households (62 years or older) many of whom have only one (1) car or do not drive and utilize available public transportation such as the bus. The project includes a drop-off area for vehicles and buses. Project traffic impact was also found to be less than the traffic impact if other uses already permitted by the existing “P-1 Public/Quasi Public” zoning were to be developed.

At full development of the Kulamalu Town Center, the traffic generated by the Hale Mahaolu Ewalu Senior Residential project is estimated to be less than 6 percent of the total traffic on Aapueo Parkway during the AM Peak Hour, and about 10 percent of the total traffic in the PM Peak Hour. As such, the assessment does not recommend any traffic mitigation. Refer to **Appendix “I”**.

2. **Water**

a. **Existing Conditions**

A Preliminary Engineering Report (PER) was prepared by Sato & Associates, Inc. Refer to **Appendix “E”**. Water service to the Makawao-Pukalani-Kula Community Plan region is provided by the County Department of Water Supply (DWS).

The DWS provides potable water to the Upcountry residents and users via two (2) raw surface water treatment plant (WTP) facilities. These WTP facilities consist of the Piiholo WTP and Olinda Road WTP, which have the treatment capacities of 6.0 million gallons per day (MGD) and 1.7 MGD, respectively.

A 1 MG off-site reservoir near King Kekaulike High School services a portion of the Kulamalu Town Center Subdivision. The outflow at the reservoir is a 12-inch main which traverses along Haleakala Highway to

Kulamalu. A 12-inch waterline is located within the Ohia Ku Street corridor with laterals for existing fire hydrants.

b. Potential Impacts and Proposed Mitigation Measures

According to the PER, based on the DWS standards, the project is estimated to have an average daily consumption of 36,980 gallons per day (GPD) and a maximum daily demand of 55,470 GPD. The project proposes to utilize two (2) 1-1/2-inch water meters. Fire flow of 2,000 gallons per minute (GPM) for a duration of 2 hours is required for fire protection. The main waterlines on Ohia Ku Street are adequate to accommodate the proposed project.

Hale Mahaolu, in discussions with the DWS, requested the water standards utilized for the project be based on the water usage at similar elderly housing projects operated by Hale Mahaolu. Historical records of water usage indicate that seniors utilize less water than a typical family living in an apartment on Maui. Hale Mahaolu is in ongoing discussions with the DWS to determine the water standards and usage for the project. Hale Mahaolu will implement the requirements established by the DWS.

3. Wastewater

a. Existing Conditions

There are no County of Maui public sewer facilities in the upcountry area of Maui. However the project site, located in the Kulamalu development, will be connected to the privately-owned sewage system operated by Hawaii Water Service Company (HWSC). There is an existing 8-inch sewerline located off of Ohia Ku Street with 8-inch laterals. Refer to **Appendix "E"**.

b. Potential Impacts and Proposed Mitigation Measures

The proposed project is estimated to generate approximately 16,495 GPD of wastewater which will be processed and disposed of through the HWSC wastewater system. The project is not anticipated to affect existing wastewater collection and treatment systems in the area. Refer to **Appendix "E"**.

4. Drainage

a. Existing Conditions

The Kulamalu Commercial Subdivision installed the existing drainage system and sized the existing retention basin for a 50-year, 1-hour storm with assumed post-development parameters. According to the “Grading and Drainage Report for Kulamalu Commercial Village” prepared by Austin, Tsutsumi & Associates, Inc. dated June 2003, the basin was sized for 96,000 cubic feet of storage. The proposed project does not include modification of Ohia Ku Street or the existing basin.

According to the Drainage Report, stormwater runoff currently sheet flows to the west across the project site. For a 10-year, 1-hour storm occurrence approximately 2.21 cfs flows into the adjacent tributary branch of Kaluapulani Gulch and 2.89 cfs flows to the offsite drainage system on Ohia Lehua and Ohia Ku Streets. The drainage system conveys the runoff to the existing basin in the Kulamalu Commercial subdivision. Runoff generated from the project site under existing conditions for a 10-year, 1-hour storm event is 5.10 cfs and 6.03 cfs for a 50-year, 1-hour storm event. Refer to **Appendix “F”**.

b. Potential Impacts and Proposed Mitigation Measures

According to the Drainage Report, the project will increase runoff by 12.13 cfs. The total onsite post-development surface runoff to be generated by the project site would be approximately 17.23 cfs for a 10-year, 1-hour storm. An internal drainage system of catch basins will collect storm runoff and connect to the existing 24-inch privately owned drainline on Ohia Ku Street which will transport storm runoff to the existing basin. The existing basin is expected to retain the runoff from the project site. Refer to **Appendix “F”**.

In accordance with the Department of Public Works’ (DPW) *Rules for the Design of Storm Drainage Facilities and Rules for the Design of Storm Water Treatment Best Management Practices*, all drainage improvements will comply with the foregoing drainage rules.

In compliance with Maui County Code and the Drainage Rules of the DPW, during construction, a soil erosion control plan including Best Management Practices (BMPs) will be implemented to minimize or

prevent sediments from leaving the project site in order to control dust, erosion, and sedimentation. BMPs such as stabilized entrances at the site ingress and egress, silt and dust fences, inlet and catch basin filters, and temporary sediment basins will be implemented. Slopes and exposed areas will be watered, mulched, sodded, or planted to reduce windblown and stormwater erosion.

5. Electrical, Telephone Services and Cable Television

a. Existing Conditions

Electrical, telephone and cable television (CATV) services for the Kulamalu development is provided by Maui Electric Company, Ltd., Hawaiian Telcom, and Oceanic Time Warner, respectively. Developed properties within the vicinity of the project site are served by underground electrical, telephone, and CATV distribution systems along Ohia Ku Street.

b. Potential Impacts and Proposed Mitigation Measures

The project will connect to existing underground electrical, telephone, and CATV services and not anticipated to affect electrical, telephone, and CATV services in the Kulamalu area.

E. CUMULATIVE AND SECONDARY IMPACTS

Cumulative impacts are defined as the impact on the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.

With respect to foreseeable future actions, the County of Maui adopted the Maui Island Plan (MIP) which includes future urban growth boundaries (UGB), rural growth boundaries (RGB), and small town growth boundaries (STB) which direct growth in the Upcountry area. The project site is an infill project located within the UGB and the Kulamalu Town Center subdivision. The project site was accommodated in the infrastructure improvements for the subdivision, as such, cumulative impacts on infrastructure is not anticipated.

Secondary impacts are those which have the potential to occur later in time or farther in distance, but are still reasonably foreseeable. They can be viewed as actions of others

that are taken because of the presence of the project. Secondary impacts from highway projects, for example, can occur because they can induce development by removing one of the impediments to growth-transportation access.

Aside from the direct development impacts discussed in the previous sections of this chapter, the project is not anticipated to have a significant adverse impact on the physical environment. Consequently, the proposed action is not anticipated to result in significant adverse secondary impacts.

III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

III. RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES AND CONTROLS

This section discusses the relationship of the proposed Hale Mahaolu Ewalu Senior Residential Housing project to applicable State and County land use plans, policies, and controls.

A. STATE LAND USE DISTRICTS

Pursuant to Chapter 205, Hawaii Revised Statutes (HRS), all lands in the State have been placed into one (1) of four (4) major land use districts by the State Land Use Commission. These land use districts are designated “Urban”, “Rural”, “Agricultural”, and “Conservation”. The project site is classified “Urban”. See **Figure 9**. The proposed project is consistent with the urban designation of the property.

B. HAWAII STATE PLAN

Chapter 226, HRS, also known as the Hawaii State Plan, is a long-range comprehensive plan which serves as a guide for the future long-term development of the State by identifying goals, objectives, policies, and priorities, as well as implementation mechanisms. Examples of State objectives and policies relevant to the proposed project are as follows:

- 1. Section 226-05. Objective and policies for population. To achieve this objective, it shall be the State policy to:**
 - a. Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.

- 2. Section 226-19. Objectives and policies for socio-cultural advancement--housing.**
 - a. Planning for the State's socio-cultural advancement with regard to housing shall be directed toward the achievement of the following objectives:
 - 1) Greater opportunities for Hawaii's people to secure reasonably priced, safe, sanitary, and livable homes, located in suitable environments that satisfactorily accommodate the needs and desires of families and individuals, through collaboration and cooperation between government and nonprofit and for-profit developers to ensure that

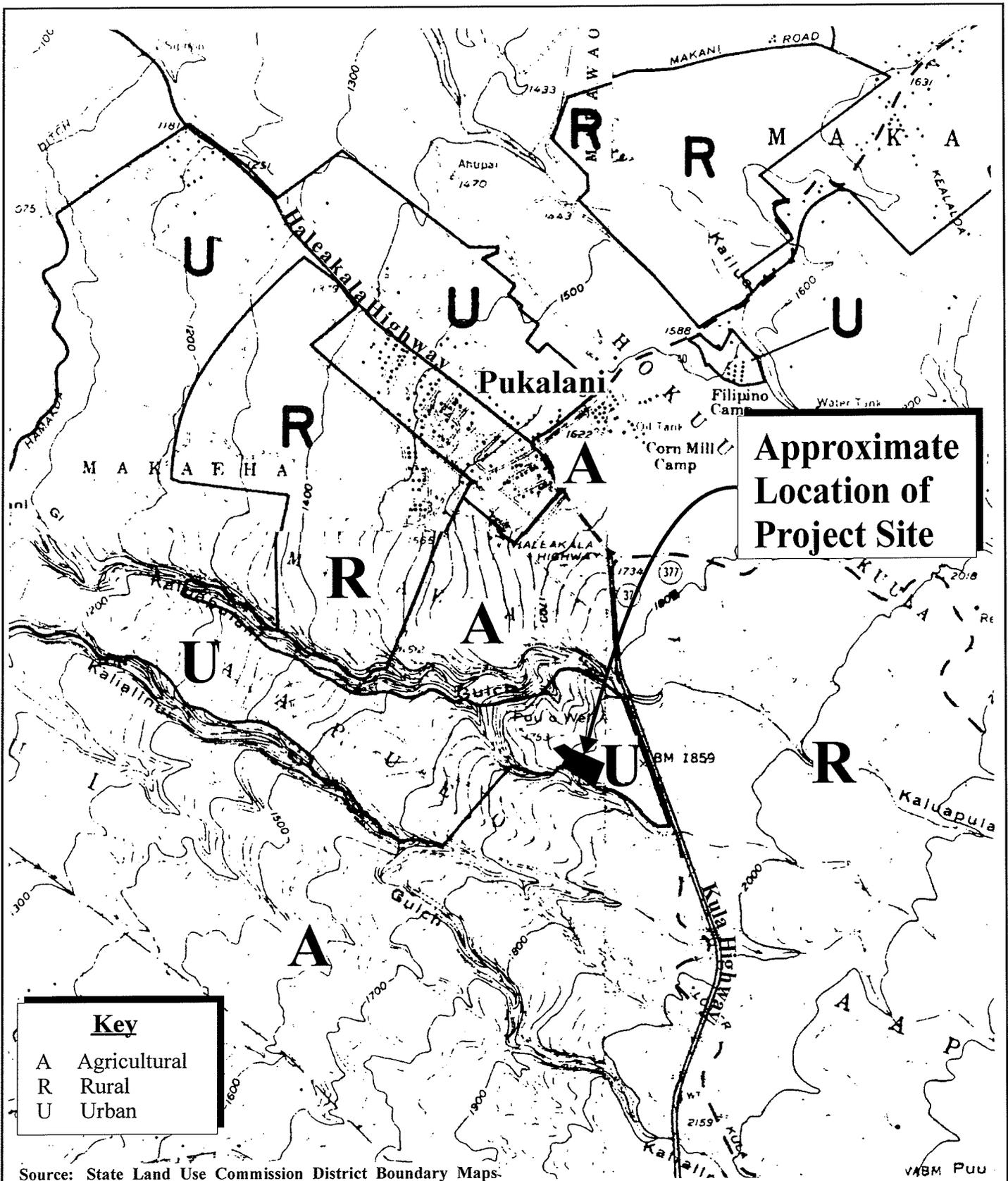


Figure 9

Hale Mahaolu Ewalu
 Senior Residential Housing
 State Land Use District Classifications

NOT TO SCALE



more affordable housing is made available to very low-, low- and moderate-income segments of Hawaii's population.

- 2) The development and provision of affordable rental housing by the State to meet the housing needs of Hawaii's people.
- b. To achieve the housing objectives, it shall be the policy of this State to:
- 1) Effectively accommodate the housing needs of Hawaii's people.
 - 2) Increase homeownership and rental opportunities and choices in terms of quality, location, cost, densities, style, and size of housing.
 - 3) Facilitate the use of available vacant, developable, and underutilized urban lands for housing.

C. GENERAL PLAN OF MAUI COUNTY

As indicated by the Maui County Charter, the purpose of the general plan shall be to:

... indicate desired population and physical development patterns for each island and region within the county; shall address the unique problems and needs of each island and region; shall explain opportunities and the social, economic, and environmental consequences related to potential developments; and shall set forth the desired sequence, patterns and characteristics of future developments. The general plan shall identify objectives to be achieved, and priorities, policies, and implementing actions to be pursued with respect to population density; land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design, and other matters related to development.

Chapter 2.80B of the Maui County Code, relating to the General Plan and Community Plans, implements the foregoing Charter provision through enabling legislation which calls for a Countywide Policy Plan and a Maui Island Plan. The Countywide Policy Plan was adopted as Ordinance No. 3732 on March 24, 2010, while the Maui Island Plan, which delineates areas for future urban and rural growth as part of a Directed Growth Strategy, was adopted as Ordinance No. 4004 on December 28, 2012.

The following sections identify pertinent objectives, policies, implementing actions and related provisions set forth in the Countywide Policy Plan and the Maui Island Plan. It is recognized that both documents are comprehensive in nature and address a number of functional planning areas which apply to all programs, plans, and projects. However, for purposes of addressing General Plan compliance requirements, policy considerations

which are deemed most relevant in terms of compatibility and consistency are addressed in this report section.

1. **Countywide Policy Plan**

With regard to the Countywide Policy Plan, Section 2.80B.030 of the Maui County Code states the following.

The countywide policy plan shall provide broad policies and objectives which portray the desired direction of the County's future. The countywide policy plan shall include:

1. *A vision for the County;*
2. *A statement of core themes or principles for the County; and*
3. *A list of countywide objectives and policies for population, land use, the environment, the economy, and housing.*

Core principles set forth in the Countywide Policy Plan are listed as follows:

1. *Excellence in the stewardship of the natural environment and cultural resources;*
2. *Compassion for and understanding of others;*
3. *Respect for diversity;*
4. *Engagement and empowerment of Maui County residents;*
5. *Honor for all cultural traditions and histories;*
6. *Consideration of the contributions of past generations as well as the needs of future generations;*
7. *Commitment to self-sufficiency;*
8. *Wisdom and balance in decision making;*
9. *Thoughtful, island appropriate innovation; and*
10. *Nurturance of the health and well-being of our families and our communities.*

Congruent with these core principles, the Countywide Policy Plan identifies goals objectives, policies and implementing actions for pertinent functional planning categories, which are identified as follows:

1. *Natural environment*
2. *Local cultures and traditions*
3. *Education*
4. *Social and healthcare services*
5. *Housing opportunities for residents*
6. *Local economy*
7. *Parks and public facilities*
8. *Transportation options*
9. *Physical infrastructure*
10. *Sustainable land use and growth management*
11. *Good governance*

With respect to the Hale Mahaolu Ewalu Senior Residential Housing Project, the following goals, objectives, policies and implementing actions are illustrative of the project's compliance with the Countywide Policy Plan.

EXPAND HOUSING OPPORTUNITIES FOR RESIDENTS

Goal: Quality, island appropriate housing will be available to all residents

Objective: Reduce the affordable housing deficit for residents

Policy: Provide for a range of senior-citizen and special needs housing choices on each island that affordably facilitates a continuum of care and services.

Objective: Increase and maintain the affordable housing inventory

Policies: Prioritize available infrastructure capacity for affordable housing

Develop public-private and nonprofit partnerships that facilitate the construction of quality affordable housing.

Streamline the review process for high-quality, affordable housing developments that implement the goals, objectives and policies of the General Plan.

In summary, the proposed project is consistent with the themes and principles of the Countywide Policy Plan.

2. Maui Island Plan

The Maui Island Plan (MIP) is applicable to the island of Maui only, providing more specific policy-based strategies for population, land use, transportation, public and community facilities, water and sewage systems, visitor destinations, urban design, and other matters related to future growth.

As provided by Chapter 2.80B, the MIP shall include the following components:

1. *An island-wide land use strategy, including a managed and directed growth plan*
2. *A water element assessing supply, demand and quality parameters*
3. *A nearshore ecosystem element assessing nearshore waters and requirements for preservation and restoration*
4. *An implementation program which addresses the County's 20-year capital improvement requirements, financial program for implementation, and action implementation schedule*
5. *Milestone indicators designed to measure implementation progress of the MIP*

It is noted the Ordinance No. 4004 does not address the component relating to the implementation program. Chapter 2.80B of the Maui County Code, relating to the General Plan, was amended via Ordinance No. 3979, October 5, 2012, to provide that the implementation program component be adopted no later than one (1) year following the effective date of Ordinance No. 4004. As such, the implementation program component of the MIP will require adoption prior to December 28, 2013.

The MIP addresses a number of planning categories with detailed policy analysis and recommendations which are framed in terms of goals, objectives, policies and implementing actions. These planning categories address the following areas:

1. *Population*

2. *Heritage Resources*
3. *Natural Hazards*
4. *Economic Development*
5. *Housing*
6. *Infrastructure and Public Facilities*
7. *Land Use*

An essential element of the MIP is its directed growth plan which provides a management framework for future growth in a manner that is fiscally, environmentally, and culturally prudent. Among the directed growth management tools developed through the MIP process are maps delineating urban growth boundaries (UGB), small town boundaries (STB), and rural growth boundaries (RGB). The respective boundaries identify areas appropriate for future growth and their corresponding intent with respect to development character.

The proposed Hale Mahaolu Ewalu Senior Residential Housing project is located within the UGB. In this regard, it is consistent with the directed growth strategy defined via growth maps adopted in the MIP.

In addition, the proposed Hale Mahaolu Ewalu Senior Residential Housing project has been reviewed with respect to pertinent goals, objectives, policies and implementing actions of the MIP. A summary of these policy statements are provided below:

POPULATION

Maui's population is aging; and recent data shows that trends related to Maui's aging population will be similar to the trends on the Mainland. This demographic change has significant impacts to public services as they relate to the elderly, including housing, transportation, health care, and elder care services.

Goal: Maui's people, values, and lifestyles thrive through strong, healthy, and vibrant island communities.

Policies: Expand housing, transportation, employment, and social opportunities to ensure residents are able to comfortably age within their communities.

Support funding for transportation, housing, health care, recreation, and social service programs that help those with special needs (including the elderly and disabled).

HOUSING

According to the MIP, with the number of people over age 65 growing in the coming decades, there is a need to work with the State, Federal government, community groups, landowners and others to find ways to provide affordable housing to senior citizens and those with special needs.

Goal: Maui will have safe, decent, appropriate, and affordable housing for all residents developed in a way that contributes to strong neighborhoods and a thriving island community.

Objective: More livable communities that provide for a mix of housing types, land uses, income levels, and age.

Policy: Support fast-track processing procedures for the following housing-related entitlements: affordable housing projects/ units; indigenous Hawaiian housing/units; and special-needs housing units (seniors, disabled, homeless, etc.).

LAND USE

According to the MIP Maui's future urban growth will take place in four different physical forms: 1) as infill development; 2) within urban expansion areas; 3) as new towns and settlements; and 4) as orderly infill and expansion of existing country towns and villages. Each development pattern has benefits and costs that will determine the extent and location of their use.

The Hale Mahaolu Ewalu Senior Residential Housing project is an infill development. According to the MIP, infill development "represents the best utilization of our existing infrastructure and the best opportunity to preserve open space." It focusses growth to an existing urbanized area and creatively utilizes vacant or underdeveloped property.

D. MAKAWAO-PUKALANI-KULA COMMUNITY PLAN

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas, including infrastructure-related parameters.

Land use guidelines are set forth by the Makawao-Pukalani-Kula Community Plan Land Use Map. As shown in **Figure 10**, the Hale Mahaolu Ewalu Senior Housing Residential Project site is designated “P, Public/Quasi-Public”. The proposed project is consistent with the underlying land use designation.

The proposed project is consistent with the following goals, policies, and objectives of the Community Plan:

LAND USE

Goal

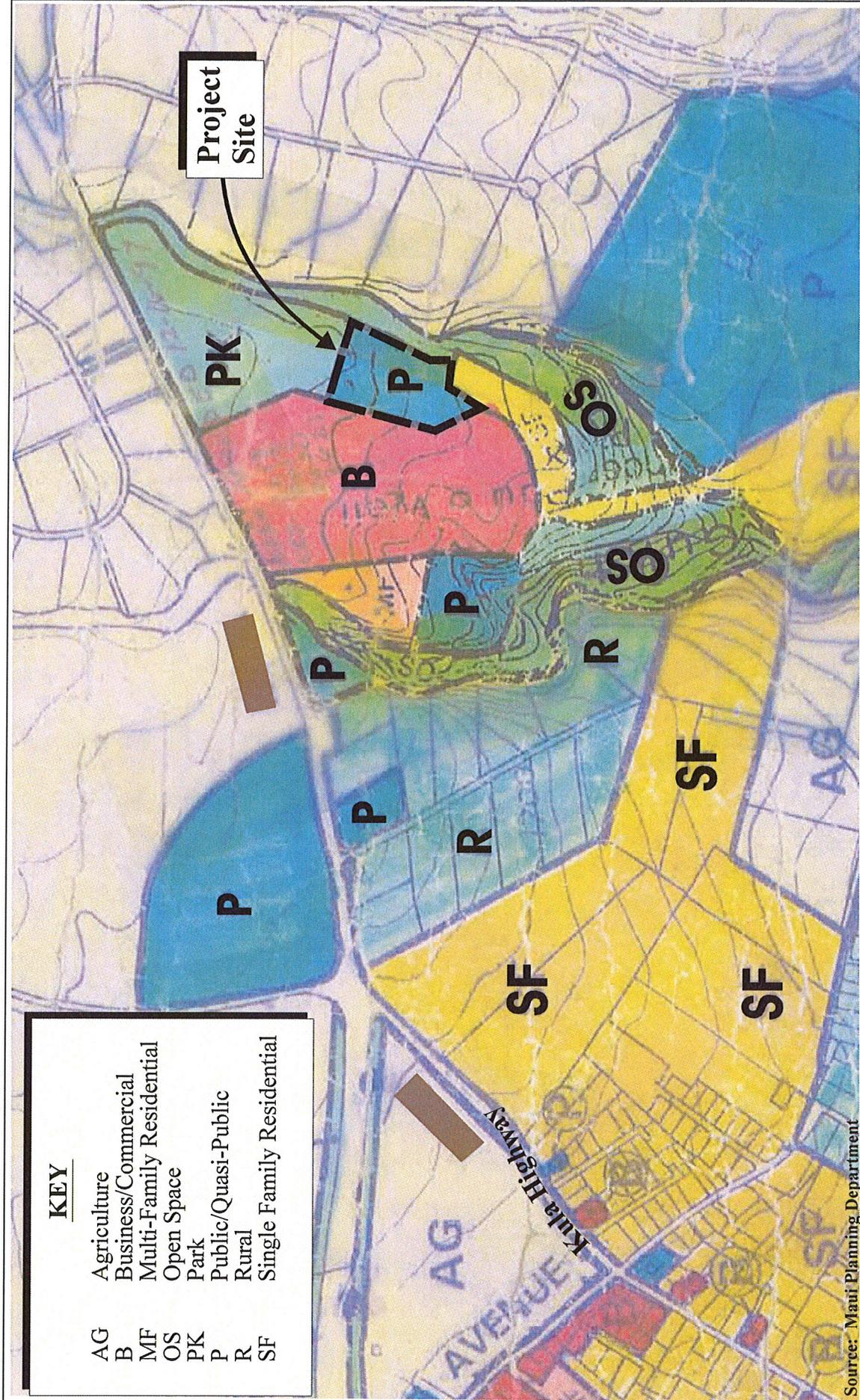
The maintenance and enhancement of Upcountry’s unique and diverse rural land use character with sensitivity to existing land use patterns, natural resource values, and economic and social needs of the region’s residents.

Objective and Policy

- *Ensure an adequate supply of lands designated for residential use to address the affordable and elderly housing needs of the region’s residents.*

Implementation Actions

- *Implement cooperative public and private land use activities (e.g., Hale Mahaolu programs) which address the region’s social welfare needs.*
- *Require that the development and dedication (pursuant to parks and playgrounds assessment requirements) of the 15.01-acre park and the development of the 5.11-acre public/quasi-public areas and 5-acre multi-family/elderly housing in the vicinity of the proposed Kulamalu development along Kula Highway be developed concurrently with the development of the 20-acre commercial site. The commercial site shall be Country-Town Business at the time of zoning.*



Source: Maui Planning Department

Figure 10



Hale Mahaolu Ewalu Senior
Residential Housing
Makawao-Pukalani-Kula
Community Plan Land Use Map

NOT TO SCALE



Prepared for: Hale Mahaolu

MUNEKIYO & HIRAGA, INC.
HaleMahaolu/KulamaluSrhsg/CommunityPlanLandUse

URBAN DESIGN

Goal

Recognition and preservation of the unique design characteristics of the Makawao, Pukalani and Kula communities in order to enhance Upcountry's man-made environment.

Objectives and Policies

- *Utilize design standards for multi-family residential uses which respect Upcountry's rural residential lifestyle.*
- *Enforce a two-story or 35-foot height limitation throughout the region, except for public/quasi-public uses such as auditoriums, gymnasiums, and fire stations.*

HOUSING

Goal

Housing opportunities for the residents of Makawao-Pukalani-Kula, to include all income and age groups, which are affordable, safe, and environmentally and culturally compatible.

Objectives and Policies

- *Provide independent living and assisted living elderly housing with support facilities and services to meet the needs of the region's elderly residents.*

Implementing Actions

- *Provide housing opportunities for independent living for Upcountry's elderly within the Kulamalu project along Kula Highway and the new Project District 3/Crook Estate in Makawao Town.*

SOCIAL INFRASTRUCTURE

Goal

An efficient and responsive system of people-oriented public services which enable residents to live a safe, healthy and enjoyable lifestyle, and offer the youth and adults of the region opportunities and choices for self and community improvement.

Education and Family Services

Objectives and Policies

- *Coordinate the establishment of child care facilities, senior citizen centers, religious institutions and social services offices to benefit from complementary and mutually beneficial combination of service delivery.*
- *Encourage the expansion of programs and facilities for early childhood education, family day care, and youth services.*

PLANNING STANDARDS

Design

- *Limit building height throughout the region to two stories, not to exceed thirty-five feet above grade. Exceptions to this standard may be considered for public and quasi-public facilities such as gymnasiums, medical facilities and fire stations.*

The proposed Hale Mahaolu Ewalu Senior Residential Housing project proposes two- and three-stories with a maximum height of 44 feet which will exceed 35 feet. The “P1, Public/Quasi-Public” zoning of the project limits height to two-stories not to exceed 35 feet. The project will also require approval of a subdivision into two (2) lots that identifies the development phases for the project. Chapter 18, Section 18.04.030(A) of the Maui County Code (MCC), as amended, states “[T]his title shall be applied and administered within the framework of the county general plan, community plans, land use ordinances, the Maui County Code, and other laws relating to the use of land. The director shall not approve any subdivision that is not consistent with the county general plan, community plans, State land use classification, and zoning.” As such, a HRS 201H-38 Application will be filed with the Maui County Council seeking an exemption from these provisions of the MCC.

E. COUNTY ZONING

The project site was zoned “P-1, Public/Quasi-Public” district by Ordinance No. 2623 on December 16, 1997 and was subject to the following three (3) conditions of zoning: Refer to **Appendix “A”**.

1. The applicant shall submit a landscaping plan for the review and approval of the Arborist Committee.
2. The applicant shall contribute its pro-rata share to the design and construction of highway and traffic improvements on Kula Highway, including but not limited to

storage lanes, acceleration and deceleration lanes, traffic signal(s), crosswalks and sidewalks, as required by the State Department of Transportation.

3. The applicant shall submit a drainage master plan for the review and approval of the Department of Public Works and Waste Management and the Natural Resources Conservation Service, United States Department of Agriculture.

By letter dated November 14, 2012, the Maui Planning Department determined the conditions of zoning had been complied with. Refer to **Appendix "A-1"**.

The "P-1, Public/Quasi-Public" district includes day care centers and community centers as permitted uses. However, offices and senior housing are not identified as permitted uses. Also, the development standards limit building heights to two-stories, not to exceed thirty-five feet. The senior housing is proposed in two- and three-story buildings. As such, an HRS 201H-38 Application will be filed with the Maui County Council seeking an exemption from Chapter 19, MCC, as amended. The following exemptions will be requested:

1. Section 19.31.020(A) Permitted Uses, does not include multi-family residential housing units or identify accessory uses or structures. As such, "permitted uses" shall be 1) multi-family residential housing units, 2) adult day care center, 3) community center, 4) offices, 5) kitchen, 6) recreational uses and structures, and accessory uses and structures such as parking, storage or accessory buildings and structures, trash enclosures, outdoor recreation, small-scale energy systems, and walls and fences.
2. Section 19.31.020(B) Development Standards, includes maximum building heights of two-story, not to exceed 35 feet with building setbacks from property lines. The project proposes two- and three-story structures with a maximum height of approximately 44 feet. Also, it proposes to consolidate and resubdivide the project site with no increase in lots in order to create new property boundaries which may affect building setbacks. As such, "development standards" are requested to allow maximum building height of three (3) stories, not to exceed 45 feet from finished grade, and no setbacks from common property lines between the residential building lot and the senior center and adult care center lot.
3. Section 19.36A.010 Designation Number of Spaces, identify two (2) parking stalls for every apartment unit and one (1) parking space for each classroom in the day care facility. The parking ordinance does not include a category for the community center. The project is for seniors who have either one (1) vehicle or no vehicle and the day care facility is set up as recreational spaces and not as

classrooms. As such, “designation of number of spaces” shall be based on a parking ratio of one (1) parking space per residential housing unit; and two (2) parking spaces per 1,200 square feet of floor area for the adult day care center and the community center.

4. Section 19.36A.190 Loading Zone, requires one (1) loading space for buildings between 2,000 and 10,000 square feet and two (2) loading spaces for each building in excess of 10,000 square feet. The total square footage of the buildings within the project is approximately 68,240 square feet. As such, designation of number of loading spaces is being requested to be a total of two (2) loading spaces.
5. Section 19.36A.030 Location, requires the parking spaces to be located on the lot it serves. The project site is a unified project with the residential units to be located on one (1) lot and the community center and adult day care center on another lot. As such, “location” of the parking spaces shall allow the parking spaces to be located either on the lot it serves or on the adjacent lot within the project site.
6. Section 19.36A.070 Walls, Fences and Landscaping, requires that one (1) shade tree at minimum regular intervals for every five (5) spaces shall be provided within parking areas. An exemption will be requested to allow for the flexibility in the placement of the shade trees.

F. COASTAL ZONE MANAGEMENT OBJECTIVES AND POLICIES

The Hawaii Coastal Zone Management Program (HCZMP), as formalized in Chapter 205A, HRS, establishes objectives and policies for the preservation, protection, and restoration of natural resources of Hawaii’s coastal zone. Section 205A-1 defines “coastal zone” as all lands of the State and the area extending seaward from the shoreline to the limit of the State’s police power and management authority, including the United States territorial sea. The Hale Mahaolu Ewalu Senior Residential Housing project is not located within the County of Maui’s Special Management Area (SMA). However, the project has been reviewed in the context of HRS 205A.

1. Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

- a. *Improve coordination and funding of coastal recreational planning and management; and*
- b. *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
 - i. *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;*
 - ii. *Requiring replacement of coastal resources having significant recreational value, including but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;*
 - iii. *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;*
 - iv. *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;*
 - v. *Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;*
 - vi. *Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;*
 - vii. *Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and*
 - viii. *Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Section 46-6.*

Response: The project area does not abut the shoreline, but is located inland on the slopes of Haleakala and away from shoreline resources. The proposed actions will, therefore, not affect coastal recreational opportunities.

2. Historic Resources

Objective:

Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

- a. *Identify and analyze significant archeological resources;*
- b. *Maximize information retention through preservation of remains and artifacts or salvage operations; and*
- c. *Support state goals for protection, restoration, interpretation, and display of historic resources.*

Response: As stated previously, previous archaeological surveys of the project area were carried out. Other than the existing human burials and non-burial features consisting of a fire pit and former irrigation ditch, no historic or cultural features were found on the project site. The human burials will remain in-situ on the project site in accordance with the Burial Preservation Plan prepared for the project site. Refer to **Appendix “B”**. The Burial Preservation Plan will be implemented to protect the existing human burials presumed to be of Chinese origin and non-burial features located on the project site. The human burials will be kept undisturbed on the project site with a 30-foot exterior buffer area. The nearest building will be 12 feet from the exterior buffer area.

3. Scenic and Open Space Resources

Objective:

Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

- a. *Identify valued scenic resources in the coastal zone management area;*
- b. *Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;*

- c. *Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and*
- d. *Encourage those developments which are not coastal dependent to locate in inland areas.*

Response: Due to the distance from Kula Highway, existing landscaping (i.e., trees) and sloping topography, the proposed improvements will not have a significant adverse impact upon scenic or open space resources.

4. **Coastal Ecosystems**

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

- a. *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;*
- b. *Improve the technical basis for natural resource management;*
- c. *Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;*
- d. *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and*
- e. *Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.*

Response: The proposed project is not anticipated to result in any adverse impacts to coastal ecosystems as the project area is located over 10 miles away from the ocean. Applicable Best Management Practices (BMPs) and erosion-control measures will be implemented to mitigate runoff during construction-related activities.

5. **Economic Uses**

Objective:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- a. *Concentrate coastal dependent development in appropriate areas;*
- b. *Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and*
- c. *Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:*
 - i. *Use of presently designated locations is not feasible;*
 - ii. *Adverse environmental effects are minimized; and*
 - iii. *The development is important to the State's economy.*

Response: The proposed improvements are in keeping with the urban uses in the area and will not result in adverse economic impacts.

6. **Coastal Hazards**

Objective:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence and pollution.

Policies:

- a. *Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;*
- b. *Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;*

- c. *Ensure that developments comply with requirements of the Federal Flood Insurance Program; and*
- d. *Prevent coastal flooding from inland projects.*

Response: The project site is located in an area with no special flood hazard considerations. Appropriate BMPs will be implemented during construction to ensure downstream and adjacent properties will not be adversely impacted.

7. **Managing Development**

Objective:

Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

- a. *Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;*
- b. *Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and*
- c. *Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.*

Response: In compliance with the requirements of Chapter 343, Hawaii Revised Statutes (HRS), this Environmental Assessment (EA) has been prepared to facilitate public understanding and involvement in project development. All aspects of the development will be conducted in accordance with applicable Federal, State and County standards. Compliance with applicable regulatory requirements, including Section 201H-38, HRS, advances the objective and policies for managing development.

8. **Public Protection**

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

- a. *Promote public involvement in coastal zone management processes;*
- b. *Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and*
- c. *Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

Response: Opportunities for public awareness and participation for the project are facilitated through the notification, review and comment processes of the EA requirements of Chapter 343, HRS and the Section 201H-38, HRS application. The proposed project is not contrary to the objectives of public awareness, education, and participation.

9. **Beach Protection**

Objective:

Protect beaches for public use and recreation.

Policies:

- a. *Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;*
- b. *Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and*
- c. *Minimize the construction of public erosion-protection structures seaward of the shoreline.*

Response: The proposed project is not located in proximity to shoreline areas, nor is it anticipated to impact shoreline activities or beach processes.

10. **Marine Resources**

Objective:

Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

- a. *Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;*
- b. *Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;*
- c. *Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;*
- d. *Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and*
- e. *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Response: The proposed project is not anticipated to impact marine or coastal resources as the project site is located over 10 miles away from the ocean.

In addition to the foregoing objectives and policies, HRS Section 205A-30.5 Prohibitions, provides specifications for the limitation of lighting in coastal shoreline areas in relation to the granting of SMA permits:

No special management area use permit or special management area minor permit shall be granted for structures that allow artificial light from floodlights, uplights, or spotlights used for decorative or aesthetic purposes when the light:

- (1) *Directly illuminates the shoreline and ocean waters; or*
 - (2) *Is directed to travel across property boundaries toward the shoreline and ocean waters.*
- (b) *Subsection (a) shall not apply to special management area use permits for structures with:*

- (3) *Artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs; provided that a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts.*

Response: Although the proposed project is not located in the SMA, it will incorporate, as appropriate, low level, shielded and downward lighting. All outdoor lighting will comply with the County of Maui's outdoor lighting ordinance. Construction is anticipated to occur during the daylight hours and as such, no lighting during construction is anticipated.

**IV. SUMMARY OF ADVERSE
ENVIRONMENTAL EFFECTS
WHICH CANNOT BE
AVOIDED**

IV. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

The proposed project involves the construction of the 61-unit Hale Mahaolu Ewalu Senior Residential project and associated adult day care and community center.

Assessment of construction-related impacts, noise and air quality impacts, and potential impact on physical and socio-economic environment, were carried out as part of the EA. The proposed development will have a limited, unavoidable construction-related impact on the environment, as described in Chapter II.

In the short term, construction activities associated with the Hale Mahaolu Ewalu Senior Residential Housing project will have a temporary impact on air quality from dust generation and discharge of exhaust from construction equipment during ground altering activities and site grading. Appropriate BMPs will be incorporated to mitigate adverse impacts, including watering of exposed surfaces and regular maintenance of construction equipment to minimize construction-related impacts.

Construction of the housing units, adult day care, community center, and related improvements, will also generate short-term noise impacts which will also be unavoidable. The use of properly maintained construction equipment will mitigate noise impacts caused by equipment. Compliance with State Department of Health construction noise limits is another measure to mitigate noise impacts caused by equipment.

V. ALTERNATIVES TO THE PROPOSED ACTION

V. ALTERNATIVES TO THE PROPOSED ACTION

A. PREFERRED ALTERNATIVE

The proposed project, consisting of 61 rental units for seniors, adult day care center and community center is the Preferred Alternative. Refer to **Appendix “C”**. The proposed action will provide needed affordable housing for our aging population in the upcountry region.

B. NO ACTION ALTERNATIVE

The “no action” alternative will not meet Hale Mahaolu’s mission to provide affordable housing to Maui’s residents, including seniors, families and those with special needs. As such, the no action alternative was not considered as an alternative for the project.

C. DEFERRED ACTION ALTERNATIVE

Similar to the “no action” alternative, the deferred action alternative would delay the construction of much needed affordable senior housing in the Makawao-Pukalani-Kula region. As such, this alternative was not pursued further.

D. DESIGN ALTERNATIVES

Site design alternatives reviewed and considered included several building configurations and architectural design character as recommended in the Kulamalu Design Guidelines. These iterations were presented to Hale Mahaolu for consideration. Preliminary configurations included variation in number of units, inclusion or omission of the Adult Day Care Facility, additional grading and hardscape to accommodate ramped access throughout the site, various building configurations and sizes. The preferred alternative resulted from the special and functional needs for Hale Mahaolu as well as the design review through the Kulamalu Design Review Committee who approved the preliminary plans for the preferred alternative on October 14, 2013. Refer to **Exhibit “C-1”**.

**VI. IRREVERSIBLE AND
IRRETRIEVABLE
COMMITMENTS OF
RESOURCES**

VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Development of the proposed project will involve a commitment of energy, labor, fiscal and material resources. The use of these resources, when weighed against the expected benefit to be derived from the project, is not considered an adverse commitment.

VII. SIGNIFICANCE CRITERIA ASSESSMENT

VII. SIGNIFICANCE CRITERIA ASSESSMENT

The “Significance Criteria”, Section 12 of the Administrative Rules, Title 11, Chapter 200, “Environmental Impact Statement Rules”, were reviewed and analyzed to determine whether the proposed project will have significant impacts to the environment. The following criteria and preliminary analysis are provided:

1. **Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.**

The proposed action will result in short-term construction related air quality and noise impacts. However, these effects will be limited in scope due to the short-term duration of construction. There are no known rare, threatened, or endangered species of flora, fauna, avifauna, or important habitats located within the project site. As such, the proposed project is not anticipated to adversely impact threatened or endangered species or their habitats. Refer to **Appendix “G”**.

Except for the human burials and non-burial features consisting of a fire pit and former irrigation ditch, no archaeological or cultural resources were found on the project site. A Burial Preservation Plan will be implemented to protect the human burials in situ. Refer to **Appendix “B”**. The previous grading and fill work on the project site deposited up to approximately 20 feet of fill in portions of the project site. Minimal grading is proposed outside of the burial preservation area, as such, it is unlikely inadvertent burials will be encountered. Archaeological monitoring is not recommended.

The cultural impact assessment did not reveal any current cultural practices or uses on the project site. However, in the past people traveled within the nearby gulches to hunt which continues today with the approval of landowners. The gulches contain historic and cultural sites. The project does not propose any work within the gulches and is not anticipated to impact these sites.

Based on the foregoing, the proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resources.

2. **Curtails the range of beneficial uses of the environment.**

The proposed action and the commitment of land resources will not curtail the range of beneficial uses of the environment. The surrounding uses in the Kulamalu Commercial

Subdivision include a mixture of uses consisting of business, single-family and park uses which are compatible with the proposed Hale Mahaolu Ewalu Senior Residential project. Also, the proposed senior housing, adult day care center, community center and offices are compatible with the current designations for the subject property, which are identified as “Urban” by the State Land Use Commission and “Public/Quasi-Public” by the Makawao-Pukalani-Kula Community Plan. The “P-1, Public/Quasi-Public” district zoning designation of the project site does not identify senior housing and offices as permitted uses, as such, a HRS 201H-38 Application will be filed with the Maui County Council requesting exemptions from the zoning code.

3. **Conflicts with the state’s long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders.**

The State’s Environmental Policy and Guidelines are set forth in Chapter 344, Hawaii Revised Statutes (HRS). The proposed action is consistent with the policies and guidelines of Chapter 344, HRS.

4. **Substantially affects the economic welfare, social welfare, and cultural practices of the community or State.**

The proposed action will have a beneficial effect on the local economy during construction. In the long term, the proposed project will provide much needed affordable senior housing and employment opportunities at the adult day care, community center, and housing manager for the project.

5. **Substantially affects public health.**

No adverse impact to public health or welfare is anticipated as a result of the proposed action. The proposed project will provide much needed affordable senior housing. Therefore, implementation of the proposed action will be beneficial to the overall social welfare of residents living in the upcountry area.

6. **Involves substantial secondary impacts, such as population changes or effects on public facilities.**

The proposed action may slightly increase the senior population in the area, as seniors living elsewhere on Maui may relocate to the proposed project. However, it is anticipated that the housing units may also be rented by upcountry residents. Due to the

limited number of proposed units (60 units), significant adverse impacts to population are not anticipated as a result of the project.

From a land use standpoint, the proposed project is in keeping with the objectives, policies, and implementing actions of the General Plan, Maui Island Plan, and Directed Growth maps and the Makawao-Pukalani-Kula Community Plan. The project does not anticipate any adverse impacts to public facilities as a result of implementation.

Adverse impacts to water and wastewater capacities and facilities are not anticipated as a result of project implementation.

7. **Involves a substantial degradation of environmental quality.**

During construction of the project, appropriate Best Management Practices (BMPs) will be utilized to ensure that potential adverse environmental effects are mitigated. No substantial degradation of environmental quality is anticipated as a result of project implementation.

8. **Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.**

The proposed action does not represent a commitment to larger actions. In addition, the proposed action is not expected to result in cumulative impacts that would adversely affect the environment.

9. **Substantially affects a rare, threatened, or endangered species, or its habitat.**

The project site is located on lands previously disturbed during construction of the Kulamalu Commercial Subdivision. As mentioned previously, there are no known or identified habitats of rare, threatened, or endangered species of flora, fauna or avifauna, or their habitats in the vicinity of the project site. Refer to **Appendix "G"**.

10. **Detrimentially affects air or water quality or ambient noise levels.**

Localized air quality impacts from construction equipment and vehicles may occur during construction of the proposed action. As such, potential air quality impacts during construction will be mitigated by complying with the provisions of the State Department of Health Administrative Rules, Title 11, Chapter 60, Fugitive Dust. Measures will be

taken to minimize air quality impacts, such as watering loose or exposed soil, erecting dust screens, and re-vegetating exposed areas as soon as practical.

Temporary noise impacts may also be generated from construction equipment. Equipment mufflers or other noise attenuating equipment, as well as proper equipment and vehicle maintenance, will be used during construction activities. Construction noise impact will be mitigated through compliance with the provisions of the State of Hawaii, Department of Health Administrative Rules Title 11, Chapter 46, "Community Noise Control". These rules require a noise permit if the noise levels from construction activities are expected to exceed the allowable levels set forth in Chapter 46 rules.

With proposed mitigation measures, the project is not anticipated to have adverse significant impacts on air quality or noise levels.

Water quality is also not anticipated to be affected by the proposed action in either the short term or long term.

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The project is not located within and would not affect environmentally sensitive areas. The Flood Insurance Rate Map (FIRM) for this region indicates that the project site is located in Zone X, an area of minimal flooding. In addition, the project site is located beyond the reaches of designated tsunami evacuation areas and is not located within any known hazard zone. The project site is not a shoreline property, nor is it situated near perennial streams or wetland areas. There are no geologically hazardous lands, estuaries, or coastal waters within or adjacent to the project site.

12. Substantially affects scenic vistas and viewplanes identified in county or state plans or studies.

The project site is not identified as a scenic vista or viewplane in County or State plans. It is not anticipated, therefore, that the proposed action will affect scenic corridors and coastal scenic and open space resources.

13. Requires substantial energy consumption.

The proposed project will involve the short-term commitment of fuel for equipment, vehicles, and machinery during construction activities. However, this use is not

anticipated to result in a substantial consumption of energy resources. In the long term, the proposed affordable housing will slightly increase demand for energy resources which can be accommodated by Maui Electric Company, Ltd. To reduce energy consumption, solar hot water and low-flow water fixtures will be installed. Also, the structures have been designed to accommodate a photovoltaic system to be added in the future.

In summary, the proposed action will provide much needed affordable senior housing in the upcountry area. The proposed action is not anticipated to have significant adverse impacts on the physical environment. In this context, a Finding of No Significant Impact (FONSI) determination is anticipated to be issued for the proposed action.

VIII. LIST OF PERMITS AND APPROVALS

VIII. LIST OF PERMITS AND APPROVALS

The following permits and approvals will be required prior to the implementation of the project:

State of Hawaii

1. Hawaii Revised Statutes (HRS) Chapter 343 Environmental Assessment
2. Department of Health Community Noise Permit, as applicable
3. Department of Health National Pollutant Discharge Elimination System (NPDES) permit, as applicable

County of Maui

1. Section 201H-38, HRS Affordable Housing Approval
2. Subdivision Approval
3. Construction Permits (Building, electrical, plumbing)

**IX. AGENCIES CONSULTED
DURING THE PREPARATION
OF THE DRAFT
ENVIRONMENTAL
ASSESSMENT; LETTERS
RECEIVED AND RESPONSES
TO SUBSTANTIVE
COMMENTS**

IX. AGENCIES CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT; LETTERS RECEIVED AND RESPONSES TO SUBSTANTIVE COMMENTS

A request for early consultation for the subject project was sent to the agencies and organizations listed below.

1. Ranae Ganske-Cerizo, Soil Conservationist
Natural Resources Conservation Service
U.S. Department of Agriculture
77 Hookele Street, Suite 202
Kahului, Hawaii 96732
2. George Young
Chief, Regulatory Branch
U.S. Department of the Army
U.S. Army Engineer District, Honolulu
Regulatory Branch. Building 230
Fort Shafter, Hawaii 96858-5440
3. Gordan Furutani, Field Office Director
U. S. Department of Housing and Urban
Development
1132 Bishop Street, Suite 1400
Honolulu, Hawaii 96813-2879
4. Loyal A. Mehrhoff
Field Supervisor
U. S. Fish and Wildlife Service
300 Ala Moana Blvd., Rm. 3-122
Box 50088
Honolulu, Hawaii 96813
5. Karen Seddon, Executive Director
State of Hawaii
Hawaii Housing Finance and Development
Corporation
677 Queen Street
Honolulu, Hawaii 96813
6. Richard C. Lim, Director
State of Hawaii
Department of Business, Economic
Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804
7. Kathryn Matayoshi, Superintendent
State of Hawaii
Department of Education
P.O. Box 2360
Honolulu, Hawaii 96804
8. Heidi Meeker, Planning Division
Office of Business Services
Department of Education
c/o Kalani High School
4680 Kalaniana'ole Highway, #T-B1A
Honolulu, Hawaii 96821
9. Jobie Masagatani
Chairperson Designate
Hawaiian Home Lands Commission
P.O. Box 1879
Honolulu, Hawaii 96805
10. Loretta J. Fuddy, Director
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814
11. Alec Wong, P.E., Chief
Clean Water Branch
State of Hawaii
Department of Health
919 Ala Moana Blvd., Room 300
Honolulu, Hawaii 96814
12. Patti Kitkowski, District Environmental
Health Program Chief
State of Hawaii
Department of Health
Maui Sanitation Branch
54 South High Street, Room 300
Wailuku, Hawaii 96793

13. Laura McIntyre, AICP, Office Manager
Environmental Planning Office
Department of Health
919 Ala Moana Blvd., Suite 312
Honolulu, Hawaii 96814
14. Lene Ichinotsubo
Environmental Management Division
State of Hawaii
Department of Health
919 Ala Moana Boulevard, Room 212
Honolulu, Hawaii 96814
15. William J. Aila, Jr., Chairperson
State of Hawaii
Department of Land and Natural
Resources
P. O. Box 621
Honolulu, Hawaii 96809
16. Dr. Puaalaokalani Aiu, Administrator
State of Hawaii
Department of Land and Natural
Resources
State Historic Preservation Division
601 Kamokila Blvd., Room 555
Kapolei, Hawaii 96707
17. Jenny Pickett, Maui Archaeologist
Department of Land and Natural
Resources
State Historic Preservation Division
130 Mahalani Street
Wailuku, Hawaii 96793
18. Glenn Okimoto, Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813
19. Major General Darryll Wong, Director
Hawaii State Civil Defense
3949 Diamond Head Road
Honolulu, Hawaii 96813-4495
20. Gary Gill, Acting Director
Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96818
21. Dr. Kamana`opono Crabbe, Chief
Executive Officer
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813
22. Jesse Souki, Director
State of Hawaii
Office of Planning
P.O. Box 2359
Honolulu, Hawaii 96804
23. University of Hawaii at Manoa
Environmental Center
2550 Campus Road, Crawford 317
Honolulu, Hawaii 96822
24. Anna Foust, Management Officer
Maui Civil Defense Agency
200 South High Street
Wailuku, Hawaii 96793
25. Jeffrey A. Murray, Fire Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawaii 96732
26. Glenn Correa, Director
County of Maui
Department of Parks and Recreation
700 Halia Nakoa Street, Unit 2
Wailuku, Hawaii 96793
27. William Spence, Director
County of Maui
Department of Planning
250 South High Street
Wailuku, Hawaii 96793
28. Gary Yabuta, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793
29. David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Hawaii 96793
30. Kyle Ginoza, Director
County of Maui
Department of Environmental Management
One Main Plaza
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

31. Jo Anne Johnson Winer, Director
County of Maui
Department of Transportation
200 South High Street
Wailuku, Hawaii 96793
32. David Taylor, Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793
33. Honorable Gladys Baisa, Council Chair
Maui County Council
200 South High Street
Wailuku, Hawaii 96793
34. Dan Takahata, Manager – Engineering
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawaii 96733
35. Hawaiian Telcom
60 South Church Street
Wailuku, Hawaii 96793
36. Kamehameha Schools
270 Aapueo Parkway
Makawao, Hawaii 96768
37. Shelley Maddigan, President
Kula Community Association
P.O. Box 417
Kula, Hawaii 96790
38. Kulamalu Hilltop Subdivision Association
c/o Commercial Properties of Maui
Management
Attention: Debbie Anthony
1962B Wells Street
Wailuku, Hawaii 96793
39. University of Hawaii
Institute for Astronomy
34 Ohia Ku Street
Pukalani, Hawaii 96768



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT
FORT SHAFTER, HAWAII 96858-5440

APR 26 2013

April 23, 2013

Regulatory Branch

POH-2013-00090

Munekiyo & Hiraga, Inc.
Attn: Colleen Suyama
305 S. High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

This is in response to your April 10, 2013 letter requesting the Department of the Army review and comment on the proposed Hale Mahaolu Ewalu Senior Residential Housing Project at TMKs: (2) 2-3-066:19 and 20, Pukalani, Island of Maui, Hawai'i. We have completed our review of the submitted document and have the following comments:

Your proposed project was reviewed pursuant to Section 10 of the Rivers and Harbors Act of 1899 (Section 10) and Section 404 of the Clean Water Act (Section 404). Section 10 requires that a DA permit be obtained for certain structures or work in or affecting navigable waters of the United States (U.S.), prior to conducting the work (33 U.S.C. 403). Navigable waters of the U.S. are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified as navigable by the Honolulu District. In addition, a Section 10 permit is required for structures or work outside this limit if they affect the course, capacity, or condition of the waterbody. Some typical examples of structures or work requiring Section 10 permits within this jurisdictional area include beach nourishment, boat ramps, breakwaters, bulkheads, and dredging.

Section 404 requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including wetlands, prior to conducting the work (33 U.S.C. 1344). For regulatory purposes, the U.S. Army Corps of Engineers (Corps) defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The area of Corps jurisdiction under Section 404 extends to the Mean Higher High Tide Line (MHHTL) or to the Ordinary High Water Mark (OHWM) for navigable waters other than the Pacific Ocean, and to the upland boundary of any adjacent wetlands. Fill material is any material that replaces a jurisdictional aquatic area with dry land or changes the bottom elevation of a waterbody. Fill may be temporary or permanent and often includes, but is not limited to, rock, sand, concrete, and sandbags. Projects involving discharges typically include placement of fill material for homes and landscaping, impoundments, road fills, dams and dikes, culverts, riprap, and beach nourishment. Section 404 also regulates discharges of dredged material incidental to certain activities such as

grading, mechanized landclearing, ditching or other excavation activity, and the installation of certain pile-supported structures.

The Corps of Engineers has sole authority to determine if an aquatic feature is/is not a water of the U.S., potentially subject to regulation under Section 10 and/or Section 404. Based on the submitted documents, **Kaluapulani Gulch** appears to flow through the southern portion of the proposed project area. Please submit further documentation you may have in regards to proposed work in or adjacent to Kaluapulani Gulch, along with any additional aquatic features that may be present on the property. Please submit drawings as outlined on our website (www.poh.usace.army.mil). Specifically, drawing recommendations must be on **8.5"x11" sheets of paper**, show existing and proposed conditions, and show the Mean High Water Mark/Ordinary High Water Mark. Please also indicate in writing the proposed construction in relation to any aquatic features, including Kaluapulani Gulch.

Thank you for giving us the opportunity to review this proposal and for your cooperation with our regulatory program. Please be advised you can provide comments on your experience with the Honolulu District Regulatory Branch by accessing our web-based customer survey form at <http://per2.nwp.usace.army.mil/survey.html>.

Should you have any questions, please contact Kaitlyn Seberger of this office at the above address or telephone 808-835-4300 (FAX: 808-835-4301) or by E-Mail at Kaitlyn.R.Seberger@usace.army.mil. Please refer to File Number **POH-2013-00090** in all future communications with this office regarding this or other projects at this location.

Sincerely,



George P. Young, P.E.
Chief, Regulatory Branch



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

OWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICHY" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

George P. Young, P.E.
Chief, Regulatory Branch
Department of the Army
U.S. Army Corps of Engineers
Honolulu District
Fort Shafter, Hawaii 96858-5440

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii (POH-2013-00090)

Dear Mr. Young:

Thank you for your letter of April 23, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we acknowledge that a tributary of Kaluapulani Gulch flows through the southern portion of the project site and may be subject to regulation under Section 10 and/or Section 404. Your letter has been forwarded to the project engineer for review and appropriate action. A Preliminary Drainage Report will be included in the Draft EA identifying the existing and proposed conditions and work adjacent to or in the gulch. Hale Mahaolu proposes to limit work outside of the gulch.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

CAHU

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

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George P. Young, P.E.
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates, Inc.

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MAY 07 2013



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

In Reply Refer To:
2013-SL-0255

MAY 03 2013

Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Species List for Preparation of an Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project, Pukalani, Maui

Dear Ms. Suyama:

The U.S. Fish and Wildlife Service (Service) received your correspondence on April 15, 2013, requesting early consultation for the proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision of Pukalani, Maui. Hale Mahaolu is proposing this project on approximately 4.0 acres located at the southeast corner of the Ohia Ku Street and Ohia Lehua Place intersection (Tax Map Keys (2) 2-3-066:19 & 20). Access to the project site will be from Ohia Ku Street. North and east of the project site is the Kulamalu Town Center, including the Longs Drugs store; directly east is an existing parking lot; south is the Kaliahinui Gulch; and west are the Kulamalu Hilltop Subdivision and University of Hawaii Institute of Astronomy. The project will involve the use of funds from the County of Maui and will be designated for 100 percent (100%) affordable elderly housing. This project proposes to take advantage of the downward slope of the project site and construct three-story buildings containing approximately 61 housing units, an Adult Day Care senior center building, maintenance shop, and approximately 75 parking stalls.

Based on information you provided and pertinent information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, four species protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), could be impacted by the proposed project. To assist you with minimization and avoidance of impacts to these species, the Service offers the following recommendations:

- The Blackburn's sphinx moth (*Manduca blackburni*) may breed and feed within the proposed project area. Adult moths feed on nectar from native plants, including beach morning glory (*Ipomoea pes-caprae*), iliee (*Plumbago zeylanica*), and maiapilo (*Capparis sandwichiana*). Larvae feed upon non-native tree tobacco (*Nicotiana glauca*) and native aiea (*Nothocestrum latifolium*). Blackburn's sphinx moth pupae may occupy

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the soil within 250 feet of larval host plants for a year or longer. The Service recommends that a qualified biologist survey all project areas, and areas adjacent to the project, for the presence of native and non-native Blackburn's sphinx moth host plants. The Service recommends these surveys be conducted during the wettest portion of the year (usually November-April), approximately four to eight weeks following a significant rainfall event. Surveys should include looking for eggs, larvae, and signs of pupating larvae (frass, chewed leaves and stems, or other characteristic signs of larval browsing). If presence of the Blackburn's sphinx moth is confirmed, the Service should be contacted for further coordination.

- The Hawaiian petrel (*Pterodroma sandwichensis*) and Newell's shearwater (*Puffinus newelli*), collectively referred to as seabirds, may transit through the proposed action area while flying between the ocean and nesting sites in the mountains during their breeding season (March through December). Seabird fatalities resulting from collisions with artificial structures that extend above the surrounding vegetation have been documented in Hawaii where high densities of transiting seabirds occur. Additionally, artificial lighting, such as flood lighting for construction work and site security, can adversely impact seabirds by causing disorientation which may result in collision with utility lines, buildings, fences, and vehicles. Fledging seabirds are especially affected by artificial lighting and have a tendency to exhaust themselves while circling the light sources and become grounded. Too weak to fly, these birds become vulnerable to depredation by feral predators such as dogs, cats, and mongoose. Therefore, the Service recommends that no outdoor flood lighting be installed as part of the proposed action. Project-related lighting should be minimized. All project-related lights should be shielded so the bulb is not visible at or above bulb-height. Motion sensors and timers should be installed to minimize periods of illumination.
- The Hawaiian goose (*Branta sandvicensis*) may be present in the vicinity of the proposed action at any time of the year due to its range and foraging behavior. The Service recommends that a biologist familiar with the nesting behavior of the Hawaiian goose should survey the area around proposed construction areas prior to the initiation of any work during the Hawaiian goose breeding season (November through April), or after any subsequent delay of work of three or more days (during which the birds may attempt to nest). If a nest is discovered within a radius of 150 feet of proposed construction activity, or a previously undiscovered nest is found within said radius after work begins, all work should cease immediately and the Service contacted for further guidance. Moreover, if a Hawaiian goose appears within 100 feet of ongoing work at any time during the construction phase of the proposed project, all activity should be temporarily suspended until the bird moves off to a safe distance of its own volition.

Implementation of Best Management Practices for these species will minimize but does not ensure that take of listed species associated with this proposed action will be avoided. Therefore, a consultation pursuant to section 7 of the ESA may be necessary and can be initiated by the federal agency serving as a nexus for this project. Alternatively, that federal agency can designate a non-federal representative to conduct an informal consultation on their behalf. If there is not a federal nexus for this proposed project, the Service should then be contacted by the Applicant to complete a Habitat Conservation Plan pursuant to section 10 of the ESA, if take of listed species cannot be avoided.

Ms. Colleen Suyama

3

No designated critical habitat occurs within the vicinity of the proposed action area. Thank you for your conservation efforts. Please contact Fish and Wildlife Biologist Dr. Tim Langer (808-792-9462) if you have any questions or for further guidance.

Sincerely,

Crystal Licetti
for

Loyal Mehrhoff
Field Supervisor

cc: Lasha-Lynn H. Salbosa, Division of Forestry and Wildlife



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

EWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MIYURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Loyal Mehrhoff, Field Supervisor
U.S. Department of the Interior
Fish and Wildlife Service
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii, (2013-SL-0255)

Dear Mr. Mehrhoff:

Thank you for your letter of May 3, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, offer the following information, which addresses your comments in the order listed in your letter.

1. A biological resources study will be prepared and included in the Draft EA. A special effort will be made to find the Blackburn's sphinx moth, as well as their native and non-native host plants. If found, appropriate mitigation will be included in the Draft EA and implemented prior to construction.
2. We acknowledge that the Hawaiian petrel and Newell's shearwater may transit the project area. Appropriate mitigation measures will be included in the Draft EA to minimize impacts on these seabirds.
3. We acknowledge the Hawaiian goose may be present in the vicinity of the proposed action. As previously noted, a biological resources study will be prepared and included in the Draft EA. The recommended mitigation measures will be included in the Draft EA and implemented during construction of the proposed project.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

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Loyal Mehrhoff, Field Supervisor
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015

Very truly yours,



Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Robert Hobdy, Biologist

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MAY 10 2013

NEIL ABERCROMBIE
GOVERNOR



KAREN SEDDON
EXECUTIVE DIRECTOR

STATE OF HAWAII

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT AND TOURISM
HAWAII HOUSING FINANCE AND DEVELOPMENT CORPORATION
677 QUEEN STREET, SUITE 300
Honolulu, Hawaii 96813
FAX: (808) 587-0600

IN REPLY REFER TO:

13:PEO/56

May 8, 2013

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Re: Request for Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision at TMK (2)2-3-066:19 and 20, Pukalani, Maui, Hawaii

Thank you for the opportunity to provide comments on the subject senior residential housing project.

There is great need for affordable rental housing in the County of Maui. Based on the 2011 Hawaii Housing Planning Study, approximately 2,400 rental units for households at 80% and below the Maui area median income are needed by 2016. The study also shows that there is a need for nearly 300 affordable elderly and over 2,100 affordable family rental units.

Sincerely,

A handwritten signature in cursive script that reads "Karen Seddon".

Karen Seddon
Executive Director



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRABA
SENIOR VICE PRESIDENT

MITSUBU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Janice Takahashi, Interim Executive Director
Department of Business, Economic Development
And Tourism
Hawaii Housing Finance and
Development Corporation
877 Queen Street, Suite 300
Honolulu, Hawaii 96813

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii, (13:PEO/56)

Dear Ms. Takahashi:

Thank you for your agency's letter of May 8, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, please be advised that information from the 2011 Hawaii Housing Planning Study will be included in the Draft EA.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu

MAUI K:\DATA\HaleMahaolu\KulamaluSrHsng\Early Consultation Responses\DBEDT HHFDC.ltr.docx

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

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STATE OF HAWAII



JOBIE M. K. MASAGATANI
CHAIRMAN
HAWAIIAN HOMES COMMISSION

DARRELL T. YOUNG
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS

P. O. BOX 1879
HONOLULU, HAWAII 96805

May 13, 2013

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 South High Street, Suite 104
Wailuku, Hawai'i 96793

Dear Ms. Suyama:

Subject: Request for Early Consultation for the Proposed Hale Mahaolu
Ewalu Senior Residential Housing Project in the Kulamalu Commercial
Subdivision at TMK (2)2-3-066:19 and 20, Pukalani, Maui, Hawaii

Thank you for the opportunity to comment on the Early Consultation. The Department of
Hawaiian Home Lands has no comment to offer at this time.

Should you have any questions, you may reach us at (808) 620-9480.

Aloha,

Darrell C. Yagodich,
Planning Program Manager



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Darrell C. Yagodich, Planning Program Manager
Department of Hawaiian Home Lands
P.O. Box 1879
Honolulu, Hawaii 96805

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Yagodich:

Thank you for your letter of May 13, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we appreciate your confirmation that your department does not have any comments at this time.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu

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MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

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OHAIU

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

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APR 26 2013

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

04067PST.13

April 23, 2013

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: Comments on the Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision Pukalani, Island of Maui, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated April 10, 2013, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: <http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf>.

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).
2. You may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the CWB

Individual NPDES Form through the e-Permitting Portal and the hard copy certification statement with \$1,000 filing fee. Please open the e-Permitting Portal website at: <https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx>. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the "CWB Individual NPDES Form." Follow the instructions to complete and submit this form.

3. If your project involves work in, over, or under waters of the United States, it is highly recommend that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 438-9258) regarding their permitting requirements.

Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.

If you have any questions, please visit our website at: <http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,


ALEC WONG, P.E., CHIEF
Clean Water Branch

ST:rh

- c: DOH-EPO [via email only]
Roland Asakura, CWB, Maui District Head Office [via e-mail only]

MAY 29 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

05082PJF.13

May 28, 2013

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: Comments on the Early Consultation Request for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision Pukalani, Island of Maui, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated April 10, 2013, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54, and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: <http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf>.

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Anti-degradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).
2. You may be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the

discharge. To request NPDES permit coverage, you must submit the CWB Individual NPDES Form through the e-Permitting Portal and the hard copy certification statement with \$1,000 filing fee. Please open the e-Permitting Portal website at: <https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx>. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the "CWB Individual NPDES Form." Follow the instructions to complete and submit this form.

3. If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 438-9258) regarding their permitting requirements.

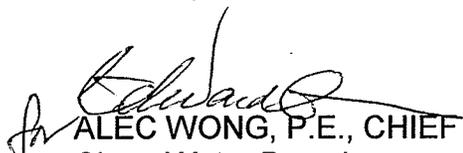
Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and HAR, Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Non-compliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.

If you have any questions, please visit our website at:

<http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,


ALEC WONG, P.E., CHIEF
Clean Water Branch

JF:np

c: DOH-EPO #13-086 [via e-mail only]



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Alec Wong, P.E., Chief
Department of Health
Clean Water Branch
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii (EMD/CWB 04067PST.13) and (EMD/CWB 05082PJF.13)

Dear Mr. Wong:

Thank you for your letters of April 23, 2013 and May 28, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. Your recommendation to review the Standard Comments of the Department of Health (DOH) has been forwarded to the applicant for review and as appropriate, implementation. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letters.

1. We acknowledge that the project shall comply with the water quality provisions of Section 11-54, Hawaii Administrative Rules (HAR), as applicable.
2. As may be required, a National Pollutant Discharge Elimination System (NPDES) permit will be submitted to the Department of Health (DOH).
3. Hale Mahaolu will coordinate the project with the United States Army Corps of Engineers, Regulatory Branch regarding permitting requirements. Also, if required, a Section 401 Water Quality Certification application will be filed with the DOH.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

KAHUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233

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Alec Wong, P.E., Chief
January 17, 2014
Page 2

4. We acknowledge that noncompliance with water quality and permitting requirements contained in HAR, Chapter 11-54, may be subject to penalties of \$25,000.00 per day per violation.

Again, thank you for your participation in the Chapter 343, HRS review process. Copies of your letters will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates, Inc.

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APR 25 2013

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, HAWAII 96793

April 24, 2013

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

**Subject: Request for Early Consultation for the Proposed Hale Mahaolu
Ewalu Senior Residential Housing Project in the Kulamalu
Commercial Subdivision, Pukalani, Maui, Hawaii
TMK: (2) 2-3-066:19 and 20**

Thank you for the opportunity to review this project. We have the following comments to offer:

1. National Pollutant Discharge Elimination System (NPDES) permit coverage maybe required for this project. The Clean Water Branch should be contacted at 808 586-4309.
2. The noise created during the construction phase of the project may exceed the maximum allowable levels as set forth in Hawaii Administrative Rules (HAR), Chapter 11-46, "Community Noise Control." A noise permit may be required and should be obtained before the commencement of work. The Indoor & Radiological Health Branch should be contacted at 808 586-4700.
3. Please provide wastewater disposal method for the proposed project. If you have any questions please contact Roland Tejano, Environmental Engineer, at 808 984-8232.

It is strongly recommended that the Standard Comments found at the Department's website: <http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html> be reviewed, and any comments specifically applicable to this project should be adhered to.

Ms. Colleen Suyama
April 24, 2013
Page 2

Should you have any questions, please call me at 808 984-8230 or E-mail me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

A handwritten signature in black ink that reads "Patti Kitkowski". The signature is written in a cursive style with a large initial "P" and a long, sweeping underline.

Patti Kitkowski
District Environmental Health Program Chief

c EPO



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBURU "MICK" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Patti Kitkowski
District Environmental Health Program Chief
Department of Health
Maui District Office
State of Hawaii
54 High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Ms. Kitkowski:

Thank you for your letter of April 24, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letter:

1. As may be required, a National Pollutant Discharge Elimination System (NPDES) permit application will be submitted to the Department of Health.
2. As may be required, to comply with Chapter 11-46, "Community Noise Control", a noise permit will be obtained prior to the commencement of work.
3. Hale Mahaolu proposes to connect to the private Pukalani Wastewater Treatment Plant (WWTP). Hale Mahaolu will continue discussions with Hawaii Water Service Company, Inc., operators of the private WWTP, regarding capacity it may need for the project and connection to the private sewage system.

Your recommendation to review the Standard Comments of the Department of Health has been forwarded to the applicant for review and, as appropriate, implementation.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

KAHUI

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Patti Kitkowski
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

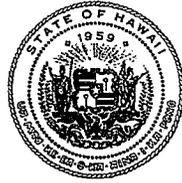
CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates, Inc.

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APR 25 2013

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GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

13-086
Kulamalu

April 22, 2013

Ms. Colleen Suyama
Munekiyo & Hiraga, Inc.
305 High Street, Suit 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: Request for Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision at TMK: (2) 2-3-066: 19 and 20 Pukalani, Maui, Hawaii

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter dated April 10, 2013. Thank you for allowing us to review and comment on the subject document. The document was routed to the DOH's Clean Water and Wastewater Branches and the County of Maui, District Health Office. They will provide specific comments to you if necessary. EPO recommends that you review the Standard Comments (www.hawaii.gov/health/epo under the land use tab). You are required to adhere to all Standard Comments specifically applicable to this application.

EPO suggests that you examine the many sources available on strategies to support the sustainable design of communities, including the:

- U.S. Environmental Protection Agency's report, "Creating Equitable, Health and Sustainable Communities: Strategies for Advancing Smart Growth, Environmental Justice, and Equitable Development" (Feb. 2013), <http://www.epa.gov/smartgrowth/pdf/equitable-dev/equitable-development-report-508-011713b.pdf>;
- U.S. Environmental Protection Agency's sustainability programs: www.epa.gov/sustainability;
- U.S. Green Building Council's LEED program: www.new.usgbc.org/leed; and
- World Health Organization, www.who.int/hia.

The DOH encourages everyone to apply these sustainability strategies and principles early in the planning and review of projects. We also request that for future projects you consider conducting a Health Impact Assessment (HIA). More information is available at www.cdc.gov/healthypplaces/hia.htm. We request you share all of this information with others to increase community awareness on sustainable, innovative, inspirational, and healthy community design.

We request a written response confirming receipt of this letter and any other letters you receive from DOH in regards to this submission. You may mail your response to: 919 Ala Moana Blvd., Ste. 312, Honolulu, Hawaii 96814. However, we would prefer an email submission to epo@doh.hawaii.gov. We anticipate that our letter(s) and your response(s) will be included in the final document. If you have any questions, please contact me at (808) 586-4337.

Mahalo,

A handwritten signature in black ink, appearing to read "Laura Leialoha Phillips McIntyre".

Laura Leialoha Phillips McIntyre, AICP
Manager, Environmental Planning Office



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBURU "MIDHI" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Laura Leialoha Phillips McIntyre, AICP
Manager, Environmental Planning Office
Department of Health
State of Hawaii
P.O. Box 3378
Honolulu, Hawaii 96801

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii (13-086 Kulamalu)

Dear Ms. McIntyre:

Thank you for your letter of April 22, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. As recommended, the design consultant will review the standard comments pertaining to land use and other recommended resources to support sustainable design of communities.

As requested, on behalf of Hale Mahaolu we acknowledge receipt of your letter.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

MAUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

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Laura Leialoha Phillips McIntyre, AICP
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates, Inc.

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MAY 06 2013

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
SOLID AND HAZARDOUS WASTE BRANCH
919 ALA MOANA BOULEVARD, #212
HONOLULU, HAWAII 96814

In reply, please refer to:
EMD/SHWB

May 1, 2013

S0504LO

Ms. Colleen Suyama
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: Early Consultation
Proposed Hale Mahaolu Ewalu Senior Residential Housing
Pukalani, Maui, Hawaii
(TMK 2nd, 2-3-066:019 and 020)

Thank you for giving us the opportunity to review and provide comments on the subject document. It has been reviewed by the Office of Solid Waste Management, Solid Waste Section, Hazardous Waste Section, and Underground Storage Tank Section of the Department of Health (DOH), Solid and Hazardous Waste Branch.

The Solid Waste, Hazardous Waste, and Underground Storage Tank Sections have no comments to offer at this time. The Office of Solid Waste Management offers the following comments in response to the April 10, 2013 request for early consultation for the subject project:

The proposed senior residential housing project within the Kulamalu Commercial Subdivision, consisting of three-story buildings with approximately sixty-one housing units, an adult day care senior center building, maintenance shop and parking stalls. Only new construction activities are anticipated based on the potential scope of the project with the assumption that no demolition activities will occur. Therefore, we offer the following comments:

1. Please inquire as to possible arrangements with DOH-permitted recovery facilities such as Pohakulepo Recycling, LLC dba Hawaiian Cement for the potential disposition of unpainted, uncontaminated concrete (no asbestos, lead-based paint or other types of contamination accepted) from new construction.

Please be aware that these businesses may choose to accept unpainted, uncontaminated concrete from their own jobs only.

2. If on-site reuse of concrete is intended, then the uncontaminated concrete must also meet the state's definition of "inert fill material" defined as:

Section 342H-1, HRS Definition

"Inert fill material" means earth, soil, rocks, rock-like material such as cured asphalt, brick, and clean concrete less than eight inches in diameter, except as specified by a licensed soils engineer with no exposed steel reinforcing rod. The fill material shall not contain vegetation or organic material, or other solid waste.

The fill material shall be clean and uncontaminated. We typically utilize the Environmental Action Levels (EALs) for residential usage as well as the most stringent water quality standards for unrestricted use as a basis of determining whether fill is contaminated or not. The EALs may be found at <http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/environmental-hazard-evaluation-and-environmental-action-levels>.

3. Appropriately dispose of new construction gypsum and plaster. Currently, no recycling facility in Maui County is permitted to accept gypsum board from demolition projects.
4. We assume that any wood waste from the new construction stage is of the treated variety. Such wood waste must be disposed of at DOH-permitted disposal facilities, not recycled. Currently, there are no DOH-permitted facilities on Maui that accept treated lumber for recycling.
5. Please send any ferrous scrap to permitted scrap metal facilities such as Schnitzer Steel Hawaii Corp., dba Hammerhead Metals Recycling.
6. Please send any non-ferrous scrap to DOH-permitted facilities such as any of the various Reynolds Recycling, Inc. locations on Maui.
7. Please send any greenwaste to DOH-permitted facilities on Maui such as Maui Earth Compost, Inc. or Maui EKO Systems. Each facility's ability to process greenwaste varies, so please contact them first prior to delivery. Whenever feasible, we also encourage on-site reuse of trees planned for removal.

Ms. Colleen Suyama
May 1, 2013
Page 3

Please be reminded that the applicant's submittal was reviewed with respect to solid waste management and disposal issues only. We do recommend that the applicant obtain approval from other agencies (such as OSHA) that may be involved in the oversight and implementation of various aspects of their proposed action.

If you have any questions or comments, please contact Mr. John Valera of our Office of Solid Waste Management at (808) 586-4226.

Sincerely,


STEVEN Y.K. CHANG, P.E., CHIEF
Solid and Hazardous Waste Branch



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Steven Y. K. Chang, P.E., Chief
Department of Health
Solid and Hazardous Waste Branch
919 Ala Moana Boulevard, #212
Honolulu, Hawaii 96814

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii (EMD/SHWB S0504LO)

Dear Mr. Chang:

Thank you for your letter of May 1, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letter:

1. As recommended, prior to the initiation of construction, Hale Mahaolu or its contractor, will coordinate construction waste disposal with Department of Health (DOH)-permitted recovery facilities such as Pohakulepo Recycling, LLC.
2. If on-site reuse of concrete is implemented, then the uncontaminated concrete shall meet the state's definition of inert fill material, as defined in Section 342H-1, HRS.
3. As recommended, new construction gypsum and plaster shall be appropriately disposed.
4. If treated wood is utilized in construction, as recommended, wood waste will be disposed of at a DOH-permitted disposal facility and not recycled unless a DOH-permitted facility for recycling of treated lumber is established on Maui.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793
PH: (808)244-2015 FAX: (808)244-8729
OAHU

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233
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Steven Y.K. Chang, P.E., Chief
January 17, 2014
Page 2

5. Ferrous scrap from the project shall be sent to a permitted scrap metal facility.
6. Non-ferrous scrap from the project shall be sent to a DOH-permitted facility on Maui for recycling.
7. Greenwaste from the project shall be sent to a DOH-permitted facility for disposal.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunland Kono Architects, Ltd.

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JUN 05 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

LUD-2 2 3 066 019-ID1336
Early Cons Hale Mahaolu Ewalu

June 5, 2013

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street Suite 104
Wailuku, Maui, Hawaii 96793

Dear Ms. Suyama:

Subject: Request for Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision Ohia Ku Street, Pukalani, Maui, Hawaii 96768 TMK (2) 2-3-066: 019 & 020

Thank you for the opportunity to comment on the Early Consultation for the subject project. We have the following comments to offer.

The subject project is located in the critical wastewater disposal area as determined by the Maui County Wastewater Advisory Committee. Domestic wastewater treatment and disposal have not been addressed in the document. If connection to the Pukalani Wastewater Treatment Plan sewer system is not available, domestic wastewater generated by the project shall be handled by wastewater systems that comply with our chapter 11-62, Hawaii Administrative Rules, "Wastewater Systems".

Should you have any questions, please contact the Planning & Design Section of our branch at phone (808) 586-4294 or fax to (808) 586-4300.

Sincerely,

SINA PRUDER, P.E., CHIEF
Wastewater Branch

LM:lmj

c: Ms. Laura McIntyre, DOH-Environmental Planning Office (13-086)
Mr. Roland Tejano, DOH-WWB's Maui Staff



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICK" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Sina Pruder, P.E., Chief
Wastewater Branch
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii (LUD-2 2 3 066 019-ID1336)

Dear Ms. Pruder:

Thank you for your letter of June 5, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. Hale Mahaolu proposes to connect to the private sewage system owned and operated by the Hawaii Water Service Company, Inc. Hale Mahaolu proposes to purchase capacity from the Pukalani Wastewater Treatment Plant for the project. In the event connection to the existing sewer system is not available, the project shall comply with the Chapter 11-62, Hawaii Administrative Rules, Wastewater Systems.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

KAHUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233

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management

Sina Pruder, P.E., Chief
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:me

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato & Associates, Inc.

K:\DATA\HaleMahaolu\KulamaluSrHng\Early Consultation Responses\DOH WWB Response.docx

MAY 01 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AHA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 1, 2013

Munekiyo & Hiraga, Inc.

Attention: Ms. Colleen Suyama, Senior Associate
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@mhplanning.com

Dear Ms. Suyama:

SUBJECT: Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from the Engineering Division on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

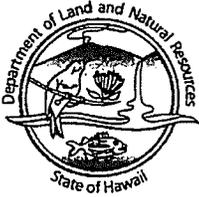
Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Land Administrator

Enclosure(s)

cc: Central Files



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 22, 2013

MEMORANDUM

RECEIVED
LAND DIVISION
2013 APR 30 PM 3:23
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

TO: FR:

DLNR Agencies:

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Maui District
- Historic Preservation

FROM:

TO:

Russell Y. Tsuji, Land Administrator

SUBJECT:

Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project

LOCATION:

Pukalani, Island of Maui; TMK: (2) 2-3-066:019 & 020

APPLICANT:

Hale Mahaolu

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2013.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:

Print Name:

Date:

[Signature]
Cory S. Chung, Chief Engineer
4/22/13

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/LydiaMorikawa

RE:Early ConsultationHaleMahaoluEwaluSeniorResHousing
Maui.398

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ____.
- (X) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone X. The National Flood Insurance Program does not have any regulations for developments within Zone X.
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.
- () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- () Mr. Mario Siu Li at (808) 768-8098 or Ms. Ardis Shaw-Kim at (808) 768-8296 of the City and County of Honolulu, Department of Planning and Permitting.
 - () Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.
 - () Ms. Carolyn Cortez at (808) 270-7813 of the County of Maui, Department of Planning.
 - () Mr. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.
- () The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.
 - () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
 - () Additional Comments: _____
 - () Other: _____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: 
CARTY S. CHANG, CHIEF ENGINEER

Date: 4/20/13

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 6, 2013

Munekiyo & Hiraga, Inc.
Attention: Ms. Colleen Suyama, Senior Associate
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@mhplanning.com

Dear Ms. Suyama:

SUBJECT: Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential
Housing Project

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on May 1, 2013, enclosed are comments from the Commission on Water Resource Management on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Land Administrator

Enclosure(s)
cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII
RECEIVED
LAND DIVISION

2013 MAY -3 PM 2:59



DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 521
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
LORETTA J. FUDDY, A.C.S.W., M.P.H.
NEAL S. FUJIWARA
JONATHAN STARR
TED YAMAMURA
WILLIAM M. TAM
DEPUTY DIRECTOR

April 29, 2013

TO: Russell Tsuji, Administrator
Land Division

FROM: William M. Tam, Deputy Director
Commission on Water Resource Management

SUBJECT: Hale Mahaolu Ewalu Senior Residence, Pukalani, Maui

FILE NO.: N/A
TMK NO.: (2) 2-3-066:019 & 020

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at <http://www.hawaii.gov/dlnr/cwrm>.

Our comments related to water resources are checked off below.

1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.
2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.
3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.
4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at <http://www.usgbc.org/leed>. A listing of fixtures certified by the EPA as having high water efficiency can be found at <http://www.epa.gov/watersense/>.
5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at <http://hawaii.gov/dbedt/czm/initiative/lid.php>.
6. We recommend the use of alternative water sources, wherever practicable.
7. We recommend participating in the Hawaii Green Business Program, that assists and recognizes businesses that strive to operate in an environmentally and socially responsible manner. The program description can be found online at <http://energy.hawaii.gov/programs/achieving-efficiency/green-business-program>

8. We recommend adopting landscape irrigation conservation best management practices endorsed by the Landscape Industry Council of Hawaii. These practices can be found online at http://landscapehawaii.org/library/documents/lich_irrigation_conservation_bmps.pdf
9. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:

Additional information and forms are available at http://hawaii.gov/dlnr/cwrn/info_permits.htm.

10. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water. The Water Use Permit may be conditioned on the requirement to use dual line water supply systems for new industrial and commercial developments.
11. A Well Construction Permit(s) is (are) required before any well construction work begins.
12. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.
13. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.
14. Ground water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.
15. A Stream Channel Alteration Permit(s) is (are) required before any alteration(s) can be made to the bed and/or banks of a stream channel.
16. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is (are) constructed or altered.
17. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.
18. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.
- OTHER:
Water resources in this area are limited.

If there are any questions, please contact Charley Ice at 587-0218.

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 19, 2013

Munekiyo & Hiraga, Inc.
Attention: Ms. Colleen Suyama, Senior Associate
305 High Street, Suite 104
Wailuku, Hawaii 96793

via email: planning@mhplanning.com

Dear Ms. Suyama:

SUBJECT: Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments previously sent you on May 1 and May 6, 2013, enclosed are comments from the Land Division – Maui District on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji
Land Administrator

Enclosure

cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

2013 APR 24 PM 12: 51

MAUI DISTRICT
LAND DIVISION

April 22, 2013

MEMORANDUM

- TO: **DLNR Agencies:**
- Div. of Aquatic Resources
 - Div. of Boating & Ocean Recreation
 - Engineering Division
 - Div. of Forestry & Wildlife
 - Div. of State Parks
 - Commission on Water Resource Management
 - Office of Conservation & Coastal Lands
 - Land Division – Maui District
 - Historic Preservation

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

2013 JUL 18 AM 9: 56

RECEIVED
LAND DIVISION

FROM: *[Signature]* Russell Y. Tsuji, Land Administrator

SUBJECT: Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project

LOCATION: Pukalani, Island of Maui; TMK: (2) 2-3-066:019 & 020

APPLICANT: Hale Mahaolu

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2013.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: *[Signature]*

Print Name: Daniel Ornelles

Date: 7/10/13

cc: Central Files



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

OWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Russell Y. Tsuji, Land Administrator
Department of Land and
Natural Resources
Land Division
P.O. Box 621
Honolulu, Hawaii 96809

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Tsuji:

Thank you for your letters of May 1, 2013, May 6, 2013 and July 19, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letters.

May 1, 2013 Letter

Engineering Division

1. We acknowledge that according to the Flood Insurance Rate Map (FIRM) the subject properties are located in Flood Zone "X".

May 6, 2013 Letter

Commission on Water Resources Management

1. We will coordinate with the Department of Water Supply (DWS) to incorporate the project into the County's Water Use and Development Plan.
2. As recommended, water efficient fixtures will be installed and water efficient practices implemented.

3. As recommended, Best Management Practices (BMPs) for stormwater management will be implemented.
4. If available and practicable, the project will utilize alternative water sources during construction or for irrigation purposes.
5. Landscape irrigation conservation BMPs endorsed by the Landscape Industry Council of Hawaii has been forwarded to the project's design consultants. As practicable, the project will implement the recommended BMPs.
6. We note your comment regarding limited water resources in the area. Currently, Hale Mahaolu is intending to utilize water credits granted to Dowling Company by the DWS.

July 19, 2013 Letter

1. We acknowledge the Maui District Land Division has no comments.

Again, thank you for your participation in the Chapter 343, HRS review process. Copies of your letters will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato & Associates, Inc.
David Sereda, Chris Hart & Partners, Inc.

K:\DATA\HaleMahaolu\KulamaluSrHsng\Early Consultation Responses\DLNR Land.ltr.docx

NEIL ABERCROMBIE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

MAY 13 2013

GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
JADE T. BUTAY
FORD N. FUCHIGAMI
RANDY GRUNE
JADINE URASAKI

IN REPLY REFER TO:

STP 8.1199

May 6, 2013

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

Subject: Hale Mahaolu Ewalu Senior Residential Housing Project
Early Consultation for Environmental Assessment
TMK: (2) 2-3-066:019 and 020

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project.

DOT understands the applicant proposes to construct three-story buildings containing approximately 61 housing units, an Adult Day Care senior center building, maintenance shop, and approximately 75 parking stalls on a 4 acres site. Access to the project site will be from Ohia Ku Street.

The Draft Environmental Assessment should discuss and evaluate the project's contribution to the cumulative traffic impacts on State highways facilities in the area.

DOT appreciates the opportunity to provide comments. If there are any questions, including the need to meet with DOT staff, please contact Mr. Garrett Smith of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Very truly yours,

A handwritten signature in black ink, appearing to read "Glenn M. Okimoto".

GLENN M. OKIMOTO, Ph.D.
Director of Transportation



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN ONASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Glenn M. Okimoto, Ph.D., Director
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii, (STP 8.1199)

Dear Mr. Okimoto:

Thank you for your letter of May 6, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we note that as requested a discussion and evaluation of the project's traffic impacts on State highways facilities will be included in the Draft EA.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

OAHU

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

WWW.MHPLANNING.COM

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process
management

Glenn M. Okimoto, Ph.D., Director
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at (808) 244-2015.

Very truly yours,



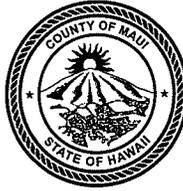
Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato & Associates, Inc.
Julian Ng, Traffic Consultant

K:\DATA\HaleMahaolu\KuiamaluSrHsng\Early Consultation Responses\SDOT.ltr.docx

CHARMAINE TAVARES
MAYOR



JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY
FIRE PREVENTION BUREAU

313 MANEA PLACE • WAILUKU, HAWAII 96793
(808) 244-9161 • FAX (808) 244-1363

April 22, 2013

Maunekiyo & Hiraga, Inc.
Attn: Colleen Suyama
305 High Street, Suite 104
Wailuku, HI 96793

**Re: Hale Mahaolu Ewalu Senior Residential Project-Early
Consultation Comment Letter
Pukalani, Hawai'i
TMK: (2) 2-3-066:019 & 020**

Dear Colleen,

Thank for allowing the Department of Fire and Public Safety the opportunity to comment on the subject project. At this time, our office has no specific comments or objections in regards to this subject.

We do reserve the right to provide comment on the proposed project during the building permit review process when fire department access, water supply for fire protection, and fire and life safety requirements will be addressed. The initial review will require that fire protection meet the classified land-use requirements. For the proposed buildings, fire protection and fire apparatus access will be addressed as well as life safety. Unfortunately, these comments can not be provided until engineered buildings plans are submitted.

If there are any questions or comments, please feel free to contact me at 244-9161 ext. 25. Thank you for your attention to fire prevention and public safety.

Sincerely,

Kono Davis
Lieutenant, Fire Prevention Bureau
Department of Fire and Public Safety, Maui County



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

EWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Lieutenant Kono Davis
Fire Prevention Bureau
Department of Fire and Public Safety
County of Maui
313 Manea Place
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Lieutenant Davis:

Thank you for your letter of April 22, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we appreciate your conveying that your Department has no comments at this time, but reserves the right to provide comments during the building permit review process.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.

MAUI K:\DATA\HaleMahaolu\KulamaluSrHsng\Early Consultation Responses\FirePrevention\ecresponse.letter.doc

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

MAUI

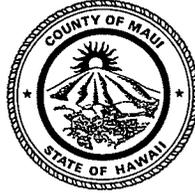
735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

WWW.MKPLANNING.COM

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process
management

MAY 01 2013

ALAN M. ARAKAWA
Mayor



GLENN T. CORREA
Director

BRIANNE SAVAGE
Deputy Director

(808) 270-7230
FAX (808) 270-7934

DEPARTMENT OF PARKS & RECREATION
700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

April 24, 2013

Munekiyo & Hiraga, Inc.
Attention: Colleen Suyama, Senior Associate
305 High Street, Suite 104
Wailuku, Hi 96793

Dear Ms. Suyama:

SUBJECT: Request for Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision at TMK (2)2-3-066:19 and 20, Pukalani, Maui, Hawaii

Thank you for the opportunity to review the subject Early Consultation Request.

As the project plans to be 100 percent affordable, the exemption from Section 18.16.320, Maui County Code, will be provided once the Maui County Council has approved the 201H application.

Should you have any questions or concerns, please feel free to contact me, or Steve Grogan, Capital Improvements Project Coordinator, at stephen.grogan@co.maui.hi.us or 808-270-6158.

Sincerely,

A handwritten signature in black ink, appearing to read "GLENN T. CORREA".

GLENN T. CORREA
Director of Parks & Recreation

c: Robert Halvorson, Chief of Planning & Development
Roy Katsuda and Robyne Nishida Nakao, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.

GTC:RH:sg



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MISH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Glenn T. Correa, Director
Department of Parks and Recreation
700 Halia Nakoa Street, Unit 2
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Correa:

Thank you for your letter of April 24, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, thank you for confirmation that the project will be exempt from Section 18.16.320, Maui County Code, once the Maui County Council has approved the 201H-38 application.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunland Kono Architects, Ltd.

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MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

MAUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233

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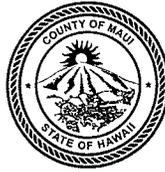
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ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



MAY 16 2013

COUNTY OF MAUI
DEPARTMENT OF PLANNING

May 13, 2013

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Dear Ms. Suyama:

SUBJECT: EARLY CONSULTATION REQUEST FOR COMMENTS (RFC) ON THE PROPOSED 201H, HAWAII REVISED STATUTES (HRS) HALE MAHAOLU EWALU AFFORDABLE SENIOR RESIDENTIAL HOUSING PROJECT WITHIN THE KULAMALU COMMERCIAL SUBDIVISION, LOCATED AT 56 AND 81 OHIA KU STREET, PUKALANI, ISLAND OF MAUI, HAWAII; TMK(S): (2) 2-3-066:019 AND 020 (RFC 2013/0054)

The Department of Planning (Department) is in receipt of the above-referenced RFC for the proposed senior housing development. The Department understands the proposed action includes the following:

- Construction of:
 - a. Approximately 61 units of affordable housing for seniors
 - b. An adult day care senior center building
 - c. A maintenance shop
 - d. Approximately 75 parking stalls
- The two (2) subject parcels are owned by Hale Mahaolu and are currently vacant;
- The combined area of the subject two (2) parcels is 3.936 acres; and
- The proposed project will utilize County of Maui (County) funds.

Based on the foregoing, the Department provides the following comments on the draft Application:

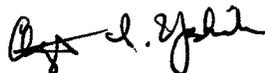
1. Please verify the land use designations for both parcels are:
 - a. State Land Use: Urban
 - b. County Zoning: P-1 Public/Quasi-Public District
 - c. The Makawao-Pukalani-Kula Community Plan: Public/Quasi-Public
 - d. Not in Special Management Area

Ms. Colleen Suyama, Senior Associate
May 13, 2013
Page 2

2. We note that on November 14, 2012, the Department confirmed that the conditions attached to Ordinance No. 2623, which changed zoning from R-2 Residential to P-1 Public/Quasi-Public, were satisfied;
3. Please be sure to evaluate the proposed project to the policies of the recently adopted Maui Island Plan (MIP). The MIP can be found at our County website or by contacting the Department's Long Range Division at (808) 270-7214. Please discuss how the proposal is consistent with the goals, policies, and objectives of the Countywide Policy Plan, the newly adopted MIP, and the Makawao-Pukalani-Kula Community Plan;
4. We suggest that once your development projects are more firmly in place, you review Chapter 19.36A MCC, Off-Street Parking and Loading, to determine parking requirements based on use. You may also wish to consult with the Department's Zoning Administration and Enforcement Division (ZAED) for assistance determining the parking requirements. ZAED can be reached by calling (808) 270-7253;
5. Although located in an area that may not be highly visible to the general public, please discuss visual screening methods for the new housing development and accessory structures;
6. The Department encourages Hale Mahaolu to ensure that the Upcountry Farmers Market is given a permanent home in the Kulamalu Commercial Subdivision so that the residents of this proposed one hundred percent (100%) affordable senior housing might enjoy a ready supply of fresh healthful fruits and vegetables easily accessible by pedestrians; and
7. Please include the Department in the distribution list of the Draft Environmental Assessment (EA). Please provide the Department with one (1) hard copy and one (1) digital copy of the Draft EA.

Thank you for the opportunity to comment. Please note this list of comments is based only on the information provided in your request. Should you require further clarification of this letter, please contact Staff Planner Livit Callentine at livit.callentine@mauicounty.gov or at (808) 270-5537.

Sincerely,



CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for WILLIAM SPENCE
Planning Director

Ms. Colleen Suyama, Senior Associate
May 13, 2013
Page 3

xc: Livit U. Callentine, AICP, Staff Planner (PDF)
Project File
General File

WRS:CIY:LUC:aj

K:WP_DOCS\PLANNING\RFC\2013\0054_HaleMahaoluEwalu\Comment.doc



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

William Spence, Director
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Spence:

Thank you for your letter of May 13, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letter:

1. Zoning and Flood Confirmation Forms were obtained from the Department of Planning Zoning and Administrative Enforcement Division (ZAED) which confirmed the land use designations for the subject parcels.
2. We acknowledge the November 14, 2012 Department of Planning confirmation that the conditions of zoning were satisfied.
3. An evaluation of the policies of the Maui Island Plan (MIP) will be included in the EA for the project.
4. The design consultants have been advised to review Chapter 19.36A, Maui County Code (MCC) and to coordinate the parking requirements with ZAED.
5. As recommended, the landscape architect for the project will include appropriate landscape screening within the project plans.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

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William Spence, Director
January 17, 2014
Page 2

6. Although Hale Mahaolu supports an Upcountry Farmers Market within the Kulamalu Commercial Subdivision, it does not control the properties within the subdivision. As such, Hale Mahaolu cannot ensure a permanent home for a farmers market.
7. A hard copy of the Draft EA and a CD with a copy of same will be distributed to the Department of Planning for review and comment.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. As noted previously, a copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

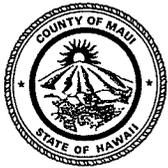


Colleen Suyama
Senior Associate

CS:la

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates
David Sereda, Chris Hart & Partners, Inc.

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ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

POLICE DEPARTMENT

COUNTY OF MAUI

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

May 8, 2013



GARY A. YABUTA
CHIEF OF POLICE

CLAYTON N.Y.W. TOM
DEPUTY CHIEF OF POLICE

Ms. Colleen Suyama
Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Dear Ms. Suyama:

SUBJECT: Request for Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision at TMK (2) 2-3-066:19 and 20

This is in response to the request for comments on the above subject.

We have reviewed the information submitted for this project and have submitted our comments and/or recommendations. Thank you for giving us the opportunity to comment on this project.

Very truly yours,

Assistant Chief Victor Ramos
for: Gary A. Yabuta
Chief of Police

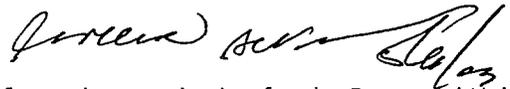
c: William Spence, Planning Department

TO : GARY YABUTA, CHIEF OF POLICE, COUNTY OF MAUI

VIA : CHANNELS

FROM : MARJORIEANN KAHOOKELE-PEA, POIII, COMMUNITY POLICE OFFICER

**SUBJECT : REQUEST FOR EARLY CONSULTATION FOR THE PROPOSED HALE MAHAOLU
EWALU SENIOR RESIDENTIAL HOUSING PROJECT IN THE KULAMALU
COMMERCIAL SUBDIVISION AT TMK (2)2-3-066:19 AND 20, PUKALANI, MAUI,
HAWAII**



This communication is being submitted as a response to a request for early consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision in Pukalani, Maui, Hawaii. This request is being made by Colleen SUYAMA, Senior Associate, Munekiyo & Hiraga, Inc., 305 High Street, Suite 104, Wailuku, Hawaii, 96793.

PROJECT : HALE MAHAOLU EWALU SENIOR RESIDENTIAL HOUSING PROJECT
TMK(s) # : (2)2-3-066:19 AND 20
APPLICANT : Colleen SUYAMA, Senior Associate
Munekiyo & Hiraga, Inc.

The proposed project consists of constructing three-story buildings containing approximately 61 housing units, and Adult Day Care senior center building, maintenance shop and approximately 75 parking stalls on a 4.0 acre parcel located at the southeast corner of Ohia Ku Street and Ohia Lehua Place intersection in the Kulamalu Commercial Subdivision. This 4.0 acre parcel is bordered by the Kalialinui Gulch, Kulamalu Hilltop Subdivision and University of Hawaii Institute of Astronomy, Kulamalu Park and across the Kulamalu Town Center. This project is to provide affordable elderly housing to persons age 62 and over.

COMMENTS:

In review of the submitted documents, concerns from the police perspective are upon the safety of pedestrian and vehicular movement. Currently the traffic flow in the area of the project are minimal as it is not fully developed however, upon developing, this will increase the amount of vehicles and pedestrian traffic as well as increasing calls for service in this area. Access into the Kulamalu area is accessible only via A'a Pueo and Kula Highway with a traffic signal at this intersection. This roadway becomes congested and backed up during the school hours and during events which have required police assistance.

RECOMMENDATIONS:

Recommendations from a police standpoint would be to increase lighting in this area for motorists and pedestrians and ways to decrease the traffic congestion during peak hours. There are no other concerns for the proposed project.

Respectfully Submitted,

Marjorieann Kahookele

Ofc. Marjorieann KAHOOKELE-PEA 15206

Community Oriented Police

May 2nd, 2013 @ 1336 Hours

NO CONCERNS AT THIS TIME.

Sgt. Paul Paul *[Signature]*

5/3/13 @ 0745

Agree w/ comments submitted
by Ofc. Paul regarding this
Project. Per Capt. *[Signature]*
5/3/13



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Gary A. Yabuta, Chief
Maui Police Department
County of Maui
55 Mahalani Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Chief Yabuta:

Thank you for your letter of May 8, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letter.

1. We acknowledge the Department's concern that during peak hours traffic congestion has been experienced at the signalized intersection on Kula Highway and Aa Pueo Parkway. The EA will include a traffic analysis of the project's impacts.
2. The traffic analysis in the EA will address the project's contribution to traffic and compare that to other traffic in the area and, if appropriate, identify mitigation measures. Also, if appropriate, consideration will be given to pursuing measures to decrease project generated traffic.
3. Your recommendation to increase lighting in this area has been forwarded to the applicant for consideration.

Gary A. Yabuta, Chief
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Julian Ng, Traffic Consultant

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APR 29 2013

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955



COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

GLEN A. UENO, P.E., Interim
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

April 25, 2013

Ms. Colleen Suyama, Senior Associate
MUNEKIYO & HIRAGA, INC.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

Dear Ms. Suyama:

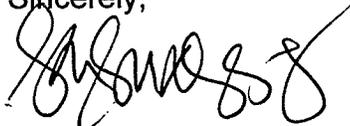
**SUBJECT: EARLY CONSULTATION REQUEST FOR THE
PROPOSED HALE MAHAOLU EWALU SENIOR
RESIDENTIAL HOUSING PROJECT LOCATED AT
KULAMALU COMMERCIAL SUBDIVISION;
TMK: (2) 2-3-066:019, 020**

We reviewed the subject application and have the following comment:

1. When a project is financed with State or County funds, the requirements of Hawaii Revised Statutes, Section 103-50 relating to Facility Access for Persons with Disabilities, will apply.

Please call Rowena M. Dagdag-Andaya at 270-7845 if you have any questions regarding this letter.

Sincerely,


DAVID C. GOODE
Director of Public Works

DCG:RMDA:ls

xc: Highways Division
Engineering Division

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MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

EWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSUBU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

David C. Goode, Director
Department of Public Works
County of Maui
200 South High Street, Room 434
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Goode:

Thank you for your letter of April 25, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we acknowledge that pursuant to Section 103-50, HRS, access within the Hale Mahaolu Ewalu Senior Residential Housing project shall be compliant for persons with disabilities.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates, Inc.

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305 High St., Suite 104 Wailuku, Hawaii 96793

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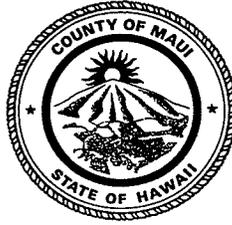
TRACY TAKAMINE, P.E.
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director



**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**

2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

May 8, 2013

Ms. Colleen Suyama
Munekiyo & Hiraga, Inc.
305 South High Street
Wailuku, Hawaii 96793

Dear Ms. Suyama:

**SUBJECT: HALE MAHAOLU EWALU SENIOR RESIDENTIAL HOUSING PROJECT
EARLY CONSULTATION
TMK (2) 2-3-066:019 AND 020, PUKALANI**

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:
 - a. Include a plan for construction waste management.
2. Wastewater Reclamation Division (WWRD) comments:
 - a. None. The County does not have a wastewater system in the area of the subject project.

If you have any questions regarding this memorandum, please contact Michael Miyamoto at 270-8230.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Ginoza", with a long horizontal line extending to the right.

KYLE K. GINOZA, P.E.
Director of Environmental Management



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

OWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Kyle Ginoza, Director
Department of Environmental Management
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Ginoza:

Thank you for your letter of May 8, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letter.

1. A construction waste management plan will be coordinated with the Department prior to the initiation of construction.
2. We acknowledge the County of Maui does not have a wastewater system in the area. Hale Mahaolu proposes to connect to the private sewage system owned and operated by the Hawaii Water Service Company, Inc.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

KAHUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233

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Kyle Ginoza, Director
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

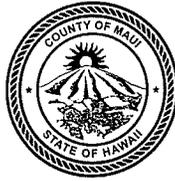
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cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunland Kono Architects, Ltd.
Michael Ishikawa, Sato & Associates, Inc.

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APR 24 2013

ALAN M. ARAKAWA
Mayor



JO ANNE JOHNSON-WINER
Director
MARC I. TAKAMORI
Deputy Director
Telephone (808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

April 17, 2013

Ms. Colleen Suyama
Munekiyo & Hiraga Inc.
305 High Street, Suite 104
Wailuku, Maui, Hawaii 96793

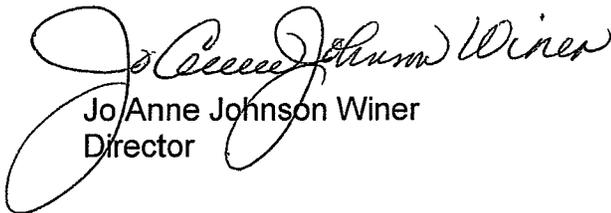
Subject: Proposed Hale Mahaolu Ewalu Senior Residential Housing Project

Dear Ms. Suyama,

Thank you for the opportunity to comment on this project. During the project development we wish to be included in any plans to accommodate public transit, since we do serve that area.

Please feel free to contact me if you have any questions.

Sincerely,


Jo Anne Johnson Winer
Director



MICHAEL T. MUNEKIYOD
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Jo Anne Johnson Winer, Director
Department of Transportation
County of Maui
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Ms. Winer:

Thank you for your letter of April 17, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we appreciate your comment. As the project progresses, should public transit be proposed, we will coordinate our plans with your department. Additionally, we note that preliminary plans for the project includes a bus turnaround near the Adult Day Care Center/Community Activity Center to accommodate potential shuttle vans.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

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735 Bishop St., Suite 238 Honolulu, Hawaii 96813 | PH: (808)983-1233

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Jo Anne Johnson Winer
January 17, 2014
Page 2

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,



Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.

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APR 26 2013

ALAN M. ARAKAWA
Mayor



DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY

COUNTY OF MAUI

200 SOUTH HIGH STREET

WAILUKU, MAUI, HAWAII 96793-2155

www.mauiwater.org

April 18, 2013

Ms. Colleen Suyama, Senior Associate
Munekiyo & Hiraga, Inc.
305 High Street, Ste. 104
Wailuku, HI 96793

Dear Ms. Suyama:

RE: Request for Early Consultation for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project in the Kulamalu Commercial Subdivision at TMK: (2) 2-3-066:019 and 20, Pukalani, Maui, Hawaii

Thank you for the opportunity to provide the following comments on the referenced project.

Background

The project site is served by a 12-inch waterline and fire hydrants numbers 667, 664, 665, and 666. Storage is provided by the 1-million gallon Kealaloo tank.

Maui County Code 14.13.040 – Water service requests states that on March 16, 1993, the upcountry water system was found to have insufficient water supply developed for fire protection, domestic, and irrigation purposes to take on new or additional water services without detriment to those already served in the regulated area. Since November 2, 1994, the department has maintained a priority list of premises, organized by the date of applications for new or additional water service were received for such premises.

The code was amended by Maui County Council and signed by the Mayor to add the following: "Effective as of January 1, 2013, the department will not accept any new applications to be placed on the priority list."

Conclusion & Recommendation

Both subject parcels are on the priority list for first meters since the project site does not have a water meter; first meters are 5/8-inch meters. Meters will be offered to parcels on the priority list as new water sources become available.

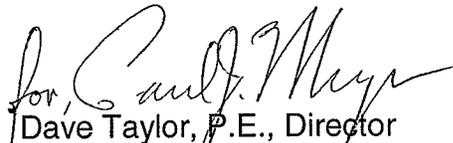
"By Water All Things Find Life"

Ms. Colleen Suyama
Page 2
April 18, 2013

During the building permit process, the applicant will be required submit domestic and irrigation calculations, approved, and stamped by a licensed architect or engineer, to determine the adequacy of the water meters for the project.

Should you have any questions, please contact Arnold Y. Imae at Arnold.Imaye@maui.county.hi.us or at 463-3110.

Sincerely,


for, Dave Taylor, P.E., Director
ayi

c: DWS Engineering Division
DWS Water Resources & Planning Division



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

OWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

David Taylor, P.E., Director
County of Maui
Department of Water Supply
200 South High Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Mr. Taylor:

Thank you for your letter of April 18, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we offer the following information, which addresses your comments in the order listed in your letter:

1. Since your letter, Hale Mahaolu has held discussions with the Department of Water Supply (DWS). As discussed, Hale Mahaolu has purchased water credits from the former landowner, Dowling Company, Inc. and is requesting modification of the per unit water standard for multi-family use of the DWS. Hale Mahaolu will continue its discussions and coordination with the DWS regarding the water requirements of the project.
2. We acknowledge that during building permit process, Hale Mahaolu will be required to submit domestic and irrigation calculations, approved and stamped by a licensed architect or engineer to determine the adequacy of the water meters for the project.

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

KAHUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

WWW.MHPLANNING.COM

excellence in
process
management

David Taylor, P.E., Director
January 17, 2014
Page 1

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Colleen Suyama', with a long horizontal flourish extending to the right.

Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu
Earl Kono, Riecke Sunnland Kono Architects, Ltd.
Michael Ishikawa, Sato and Associates, Inc.

K:\DATA\HaleMahaolu\KulamaluSrHsng\Early Consultation Responses\DWSecresponse.letter.doc

APR 23 2013

Hawaiian Telcom

Network Engineering and Planning
OSP Engineering - Maui
60 South Church St.
Wailuku, HI 96793
Phone 808 242-5102
Fax 808 242-8899

April 17, 2013

Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, HI 96793

Attention: Colleen Suyama, Senior Associate

Subject: Proposed Hale Mahaolu Ewalu Senior Residential Housing Project
in the Kulamalu Commercial Subdivision, Pukalani

Dear Colleen,

Thank you for allowing us to review and comment on the subject project. Your plans have been received and put on file.

Hawaiian Telcom, Inc. has no comment, nor do we require any additional information at this time.

Should you require further assistance, please call me at 242-5258.

Sincerely,



Sheri Ann Tihada
Senior OSP Engineer

cc: Gerry Saguico, Section Manager

BICS File No. 1304-014 (3050)



MICHAEL T. MUNEKIYO
PRESIDENT

KARLYNN FUKUDA
EXECUTIVE VICE PRESIDENT

GWEN OHASHI HIRAGA
SENIOR VICE PRESIDENT

MITSURU "MICH" HIRANO
SENIOR VICE PRESIDENT

MARK ALEXANDER ROY
VICE PRESIDENT

January 17, 2014

Sheri Ann Tihada
Senior OSP Engineer
Hawaiian Telcom
60 South Church Street
Wailuku, Hawaii 96793

SUBJECT: Early Consultation Letter for the Section 201H-38 Hawaii Revised Statutes and Environmental Assessment for the Proposed Hale Mahaolu Ewalu Senior Residential Housing Project at Tax Map Key (2)2-3-066:019 and 020, Pukalani, Makawao District, Maui, Hawaii

Dear Ms. Tihada:

Thank you for your letter of April 17, 2013 responding to our request for early consultation in preparation of a Draft Environmental Assessment (EA) for the proposed Section 201H-38 Hawaii Revised Statutes (HRS) Hale Mahaolu Ewalu Senior Residential Housing project. On behalf of Hale Mahaolu, we appreciate your conveying that your company has no comment nor do you require any additional information at this time.

Again, thank you for your participation in the Chapter 343, HRS review process. A copy of your letter will be included in the Draft EA. A copy of the Draft EA will be sent to your office for further review and comment. In the meantime, if there are any questions or if additional information is needed, please feel free to contact me at 244-2015.

Very truly yours,

Colleen Suyama
Senior Associate

CS:lh

cc: Roy Katsuda, Hale Mahaolu

K:\DATA\HaleMahaolu\KulamaluSrHsg\Early Consultation Responses\HawaiianTelcom\cresponse.letter.doc

MAUI

305 High St., Suite 104 Wailuku, Hawaii 96793

PH: (808)244-2015 FAX: (808)244-8729

KAHUI

735 Bishop St., Suite 238 Honolulu, Hawaii 96813 PH: (808)983-1233

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management

149

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X. REFERENCES

X. REFERENCES

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APPENDIX A.
Ordinance No. 2623

ORDINANCE NO. 2623

BILL NO. 87 (1997)

A BILL FOR AN ORDINANCE TO CHANGE ZONING FROM
R-2 RESIDENTIAL DISTRICT TO P-1 PUBLIC/QUASI-PUBLIC
DISTRICT (CONDITIONAL ZONING) FOR PROPERTY
SITUATED AT KOHOILO, KULA, MAUI, HAWAII

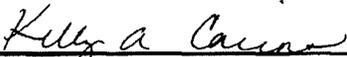
BE IT ORDAINED BY THE PEOPLE OF THE COUNTY OF MAUI:

SECTION 1. Pursuant to Chapters 19.31 and 19.510, Maui County Code, zoning is hereby amended from R-2 Residential District to P-1 Public/Quasi-Public District for that certain parcel of land located in Kohoilo, Kula, Maui, Hawaii, identified for real property tax purposes by TMK:2-3-08:portion of 38, comprised of approximately 5.10 acres, and more particularly described in Exhibit "A", which is attached hereto and made a part hereof, and in Land Zoning Map No. L-1050, on file in the Office of the County Clerk, County of Maui, and by reference made a part hereof.

SECTION 2. Pursuant to Section 19.510.050, Maui County Code, the zoning established by this ordinance is subject to the conditions set forth in Exhibit "B", which is attached hereto and made a part hereof, and the Unilateral Agreement and Declaration for Conditional Zoning, which is attached hereto and made a part hereof as Exhibit "C".

SECTION 3. This ordinance shall take effect upon its approval.

APPROVED AS TO FORM
AND LEGALITY:



KELLY A. CAIRNS
Deputy Corporation Counsel
County of Maui
dowling/kulamalu/publiques.ord

Exhibit "A"

KULAMALU SUBDIVISION

Portion of Lot 3
Change in Zoning
From R-2 Residential District to P-1 Public/Quasi-Public District

All of that certain parcel of land being a portion of Lot 3 of
Kulamalu Subdivision, being also a portion of Grant 1829,
Apana 1 to Keawe and Grant 1167 to Aui.

Situated at Kohoilo, Kula, Maui. Hawaii

Beginning at the Southwest corner of this parcel of land on
top of the South branch of Haakakai Gulch, the coordinates of said
point of beginning referred to Government Survey Triangulation
Station "PUU-O-KOHA" being 708.23 feet South and 12,327.24 feet
East and running by true azimuths measured clockwise from South:

1. 203° 19' 03" 93.84 feet along the remainder of Lot 3 of
Kulamalu Subdivision;
2. 135° 54' 30" 223.85 feet along same;
3. 248° 58' 40" 227.91 feet along same;
4. 293° 58' 40" 585.18 feet along same;
5. 23° 00' 406.16 feet along same;
6. 117° 13' 53.02 feet along a Government Land and
along the top of the South branch of
Haakakai gulch;
7. 125° 43' 30" 126.64 feet along same;
8. 129° 13' 192.50 feet along same;
9. 120° 50' 83.00 feet along same;



10. 101° 37' 50" 101.84 feet along same to the point of beginning and containing an area of 5.10 acres, more or less.

Note:

This description is being prepared as part of a Change of Zone application submitted to the County of Maui and as such it describes an area for which a Change of Zone is being requested and it does not described a legally subdivided parcel.



Austin, Tsutsumi & Associates, Inc.

Description prepared by:

A handwritten signature in black ink that reads "Ronaldo B. Aurelio".

RONALDO B. AURELIO
Licensed Professional Land Surveyor
Certificate Number 7564

Hilo, Hawaii
March 24, 1997

TMK: 2nd Division
2-3-08 : portion 38



1. The applicant shall submit a landscaping plan for the review and approval of the Arborist Committee.
2. The applicant shall contribute its pro-rata share to the design and construction of highway and traffic improvements on Kula Highway, including but not limited to storage lanes, acceleration and deceleration lanes, traffic signal(s), crosswalks and sidewalks, as required by the State Department of Transportation.
3. The applicant shall submit a drainage master plan for the review and approval of the Department of Public Works and Waste Management and the Natural Resources Conservation Service, United States Department of Agriculture.

EXHIBIT "B"

2

DEC 8 1997 3:00
97. 170960

LAND COURT SYSTEM

REGULAR SYSTEM

Return by Mail (X) Pickup () To:
Office of the County Clerk
County of Maui
200 S. High Street
Wailuku, HI 96793

TDW:dkw\November 20, 1997\26030\33817

Affects TMK (2) 2-3-8:38 (por)
Total No. of Pages: 7

UNILATERAL AGREEMENT AND DECLARATION FOR CONDITIONAL ZONING

THIS INDENTURE made this 19th day of November, 1997, by KULAMALU LIMITED PARTNERSHIP, a Hawaii limited partnership, whose business and mailing address is 1997 N. Main Street, Wailuku, Maui, Hawaii 96793, hereinafter referred to as "Declarant", and who is the owner of that certain land situate at Kohoilo, Kula, Maui, Hawaii, identified for tax purposes by Tax Map Key (2) 2-3-008:38 (portion), comprising approximately 5.10 acres, and more particularly described in Exhibit "1" which is attached hereto and made a part hereof and hereinafter referred to as the "Property".

WITNESSETH

WHEREAS, the Council of the County of Maui, State of Hawaii, hereinafter referred to as "Council", is considering a change in zoning of the Property from R-2 Residential District to P-1 Public Quasi Public District; and

26030\1\33817.1\TDW

EXHIBIT "c"

WHEREAS, the Council recommends through its Land Use Committee, Committee Report No. 97-256, as amended, that said establishment of zoning by the County be approved for passage on first reading subject to certain conditions pursuant to Maui County Code, Section 19.510.050;

WHEREAS, Declarant has agreed to execute this instrument pursuant to the conditional zoning provisions of Maui County Code Section 19.510.050;

NOW THEREFORE, Declarant hereby makes the following Declaration:

1. That this Declaration is made pursuant to the provisions of Section 19.510.050, Maui County Code, relating to conditional zoning;

2. That the Property, and all parts thereof, is and shall be held subject to the covenants, conditions, and restrictions contained herein and that all of such covenants, conditions, and restrictions shall be effective as to and shall run with the land as to the Property from and after the recording of this Declaration with the Bureau of Conveyances or Land Court of the State of Hawaii, as the case may be, without the execution, delivery or recordation of any further deed, instrument, document, agreement, declaration, covenant or the like with respect thereto by Declarant, the County of Maui, or any heir, devisee, executor, administrator, personal representative, successor or assign, as the case may be, of any of them, that the acquisition of any right, title or interest in or with respect to the Property by any person or persons, entity or entities, whomsoever, shall be deemed to constitute the acceptance of all of the covenants, conditions, and restrictions of this Declaration by such person or persons, entity or entities, and that upon any transfer of any right, title or interest in or with respect to the Property the same shall be subject to, and the transferee shall assume and be bound and obligated to observe and perform, all of the covenants, conditions, and restrictions of this Declaration;

3. This Declaration and all of the covenants, conditions, and restrictions contained herein shall continue to be effective as to and run with the land in perpetuity, or until the same is released as to the Property or any part thereof by the County;

4. The term "Declarant" and any pronoun in reference thereto, wherever used herein, shall be construed to mean the singular or the plural, the masculine or the feminine or the neuter, and vice versa, and shall include any corporation, and shall be held to mean and include "Declarant", his heirs, devisees, executors, administrators, personal representatives, successors, and assigns;

5. That the Declaration shall become fully effective on the effective date of the zoning ordinance approving the change of zoning for the Property as described in the preamble of this instrument and this Declaration shall be recorded in the Bureau of Conveyances or Land Court of the State of Hawaii, as the case may be;

6. That Declarant agrees to develop said Property in conformance with the conditions set forth in Exhibit "2", which is attached hereto and made a part hereof and which shall be made a part of the zoning ordinance; and

7. Said conditions are (a) necessary to protect the public health, safety, convenience and welfare, and (b) reasonably conceived to mitigate impacts emanating from the Declarant's proposed land uses and to meet the criteria set forth in Maui County Code Section 19.510.050;

AND IT IS EXPRESSLY UNDERSTOOD AND AGREED that the conditions imposed in this Declaration shall run with the land identified hereinabove and shall bind and constitute notice to all subsequent lessees, grantees, assignees, mortgagees, lienors and any other persons who claim an interest in the said land, and the County of Maui shall have the right to enforce this Declaration by appropriate action at law or suit in equity against all such persons, provided that Declarant or its successor and assigns may at any time file a petition for the removal of the conditions and terminate this Unilateral Agreement, such petition to be processed in the same manner as petitions for change in zoning.

IN WITNESS WHEREOF, the undersigned has executed this Declaration the day and year first above written.

APPROVED AS TO FORM:

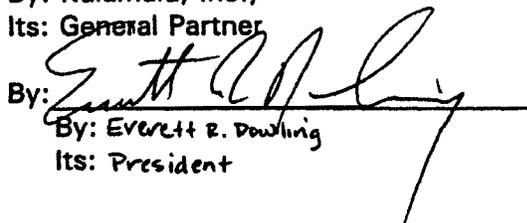


Thomas D. Welch, Jr.
Attorney for Declarant

DECLARANT:

KULAMALU LIMITED PARTNERSHIP

By: Kulamalu, Inc.,
Its: General Partner



By: EVERETT R. DOWLING
Its: President

APPROVED AS TO FORM & LEGALITY:



Deputy Corporation Counsel
County of Maui

STATE OF HAWAII)
) SS.
COUNTY OF MAUI)

On this 20th day of November, 1997, before me appeared Everett R. Dowling, to me personally known, who, being by me duly sworn, did say that he is the President of Kulamalu, Inc., a Hawaii corporation, the general partner of Kulamalu Limited Partnership, a Hawaii limited partnership, that said instrument was signed on behalf of said corporation by authority of its Board of Directors and in behalf of said partnership, and said officers acknowledged said instrument to be the free act and deed of said corporation and said partnership.

LS

Raymond K. Watson
Notary Public, State of Hawaii
My Commission Expires: 11-21-98

KULAMALU SUBDIVISION

Portion of Lot 3
Change in Zoning
From R-2 Residential District to P-1 Public/Quasi-Public District

All of that certain parcel of land being a portion of Lot 3 of
Kulamalu Subdivision, being also a portion of Grant 1829,
Apana 1 to Keawe and Grant 1167 to Aui.

Situated at Kohoilo, Kula, Maui. Hawaii

Beginning at the Southwest corner of this parcel of land on
top of the South branch of Haakakai Gulch, the coordinates of said
point of beginning referred to Government Survey Triangulation
Station "PUU-O-KOHA" being 708.23 feet South and 12,327.24 feet
East and running by true azimuths measured clockwise from South:

- | | | | |
|----|--------------|--------|---|
| 1. | 203° 19' 03" | 93.84 | feet along the remainder of Lot 3 of
Kulamalu Subdivision; |
| 2. | 135° 54' 30" | 223.85 | feet along same; |
| 3. | 248° 58' 40" | 227.91 | feet along same; |
| 4. | 293° 58' 40" | 585.18 | feet along same; |
| 5. | 23° 00' | 406.16 | feet along same; |
| 6. | 117° 13' | 53.02 | feet along a Government Land and
along the top of the South branch of
Haakakai gulch; |
| 7. | 125° 43' 30" | 126.64 | feet along same; |
| 8. | 129° 13' | 192.50 | feet along same; |
| 9. | 120° 50' | 83.00 | feet along same; |



10. 101° 37' 50" 101.84 feet along same to the point of beginning and containing an area of 5.10 acres, more or less.

Note:

This description is being prepared as part of a Change of Zone application submitted to the County of Maui and as such it describes an area for which a Change of Zone is being requested and it does not described a legally subdivided parcel.



Austin, Tsutsumi & Associates, Inc.

Description prepared by:

A handwritten signature in cursive script that reads "Ronaldo B. Aurelio".

RONALDO B. AURELIO
Licensed Professional Land Surveyor
Certificate Number 7564

Hilo, Hawaii
March 24, 1997

TMK: 2nd Division
2-3-08 : portion 38



1. The applicant shall submit a landscaping plan for the review and approval of the Arborist Committee.
2. The applicant shall contribute its pro-rata share to the design and construction of highway and traffic improvements on Kula Highway, including but not limited to storage lanes, acceleration and deceleration lanes, traffic signal(s), crosswalks and sidewalks, as required by the State Department of Transportation.
3. The applicant shall submit a drainage master plan for the review and approval of the Department of Public Works and Waste Management and the Natural Resources Conservation Service, United States Department of Agriculture.

EXHIBIT "2"

WE HEREBY CERTIFY that the foregoing BILL NO. 87 (1997)

1. Passed FINAL READING at the meeting of the Council of the County of Maui, State of Hawaii, held on the 9th day of December, 1997, by the following votes:

Patrick S. KAWANO Chair	James "Kimo" APANA Vice-Chair	Alan ARAKAWA	J. Kalani ENGLISH	Sol P. KAHO`OHALAHALA	Alice L. LEE	Dennis Y. NAKAMURA	Wayne K. NISHIKI	Charmaine TAVARES
Aye	Aye	Aye	Abstained	Aye	Aye	Abstained	No	Aye

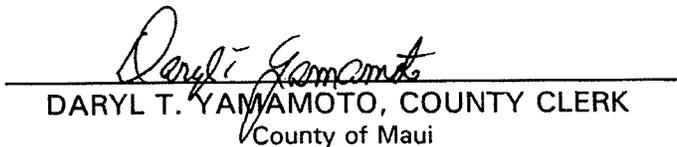
2. Was transmitted to the Mayor of the County of Maui, State of Hawaii, on the 15th day of December, 1997.

DATED AT WAILUKU, MAUI, HAWAII, this 15th day of December, 1997.

RECEIVED
1997 DEC 15 AM 11:14
OFFICE OF THE CLERK



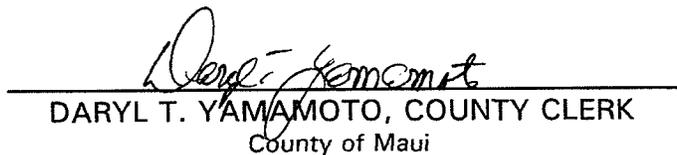
PATRICK S. KAWANO, CHAIR
Council of the County of Maui


DARYL T. YAMAMOTO, COUNTY CLERK
County of Maui

THE FOREGOING BILL IS HEREBY APPROVED THIS 16th DAY OF DECEMBER, 1997.


LINDA LINGLE, MAYOR
County of Maui

I HEREBY CERTIFY that upon approval of the foregoing BILL by the Mayor of the County of Maui, the said BILL was designated as ORDINANCE NO. 2623 of the County of Maui, State of Hawaii.


DARYL T. YAMAMOTO, COUNTY CLERK
County of Maui

Passed First Reading on December 1, 1997.
Effective date of Ordinance December 16, 1997.

I HEREBY CERTIFY that the foregoing is a true and correct copy of Ordinance No. 2623, the original of which is on file in the Office of the County Clerk, County of Maui, State of Hawaii.

Dated at Wailuku, Hawaii, on

County Clerk, County of Maui

RECEIVED
1997 DEC 17 AM 2:03
COUNTY CLERK

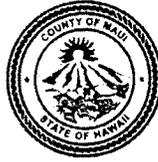
APPENDIX A-1.

**Department of Planning Letter
Dated November 14, 2012**

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

November 14, 2012

Ms. Chenise Kanemoto Iwamasa
Law Offices of Wesley Y.S. Chang
Harbor Court
55 Merchant Street, Suite 2800
Honolulu, Hawaii 96813

Dear Ms. Iwamasa:

**SUBJECT: KULAMALU COMMERCIAL SUBDIVISION CONDITIONS OF ZONING,
ORDINANCE NO. 2623, AT KULA, ISLAND OF MAUI, HAWAII;
TMK(S) : (2) 2-3-066:019 AND (2) 2-3-066:020 (RFC 2012/0155)**

The Department of Planning (Department) hereby confirms that the three (3) conditions contained in Ordinance No. 2623, which deals with landscaping plans, Kula Highway improvements, and a drainage master plan have been complied with.

Thank you for your cooperation. Should you require further clarification, please contact Current Planning Supervisor Ann Cua at ann.cua@mauicounty.gov or at (808) 270-7521.

Sincerely,

Handwritten signature of Clayton I. Yoshida.

for CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for WILLIAM SPENCE
Planning Director

xc: Aaron H. Shinmoto, PE, Planning Program Administrator (PDF)
Ann T. Cua, Current Planning Supervisor (PDF)
Kulamalu Project Binder
Project File
General File

WRS:CIY:ATC:vb
K:\WP_DOCS\PLANNING\RFC\2012\0155_KulamaluCommercial\SatisfyConditions.doc

APPENDIX B.
Burial Preservation Plan

**FINAL BURIAL SITE COMPONENT OF A PRESERVATION PLAN
FOR SITE 50-50-10-5173 AN HISTORIC CHINESE CEMETERY
SITUATED AT KULAMALU COMMERCIAL SUBDIVISION
WITHIN LOT 19A; A`APUEO *AHUPUA`A*; MAKAWAO DISTRICT;
ISLAND OF MAUI**

FOR: Mr. Roy Katsuda of Hale Mahaolu

BY: Lisa Rotunno-Hazuka (B.A.) and Jeffrey Pantaleo (M.A.)

AUGUST 2013



ARCHAEOLOGICAL SERVICES HAWAII, LLC.

POB 1015

Pu`unene, Hi 96784

“Protecting, Preserving, Interpreting the Past While Planning the Future”

INTRODUCTION

Under contract to Hale Mahaolu at 200 Hina Avenue, Kahului, Hawaii 96732 and pursuant to recommendations by the State Historic Preservation Division, SHPD, (Doc. 0307CD12), Archaeological Services Hawaii, LLC (ASH) proposes this Revised Burial Component of a Preservation plan for an Historic Chinese Cemetery designated State Inventory of Historic Places (SIHP) 50-50-10-5173. Also slated for preservation are non-burial features, Sites 5469 and 5470. Site 5173 is comprised of inadvertent burial features with associated fire-pits (Features 1-9, 11-20 and 22-28). Site 5469 is a pre-Contact fire-pit and Site 5470 appeared to be a former irrigation ditch. These historic properties are located within Lot 19a at the Kulamalu Commercial Village, A'apueo *ahupua'a*, Makawao District, Island of Maui, TMK 2-3-08: portions of 38 and 39 (Figures 1-5).

Site 5173 is comprised of eight coffin pit burials (Fe.1-4, 13, 14, 16 and 17), two prone or extended burials with no evidence of coffin materials (Fe. 8a, 9), two possibly small burial pits containing disturbed human skeletal remains within the pit outlines and or waterworn cobbles and modified basalt (Fe. 5, 7), seven definitive burning events probable Chinese burners (Fe.6, 8b, 12, 18, 19, 20 and 23), a possible animal burial rock mound (Fe.22), three areas containing isolated skeletal remains (Fes. 25-27) and three indeterminate pits (Fe. 11, 15, 24). The burial features which were tested are presumed to be of Chinese ancestry based on context, burial typology, osteological attributes and grave goods (beads and presumed Chinese burners). The bead assemblage dates to the mid to late 1800s and was predominately of Chinese manufacture, with the exception of one Venetian bead. Also noted during the testing procedures were several small ephemeral fire-pits in close proximity to the burial features. Based on archival research, the pits appear to be "Chinese burners" where items are burned to accompany the deceased in the afterlife.

These significant historic properties were discovered during excavations for a retention basin proposed within Lot 19a (see Figure 5). Once these features were identified, discussions were undertaken with the landowner (Dowling Company), SHPD and the Maui Lana'i Islands Burial Council (MLIBC), and through these conversations, it was determined that Sites 5173, 5469 and 5470 shall be preserved in place and the retention basin relocated (see Figure 5). Also discussed in the meeting was the possibility that some upcountry *Kupuna* may have information regarding this burial site; thus although the burial features were inadvertent discoveries, a burial notice was

placed in the newspaper to hopefully ascertain information about Site 5173. The notice was placed from November 25-28, 2001 (Appendix A) but unfortunately, no responses were received.

The following report presents brief background information, the proposed treatment (preservation in place) and the short and long-term preservation measures for this significant historic property. It was prepared in consultation with Ms. Dana Naone Hall.

PROJECT AREA DESCRIPTION

The subject parcel is a partially improved vacant lot comprised of 0.885 acres situated within the Kulamalu Commercial Village. The project area was cut and filled (8-20 ft.) in 2002 with subsurface utilities situated within the adjoining road to the north and east. The Kulamalu Commercial site is located in upcountry Maui in Pukalani Town. It is located near the five trees intersection at King Kekaulike High School, west of Kula Highway and south of A'apueo Parkway which also provides access to the Kamehameha Schools Campus. The cemetery is located between the proposed Kulamalu Hilltop Subdivision and the Institute for Astronomy (north) within Lot 19a. This parcel, along with Lot 20 has been acquired by Hale Mahaolu and Lot 20 will be developed with residential units in the near future.

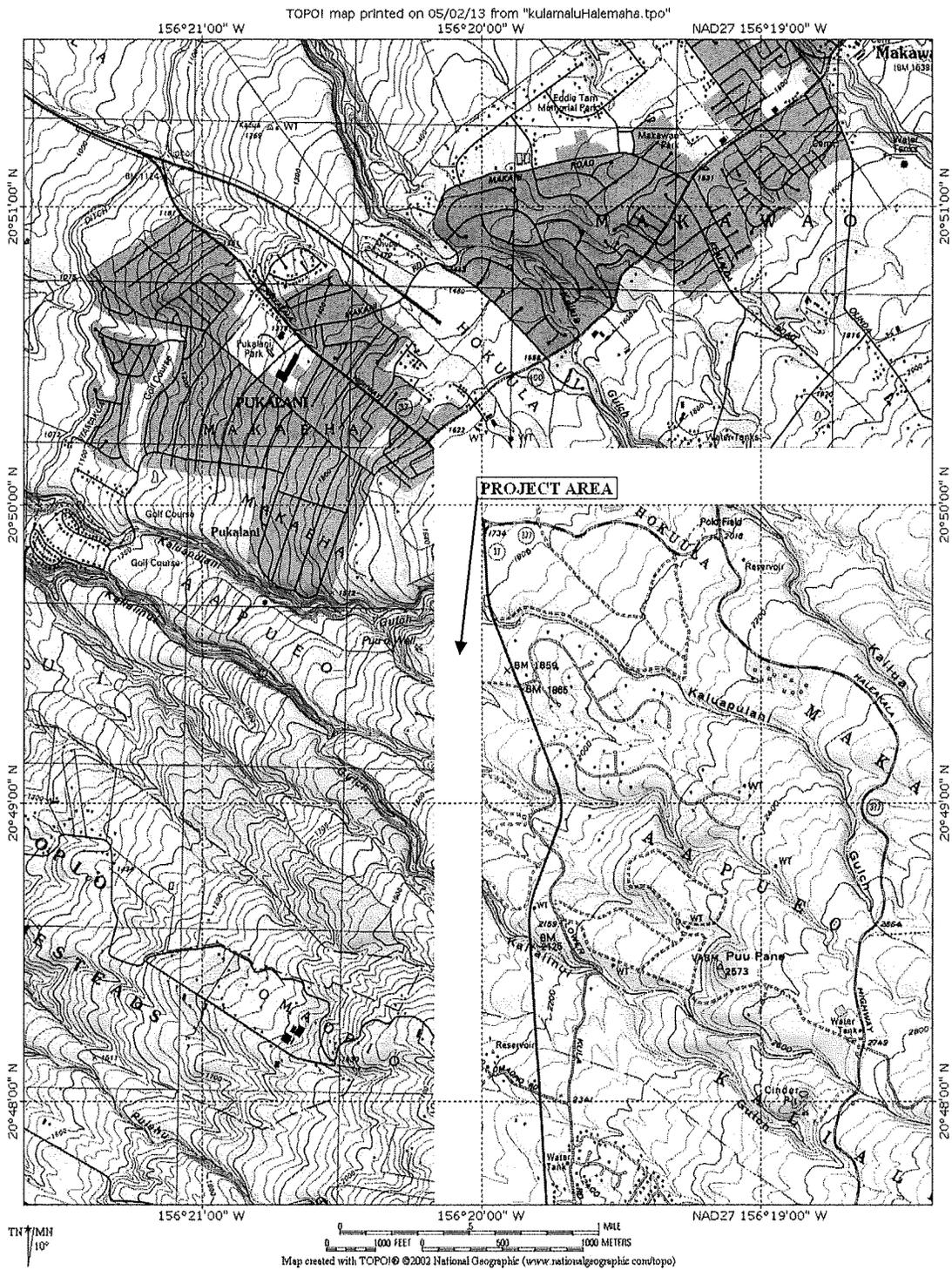


Figure 1. Location of Project Area on USGS Map

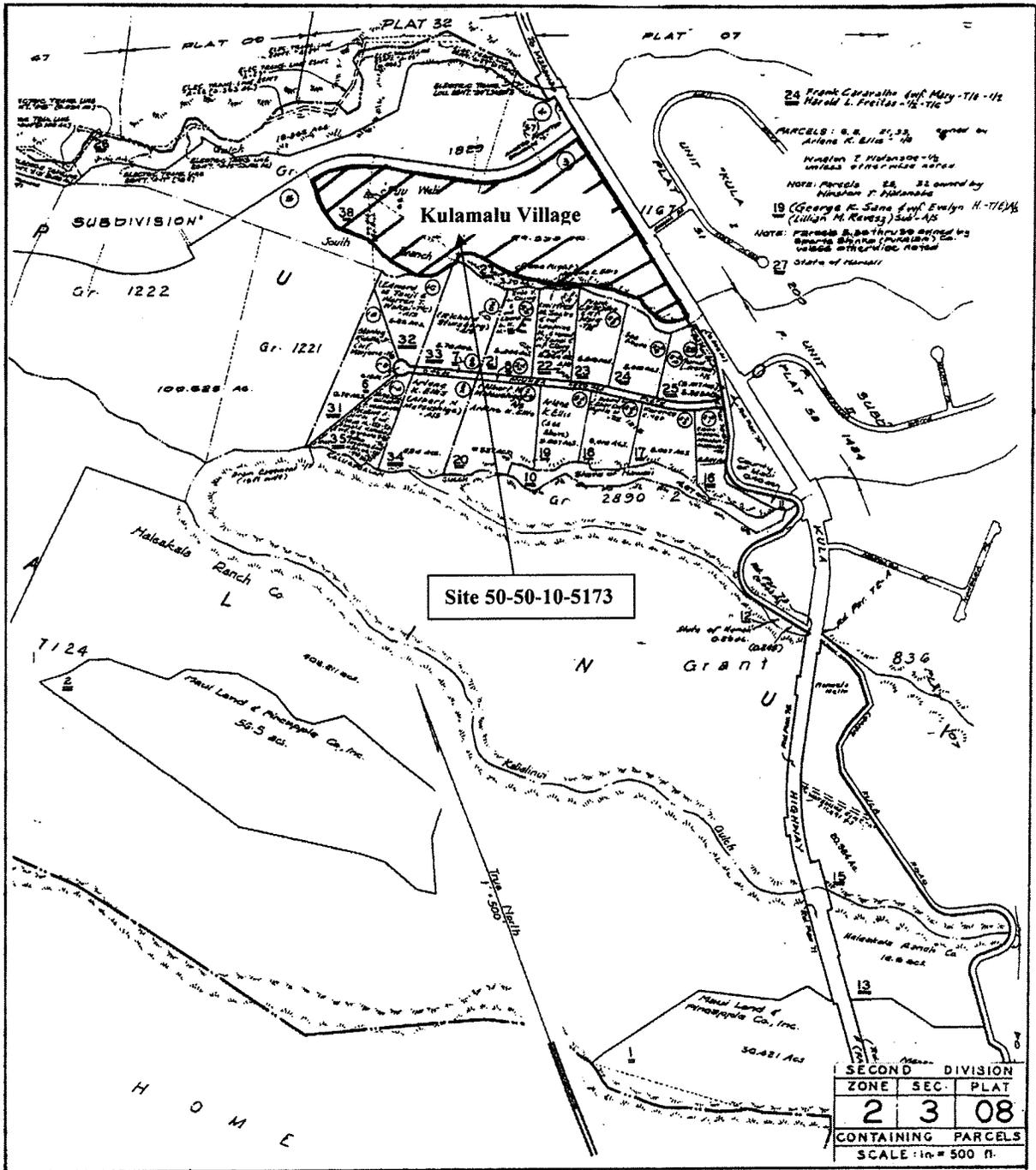


Figure 2. Location of Kulamalu Commercial Village and Site 50-50-09-5173 (Project Area)
on Tax Map Key

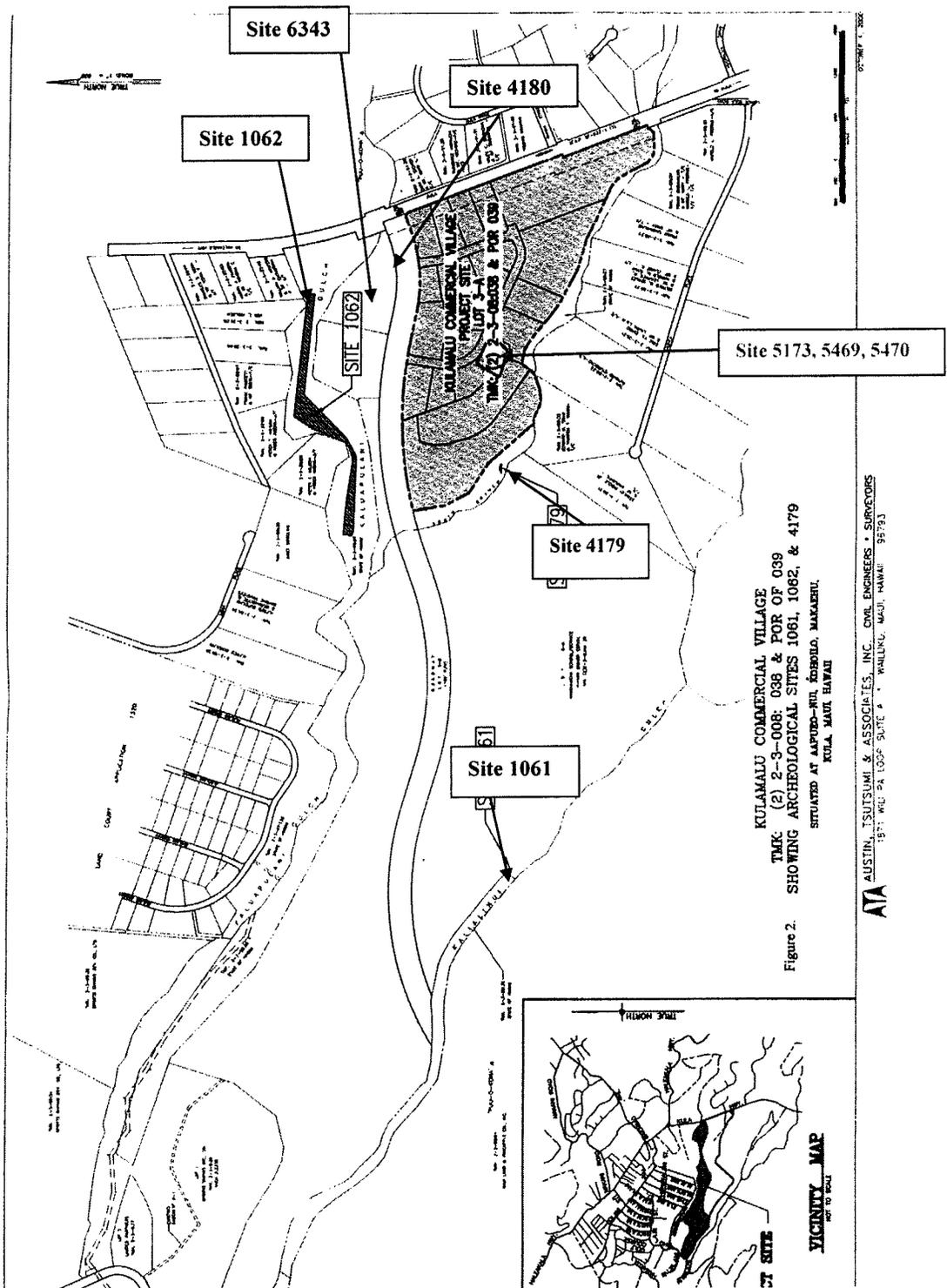


Figure 3. Plan View Map Showing Location of Historic Properties Sites 50-50-10-1061-1062, 4179 4180 and 6343 within Kulamalu Commercial Village and Sites 5173, 5469-5470 within the Project Area Lot 19a

PREVIOUS ARCHAEOLOGY AND RESULTS

Several significant sites have been identified within and surrounding the Kulamalu project area. Petroglyph panels designated Sites 1061, 1062 and 4179 were documented in the gulches, which bound the project area and agricultural sites consisting of clearing mounds, alignments and a boundary wall designated Sites 4181 and 4180, respectively, were recorded within the larger Kulamalu property during inventory procedures. Site 6343 is comprised of two historic coffin pit burial features (Fes. 1 and 2) and disturbed skeletal remains which were identified during monitoring procedures at the Kulamalu Cottages just north of A`apueo Parkway. Based on the presence of a yellow bead, context and osteological analysis, these burials were also presumed to be of Chinese ancestry. Site 5173 is an historic Chinese cemetery comprised of 26 features, and Site 5469 is a pre-contact fire-pit and Site 5470 is an historic irrigation ditch.

RESULTS

The monitoring and subsequent testing procedures identified 28 features, 26 of which were subsumed under Site 5173, and two were assigned discrete SIHP numbers, Sites 5469 and 5470. Site 5173 was assigned to an historic Chinese cemetery comprised of burial features with associated Chinese burners/fire-pits and indeterminate pits. Specifically, Site 5173 is comprised of eight coffin pit burials (Fe.1-4, 13, 14, 16 and 17), two prone/extended burials with no evidence of coffin materials (Fe. 8a, 9), two small burial pits with disturbed human skeletal remains within the pit outlines and or waterworn cobbles (Fe. 5, 7), seven definitive burning events (Fe.6, 8b, 12, 18, 19, 20 and 23), a possible animal burial rock mound (Fe.22), three areas containing isolated skeletal remains (Fes. 25-27) and three indeterminate pits (Fe. 11, 15, 24). These burial features are presumed to be Chinese based primarily on the artifact bead assemblage, and the presumed small stature of the skeletal remains. The bead analysis determined that all beads were predominately of Chinese manufacture except for one Venetian bead, and that all were temporally related suggesting an approximate age of 120 years old, dating to the 1880s. Site 5469 (formerly Fe.10) is a pre-Contact fire-pit. A charcoal sample collected from the pit returned a date of 320+/-50 B.P. (A.D. 1450-1660). Site 5470 (formerly Fe.21) is a possible irrigation ditch. Sites 5173, 5469 and 5470 are confined within a 90 ft. (NE/SW) by 80 ft. area (7,200 sq. ft.) and will be preserved in place along the west side of the project area (see Figure 5).

TRADITIONAL CHINESE BURIAL PRACTICES

In the 1900s, the Chinese had a thriving community in Kula where approximately 700 Chinese were living and working predominately as farmers and storeowners (Mark 1975). Within this

community, the Chinese population maintained several of the traditional mortuary practices from their homeland. Some of these practices were to provide offerings at the grave for the deceased for their journey into the spirit world, to bury beyond the community in which they lived, to bury on a hill overlooking water, to bury with the concept that someday the bones would be exhumed and returned to ancestral China, and also to bury on land not used for farming (Nelson 1993). Several Chinese cemeteries contained “burners” or ovens, which were used for burning the spiritual tributes. These tributes comprised money, clothing, food, and personal possessions to accompany the deceased person in the afterlife. Site 5173 exemplified some of these characteristics. The burials were situated on a hill overlooking the ocean and there were several burning episodes (presumed Chinese burners) adjacent to or near the burials.

CONSULTATION

This Preservation Plan was prepared in consultation with Ms. Dana Naone Hall of Chinese and Hawaiian ancestry. Ms. Hall also provided editorial comments for the Preservation Plan.

PRESERVATION PLAN

Short-Term Preservation Measures

Short-term protective measures are implemented at preservation areas through the interim period before and during construction. At this time, all burial features and associated grave goods have been preserved in place and or reinterred within the established preservation area and are protected by a vertical buffer comprised of 8-20 ft. of fill, and two horizontal buffers consisting of an interior (5.0 ft. buffer zone) and exterior (30.0 ft. buffer zone). The 30 ft. outer buffer zone is currently marked with t-bar posts placed approximately 10.0 ft. apart around the preservation area. Prior to and during development, orange-construction fencing will be installed to mark the 30 ft. buffer area. The fencing may need to be adjusted during construction related activities; however no alterations may be implemented without prior consultation and approval by the archaeological consultant. Additionally, all adjustments will be revised by the end of each work day.

Long-Term Preservation Measures

Long-Term measures are a mitigation strategy to protect the site in perpetuity. These measures may not be adjusted and/or changed without prior review and acceptance by the SHPD in consultation with the MLIBC.

This significant historic property will be protected by an interior buffer, measuring 5 ft. from the outermost identified burials (see red line on Figure 5). Access will be restricted within the interior buffer zone and no structures will be placed with the exception of a low rock wall or fence marking the perimeter of the interior buffer. The interior buffer shall be located within a larger, exterior outer buffer area measuring 30.0 ft. from the outermost burials. The purpose of the two buffer zones is for protection of the burial features and for aesthetic purposes by creating more open space between the 30.0 ft. and 5.0 ft. buffer zones (Figures 6 and 7). The outer buffer zone will be marked by immovable boulders and wooden posts set in concrete. Additionally the residential structures will be placed from 12.0 ft. to 50.0 ft. away from the exterior 30.0 ft. buffer. These buffer zones and other long-term protective measures including surface demarcation, signage, landscaping, access and recordation are discussed in detail below.

Surface Demarcation- The burial features shall be marked on the surface by a boulder or concentration of cobbles. This procedure was previously recorded during testing at several burial features at Site 5713. A low rock wall (approximately 3.0 ft. high) or other

permanent fencing such as black Ameristar fencing shall be constructed along the perimeter of the 5.0 ft. interior buffer zone delineated in red on Figure 4. A larger 30 ft. buffer zone will be measured from the outermost known burial features (highlighted in pink on Figure 5) and shall be delineated by large immovable boulders and or wooden posts set in concrete, placed at even intervals 15 ft. apart.

Preservation Area- The preservation area consists of an interior buffer located within a larger exterior buffer. No temporary or permanent structures shall be located or built within the interior buffer area. Subsurface utility lines and other uses shall be routed outside of the interior buffer area to prevent any harm to the historic sites; however subsurface irrigation is permissible, but may not exceed 1.5 ft. in depth. The larger exterior buffer zone (5.0 ft. to 30 ft.) is less restrictive and envisioned as open space. No subsurface utilities may be placed within the larger preservation area, with the exception of irrigation which shall not to exceed 1.5 ft. In the event that future sitting areas (i.e. benches and tables) and or walking paths are desired within the larger preservation area, these types of uses shall be acceptable. The preservation area including the interior and exterior buffer areas measures approximately 105 ft. (E/W) by 95 ft. (N/S) or 9,975 sq. ft.).

For continued protection of the burials, the entire preservation area will be clearly identified on all construction plans.

Landscaping- The area within the interior 5.0 ft. buffer zone may be planted with grass and or ground-cover; however no deeply rooted shrubs or trees shall be planted within the interior buffer zone. The outer, 30 ft. buffer zone may be planted with grass, ground-cover, shrubs and shade trees, preferably native trees such as kukui or kamani. The shrubs or hedges will consist of drought tolerant species that thrive within the Pukalani/Kula area. All plantings must be maintained so that the permanent fencing, boulders and signage are visible at all times.

Signage- A bronze plaque shall be affixed to a large boulder, stone platform or pedestal type structure along the perimeter of each buffer zone and inscribed with the following:

For the 30 ft. and 5.0 ft. Buffer Zone:

Historic Chinese Cemetery Site 50-50-10-5173
and
Pre-Historic Native Hawaiian Cultural Site 5469
Please Respect This Area

Maintenance- All surface structural remains, bronze plaques, and landscaping shall be maintained by the landowner. If any of these protective measures deteriorate or are damaged over time, the landowner shall be responsible for the repair and/or replacement of these features.

To ensure perpetual protection of this burial site, periodic site inspections by the SHPD may be conducted to verify that the long-term measures are in place and the site is adequately protected. Site inspections will be performed at mutually agreed upon times between the landowner and SHPD staff.

Recordation- The preservation area will be surveyed by a licensed surveyor and a metes and bounds description of the preservation area shall be recorded by the landowner, along with this Burial Preservation Plan at the State of Hawaii Bureau of Conveyances within 90 days of written acceptance of the Burial Treatment and Preservation Plan by the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD).

Access- Access within the interior of the 5 ft. buffer zone is for lineal and/or cultural descendants, as well as for maintenance purposes. A 3.0 ft. opening for access shall be placed along this interior buffer zone. To date, no descendant claims have been received, and or recognized by the SHPD for the burial site, Site 5713; thus access within the interior preservation area is not afforded at this time. For the 30 ft. buffer zone, access is permitted.

In the event that a future lineal and/or cultural descendant claim is recognized by the SHPD, access to the burial site shall be permitted at reasonable dates and times mutually agreed upon by the landowner and lineal and or cultural descendants.

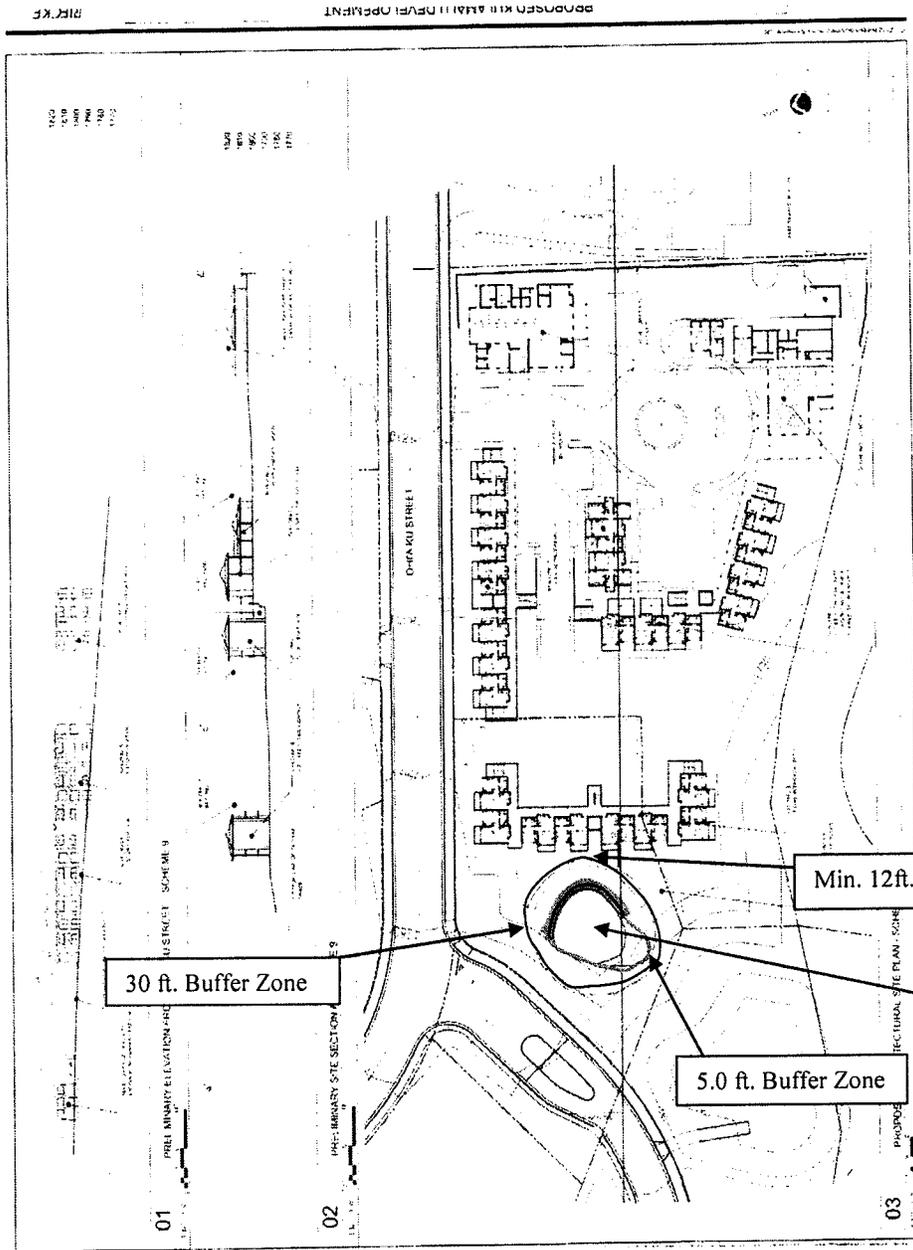


Figure 6. Plan View Map of Project Area and Preservation Areas for Site 5713, 5469 and 5470

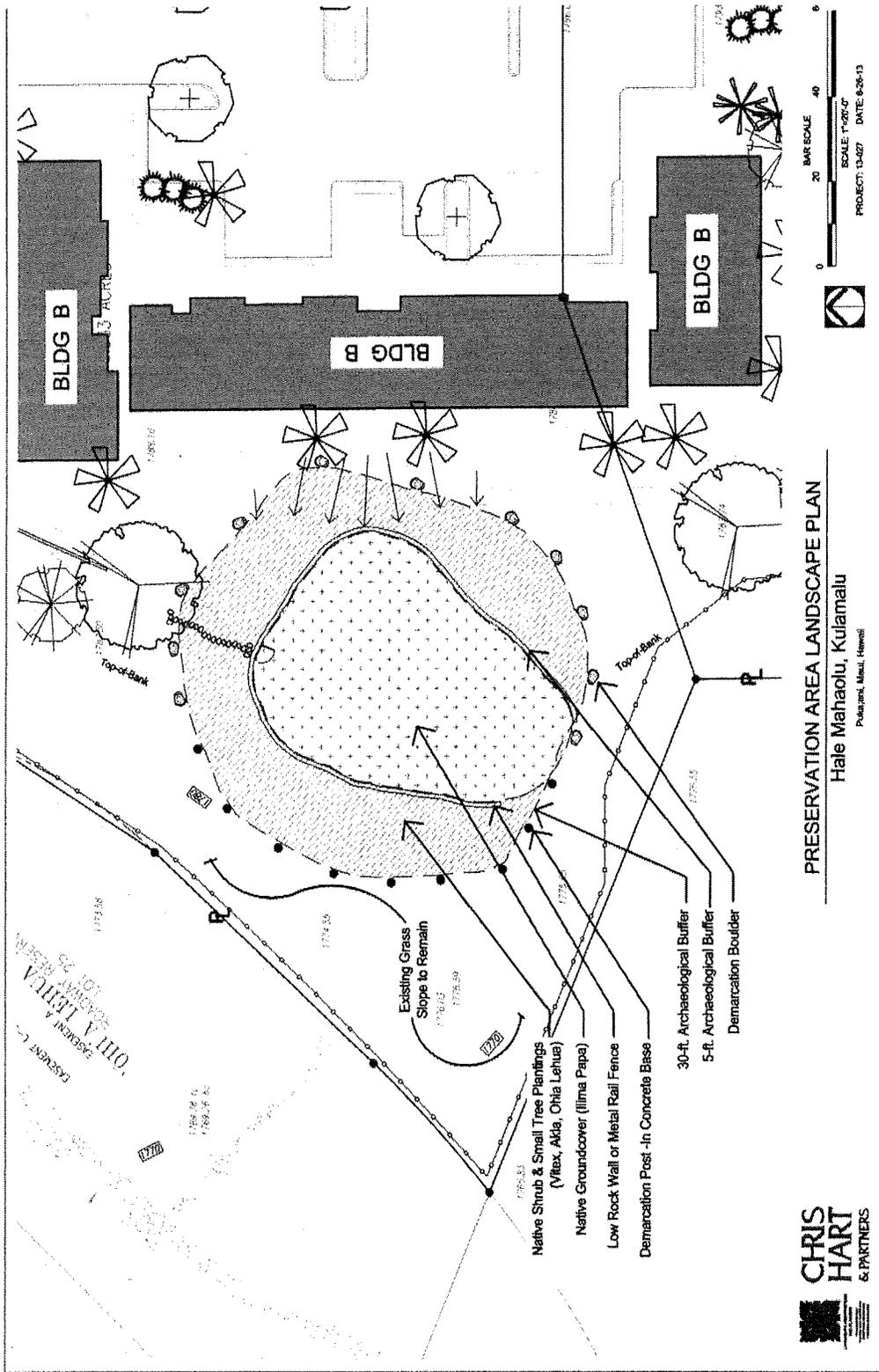


Figure 7. Plan View Map of Preservation Area Showing Buffer Zones

APPENDIX A

AFFIDAVIT OF PUBLICATION

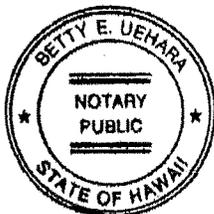
STATE OF HAWAII, }
County of Maui. } ss.

Aaron T. Viela being duly sworn
deposes and says, that he is Advertising Sales of
the Maui Publishing Co., Ltd., publishers of the MAUI NEWS, a
newspaper published in Wailuku, County of Maui, State of Hawaii;
that the ordered publication as to NOTICE IS HEREBY GIVEN
that Archaeological Services Hawaii, LLC, representing
Kulamanu LLC, for the Kulamanu Commercial Subdivision
of which the annexed is a true and corrected printed notice, was
published 4 times in the MAUI NEWS, aforesaid, commencing
on the 25th day of November, 2001, and ending
on the 28th day of November, 2001, (both days
inclusive), to-wit: _____
November 25, 26, 27, 28, 2001

and that affiant is not a party to or in any way interested in the above
entitled matter.

Aaron T. Viela

Subscribed and sworn to before me this
28th day of November A.D. 2001.



Betty E. Uehara
Notary Public, Second Judicial
Circuit, State of Hawaii.
BETTY E. UEHARA
My commission expires 9-26-03

NOTICE IS HEREBY GIVEN that Archaeological Services Hawaii, LLC, representing Kulamanu LLC, for the Kulamanu Commercial Subdivision, has discovered several unmarked burial sites beneath the cultivation zone of lands owned by Kulamanu LLC, *A'opua ulu, pua'a*, Makawao District, Island of Maui, TMK 2-3-8-38 and part 39.
The remains are assumed to be historic Chinese burial and proper treatment shall occur in accordance with Chapter 6B, Hawaii Revised Statutes, Section 43-3 regarding unmarked burial sites. The developer is committed to preserving the burials in place and would like to reinter the displaced remains within 30 days of this notice.
We are requesting descendants of known families in the area or persons with information about families from the area to immediately contact Ms. Lisa J. Roumno Hazuke at Archaeological Services Hawaii at 16 S. Ma'kei St., Ste. G, Wailuku, HI 96793, 244-2012 (ph) and 01-244-2892 (fax) and Mr. Kanani Kapoleia, Culture Historian with the State Historic Preservation Division located at Kakuhoua Building, Kamookila Boulevard, Kapolei, Hawaii 98707, 808-692-8037, ph: 808-692-8020, to present information regarding the historic Chinese burials. Please respond within 30 days.
(MN Nov. 25, 26, 27, 28, 2001)

IN THE MATTER OF
 BURIAL NOTICE
 ARCHAEOLOGICAL SERVICES HAWAII

BURIAL NOTICE
 NOTICE IS HEREBY
 GIVEN that Archaeological
 Services Hawaii, LLC, rep-
 resenting Kulamati, LLC,
 for the Kulamati Commer-
 cial Subdivision, has dis-
 covered several unmarked
 burial sites beneath the
 cultivation zone on 1004
 owned by Kulamati, LLC,
 Makawae District, Island of
 Maui, TMK 2-3-238 and
 Port 30.
 The remains are sus-
 pected to be historic Chi-
 nese burials and proper
 treatment shall be carried
 out in accordance with Chapter 68
 of the Hawaii Revised
 Statutes, Section 68-5, re-
 garding unmarked burial
 sites. The developer is
 committed to preserving the
 burial markers and would
 like to return the displaced
 remains within 30 days of
 this notice.
 We are requesting de-
 scendants of known fami-
 lies in the area or persons
 with information about
 families from the area to
 immediately contact Mr.
 Lisa J. Robinson-Hauka at
 Archaeological Services
 Hawaii at 16 S. Moku S.
 Ste. G, Waihee HI 96792,
 808-2017-0200, 808-244-
 8292 (fax) and Ms. Dana
 K. Lewis at the State Histori-
 cal Preservation Division,
 1600 Alauikeolu Building,
 Kapolei, Hawaii HI
 96707, 808-692-8037, ph:
 808-692-8202, to present
 information regarding the
 historic Chinese burials.
 Please respond within 30
 days.
 (Hon. Adv. Nov. 23, 2001
 30, 2001) (As 17278)

AFFIDAVIT OF PUBLICATION

STATE OF HAWAII
 City and County of Honolulu

ss.

Grace Santos being duly sworn,
 deposes and says that she is a clerk, duly authorized to
 execute this affidavit of THE HONOLULU ADVERTISER, a division
 of GANNETT PACIFIC CORPORATION, that said newspaper is a
 newspaper of general circulation in the State of Hawaii, and that
 the attached notice is a true notice as was published in the
 aforereferenced newspaper as follows:

The Honolulu Advertiser: 3 time(s), on
11/25/2001, 11/28/2001, 11/30/2001

and that affiant is not a party to or in any way interested in the above
 entitled matter.

Grace Santos

Subscribed and sworn to before me this 30th day of November A.D. 2001

Jeanette T. Ching
 JEANETTE T. CHING

Notary Public of the First Judicial Circuit

State of Hawaii

My commission expires

JUN 16 2002

APPENDIX B-1.

**October 23, 2013 Letter from
State Historic Preservation
Division**

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD STE 555
KAPOLEI HI 96707

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TANI
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAIHOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

October 23, 2013

Ms. Lisa Rotunno-Hazuka
Archaeological Services Hawai'i
P.O. Box 1015
Pu'unene, Hi 96784

LOG NO: 2013.0127
DOC NO: 1310.HR01

Dear Ms. Rotunno-Hazuka:

**SUBJECT: Final Burial Site Component of a Preservation Plan For Site 50-50-10-5173 An
Historic Chinese Cemetery Situated at Kulamalu Commercial Subdivision Within
Lot 19A, A'apueo Ahupua'a, Makawao District, Island of Maui,
TMK: 2-3-008: portions of 38 and 39.**

We have reviewed the above plan and find it in compliance with Hawai'i Administrative Rules §13-300-34 (b). You may proceed with implementing its provisions.

Should you have any questions or concerns, please feel free to contact me at 808 243-4640 or Hinano.R.Rodrigues@Hawaii.gov.

Sincerely,

A handwritten signature in cursive script that reads "Hinano Rodrigues".

Mr. Hinano Rodrigues
Acting History and Culture Branch Chief
State Historic Preservation Division

APPENDIX C.
Development Plans



PLANT LEGEND

Symbol	Common Name	(Size / Notes)
TREES AND PALM		
LARGE TREE:		
	Jacaranda (Field Stock)	
MEDIUM SHADE TREE:		
	Rainbow Shower & Pink Tecoma (2" cal., 6' trunk ht)	
	Plumeria, Ohia, Dwarf Koa (25 Gal.)	
PALM TREE:		
	Royal Palm (F.S. - 12-15ft. Ht.)	
	Areca Palm (5 Gal.)	
	Manila & Fishtail Palm (15 Gal.)	
	MacArthur Palm (15 Gal.)	

SHRUBS AND GROUNDCOVER

SHRUBS	
	Agapanthus
	African Iris, Plumbago
	Vitex, Queen Emma Lily
	Red Ginger, Red/Green Ti
	Anthurium, Monstera
	Spathe Flower
HEDGE SHRUBS	
	Red Hibiscus
	Eldorado
	Naupaka

GROUNDCOVER:

	Ice Plant, Purple Lantana, Dwarf Rhoen
	Kupukupu Fern, Dwarf Lauae Fern
	Grass Lawn (As Shown on Grading and Retaining Walls)

- Notes:**
- 1) All tree locations are approximate & will be adjusted in field by landscape contractor and have a 6'-0" clear zone to all utilities.
 - 2) All street trees to have 10'-0" of rootbarrier installed at back of curb.
 - 3) All landscape material to be watered using an automatic irrigation system.
 - 4) See Civil plans for all grading and retaining walls.
 - 5) 18" Maintenance strip with cinder around all buildings.

TMK: (2) 2-3-008: 027



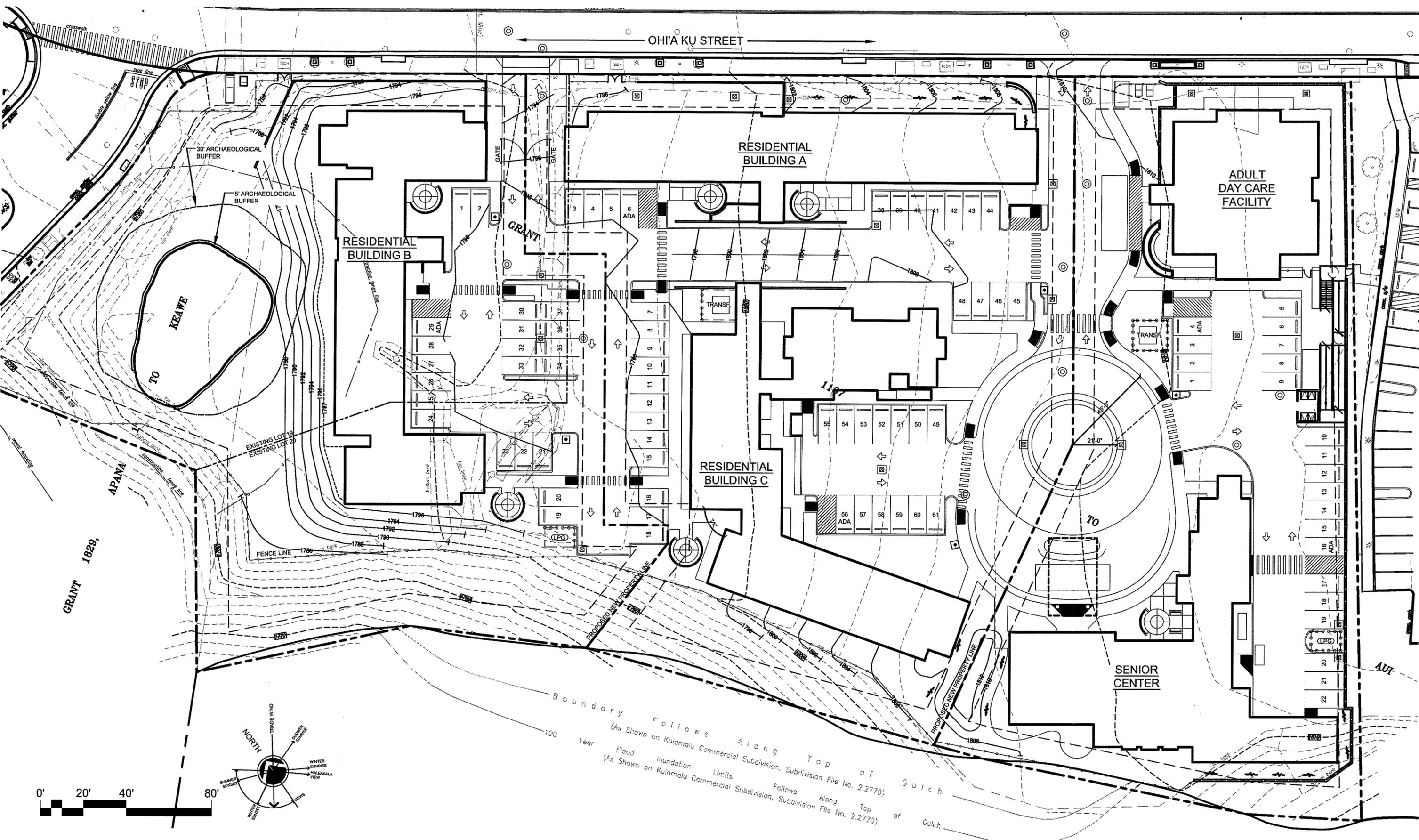
Landscape Concept Plan

Hale Mahaolu Ewalu at Kulamalu Town Center

Kula, Maui, Hawaii



SCALE: 1"=20'-0"
PROJECT: 13-027
DATE: 10-14-13

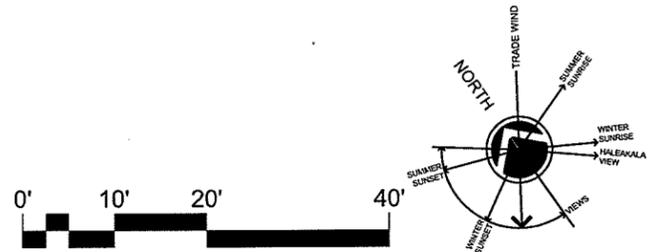
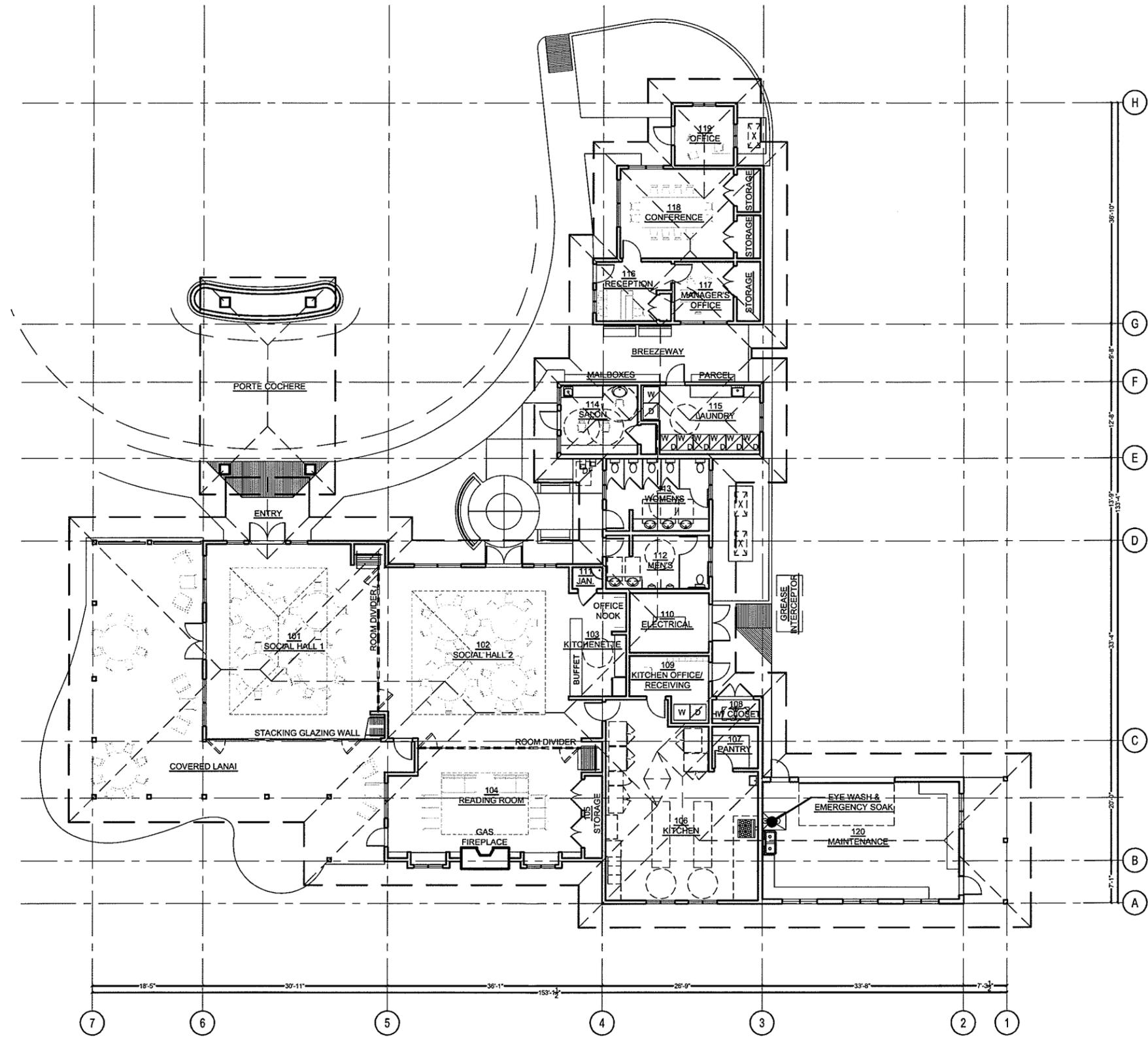


ARCHITECTURAL SITE PLAN

HALE MAHAOLU EWALU
SENIOR HOUSING AT KULAMALU
T.M.K.: (2) 2-3-066: 019 & 020

RIECKE
SUNNLAND
ARCHITECTS
KONO
LTD.

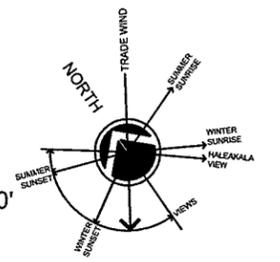
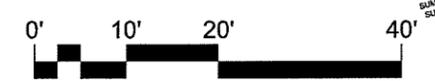
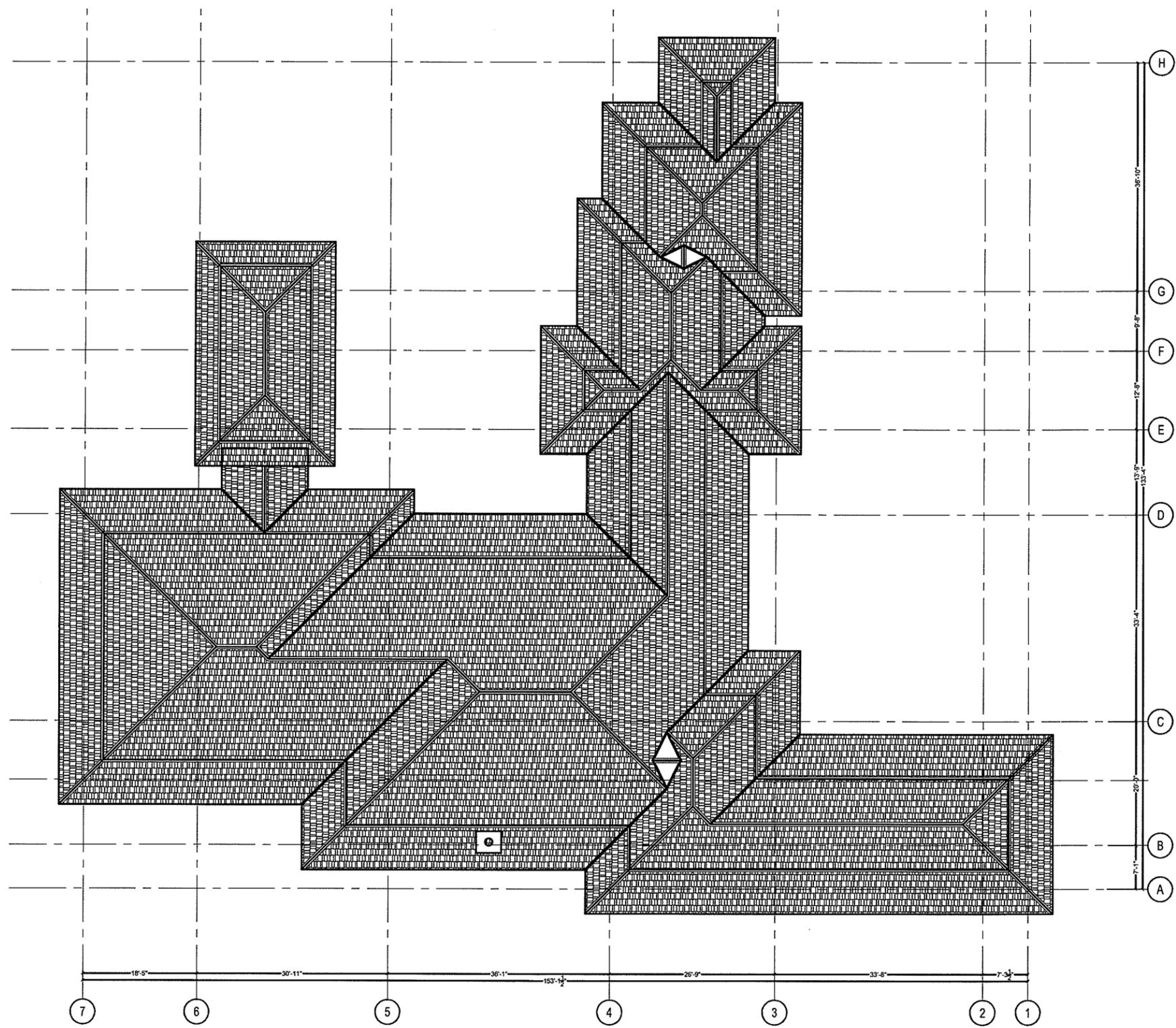
PROJECT NO. 2012-035
DATE: OCTOBER 2013
© 2013 Riecke Sunnland Kono Architects, Ltd.



SENIOR CENTER - FLOOR PLAN

HALE MAHAOLU EWALU
SENIOR HOUSING AT KULAMALU
T.M.K.: (2) 2-3-066: 019 & 020

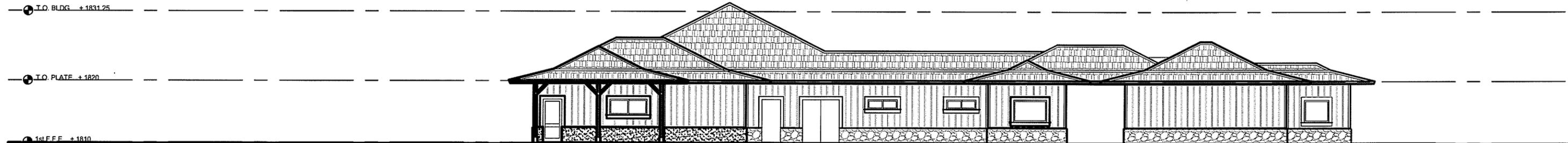
RIECKE
SUNNLAND
ARCHITECTS,
LTD. KONO



SENIOR CENTER - ROOF PLAN

HALE MAHAOLU EWALU
 SENIOR HOUSING AT KULAMALU
 T.M.K.: (2) 2-3-066: 019 & 020

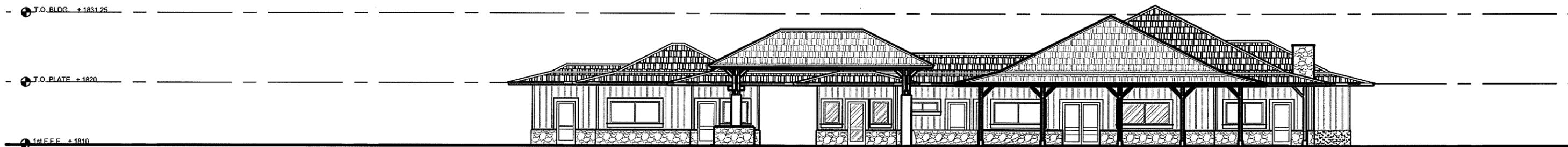
**RIECKE
 SUNNLAND
 ARCHITECTS,
 LTD. KONO**



EAST EXTERIOR ELEVATION



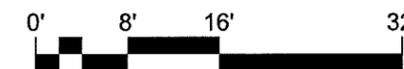
NORTH EXTERIOR ELEVATION



WEST EXTERIOR ELEVATION



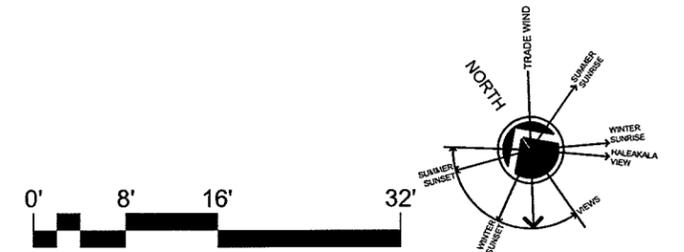
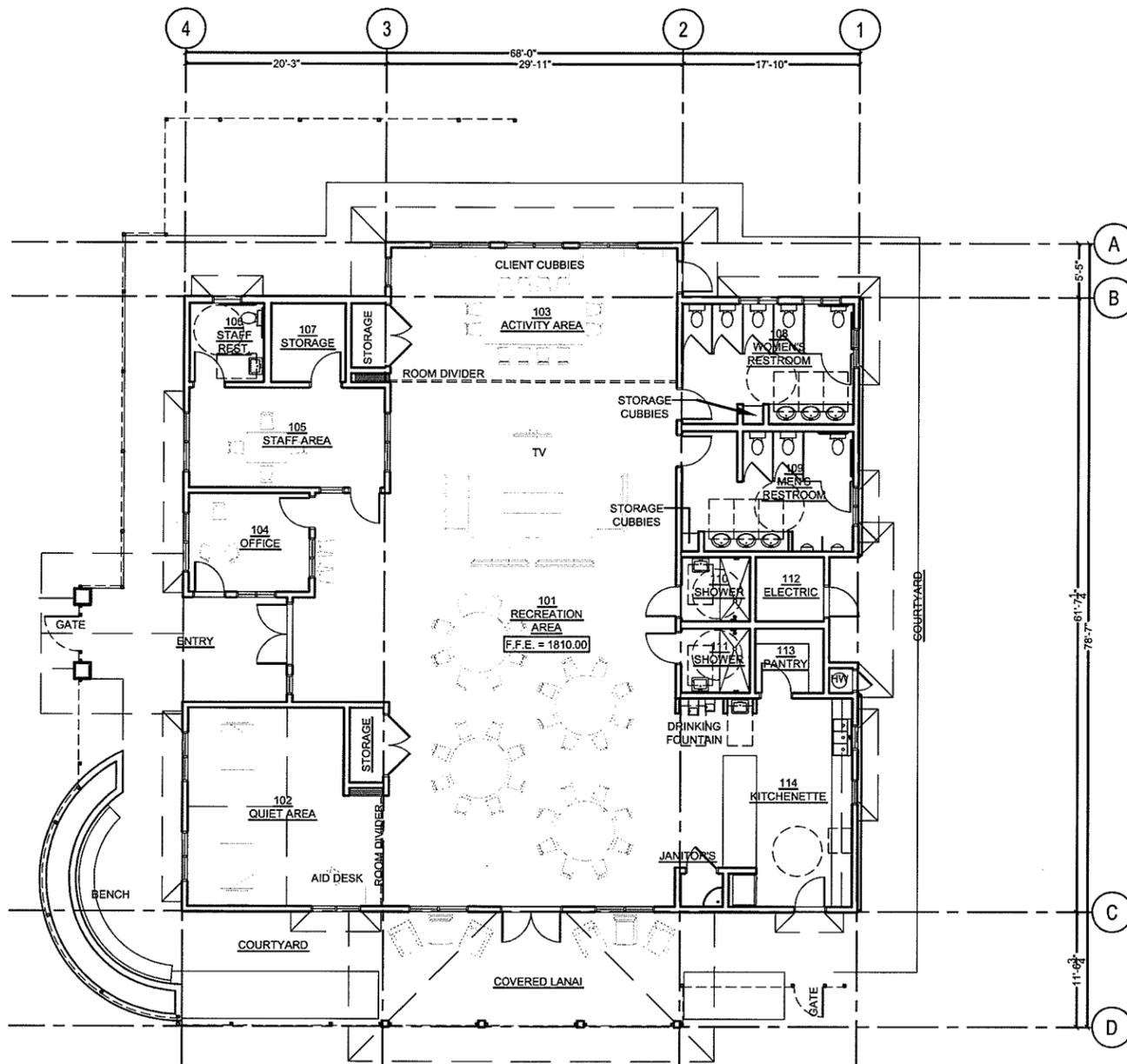
SOUTH EXTERIOR ELEVATION



SENIOR CENTER - EXTERIOR ELEVATIONS

HALE MAHAOLU EWALU
SENIOR HOUSING AT KULAMALU
T.M.K.: (2) 2-3-066: 019 & 020

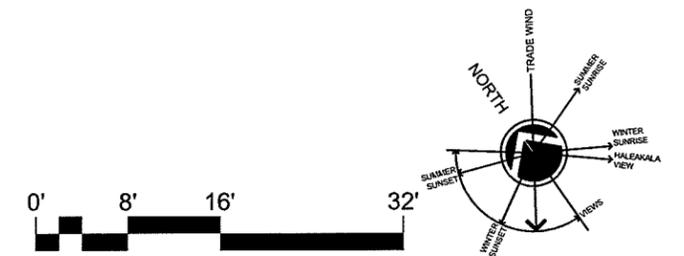
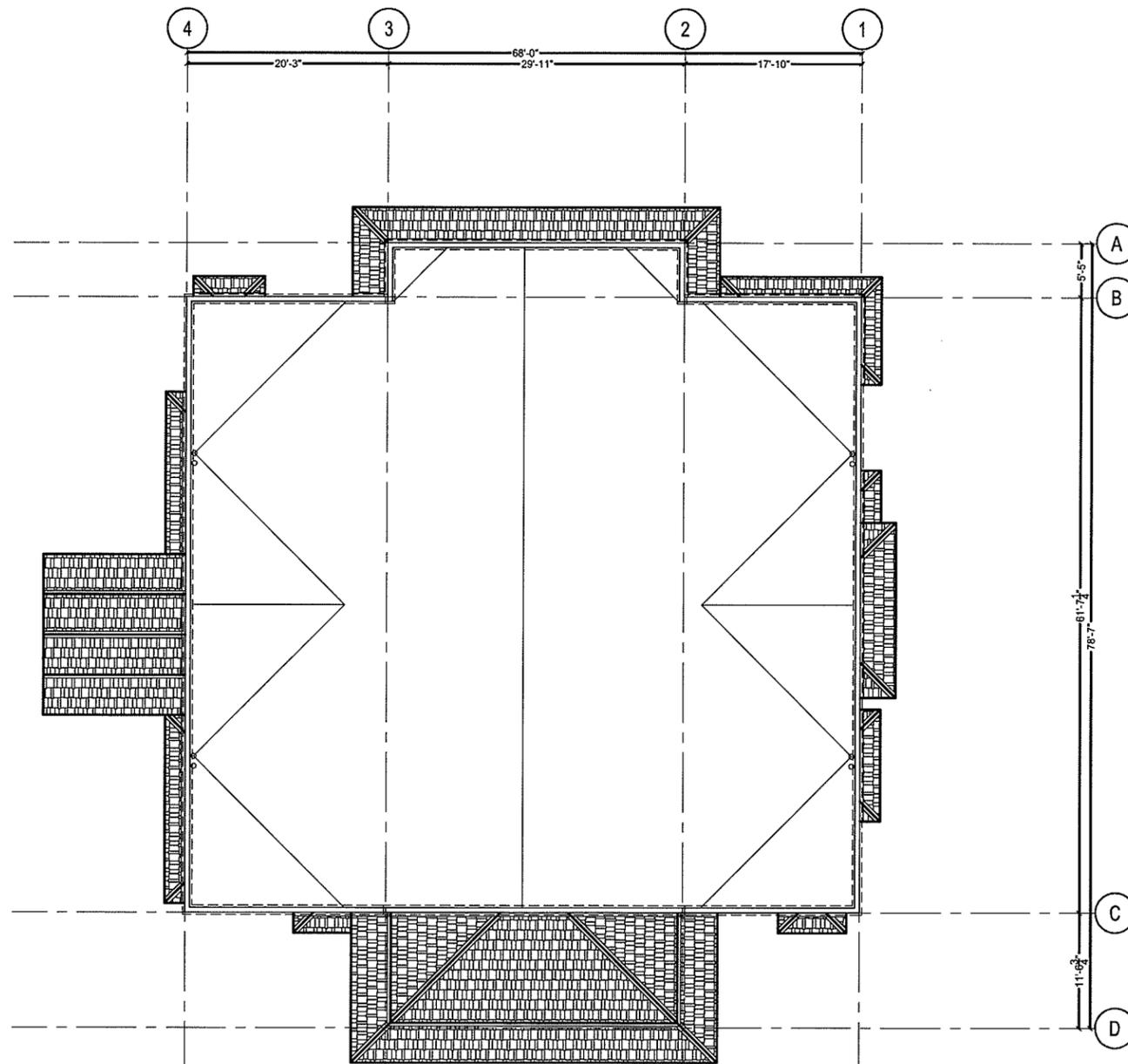
RIECKE
SUNNLAND
ARCHITECTS
LTD. KONO



ADULT DAY CARE - FLOOR PLAN

HALE MAHAOLU EWALU
SENIOR HOUSING AT KULAMALU
T.M.K.: (2) 2-3-066: 019 & 020

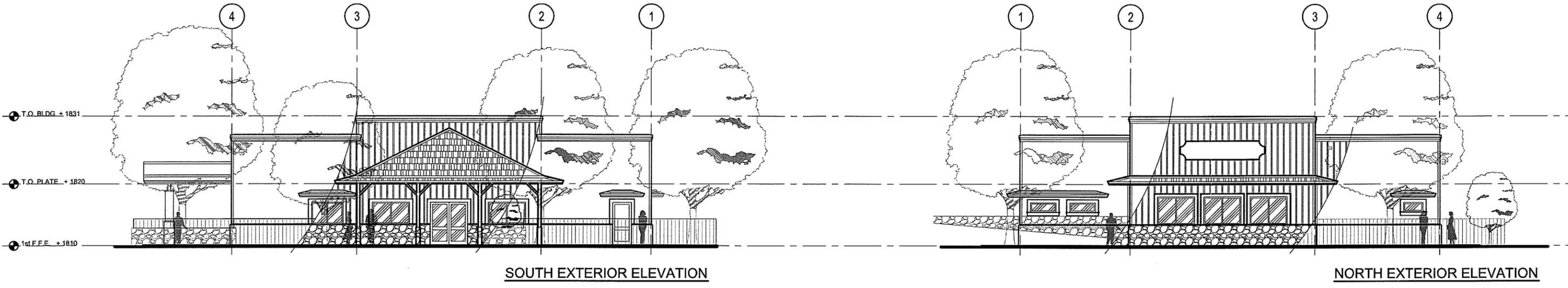
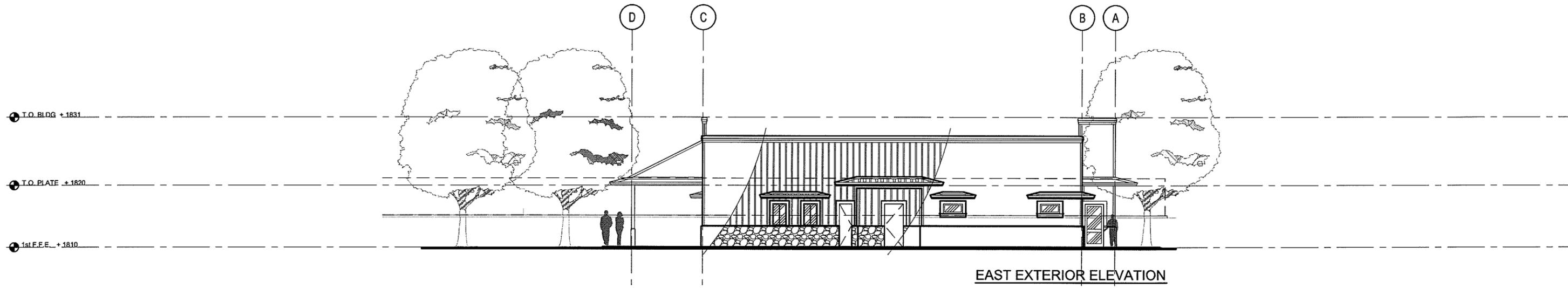
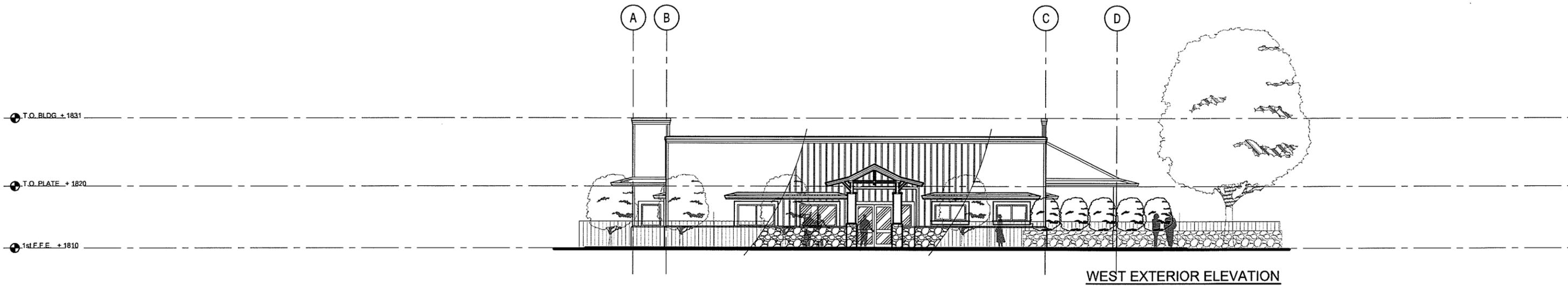
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ADULT DAY CARE - ROOF PLAN

HALE MAHAOLU EWALU
SENIOR HOUSING AT KULAMALU
T.M.K.: (2) 2-3-066: 019 & 020

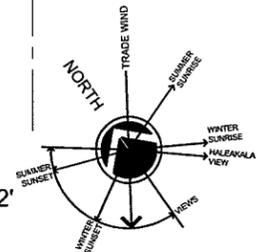
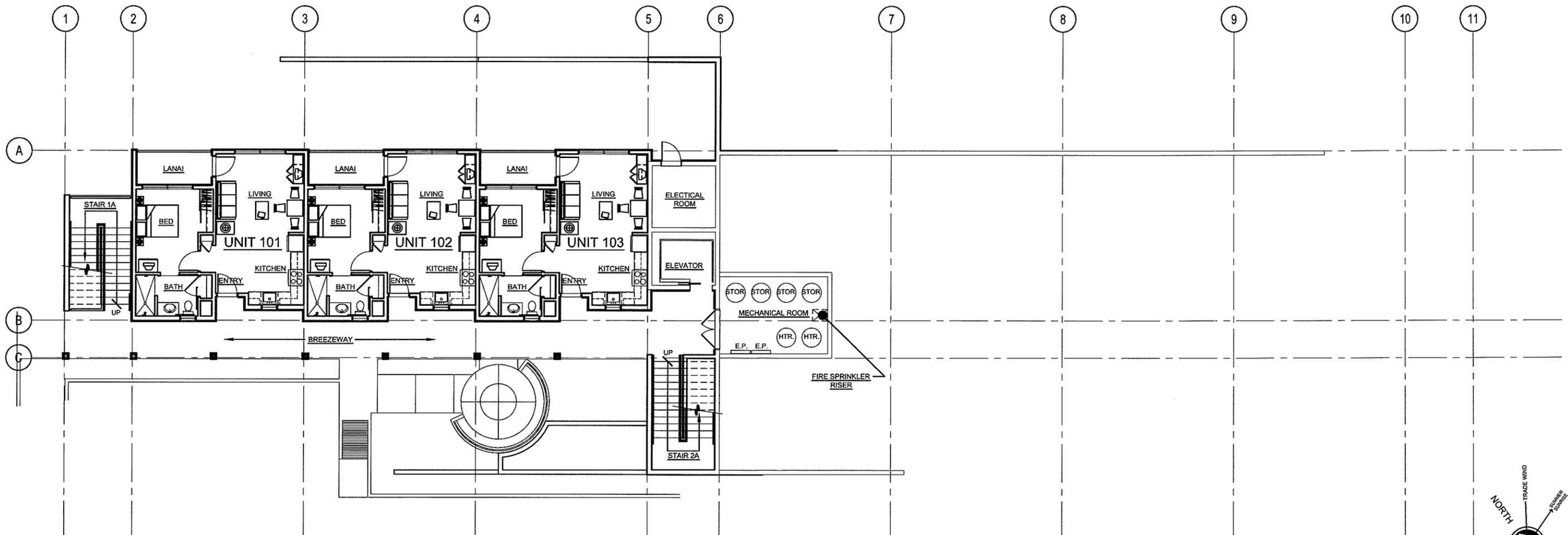
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ADULT DAY CARE - EXTERIOR ELEVATIONS

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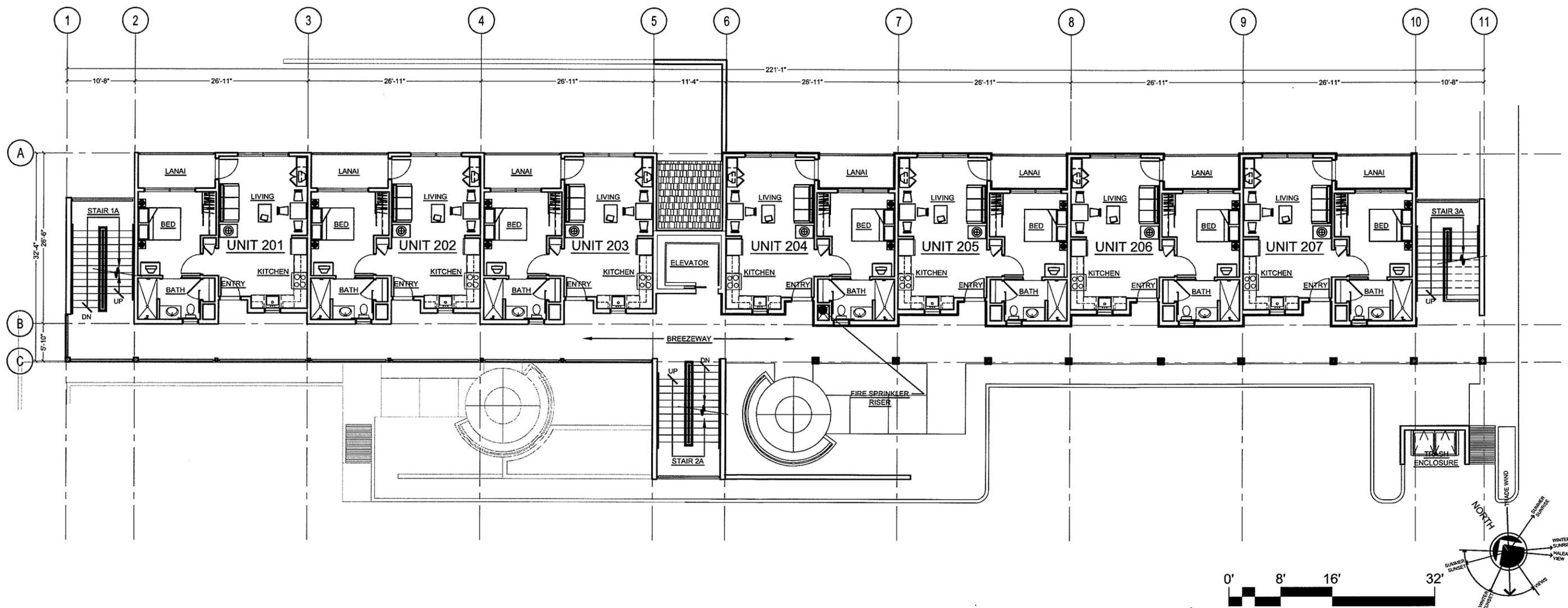
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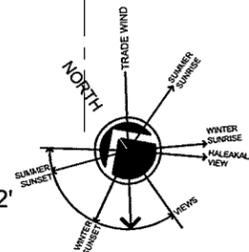
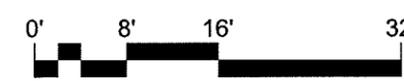
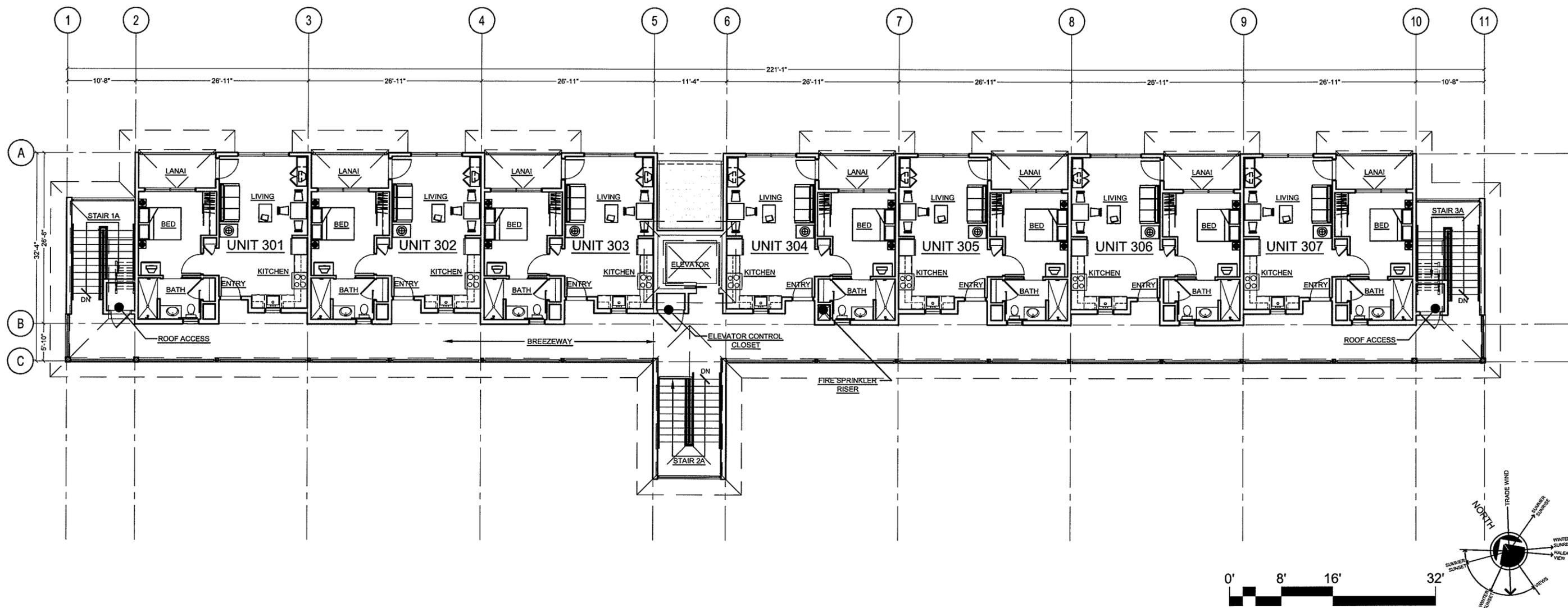
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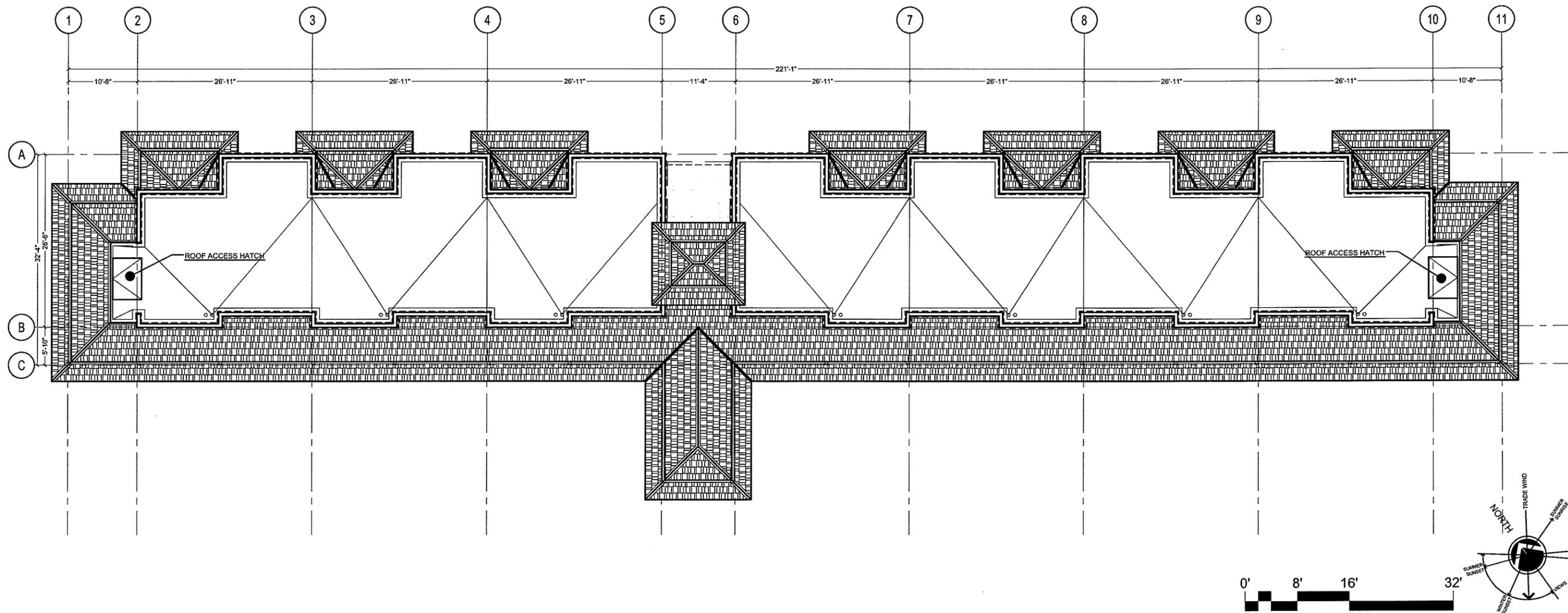
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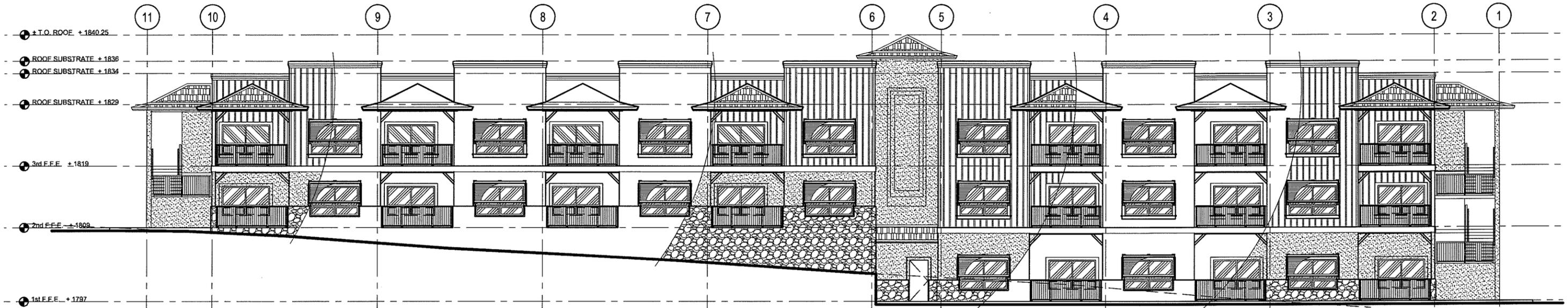
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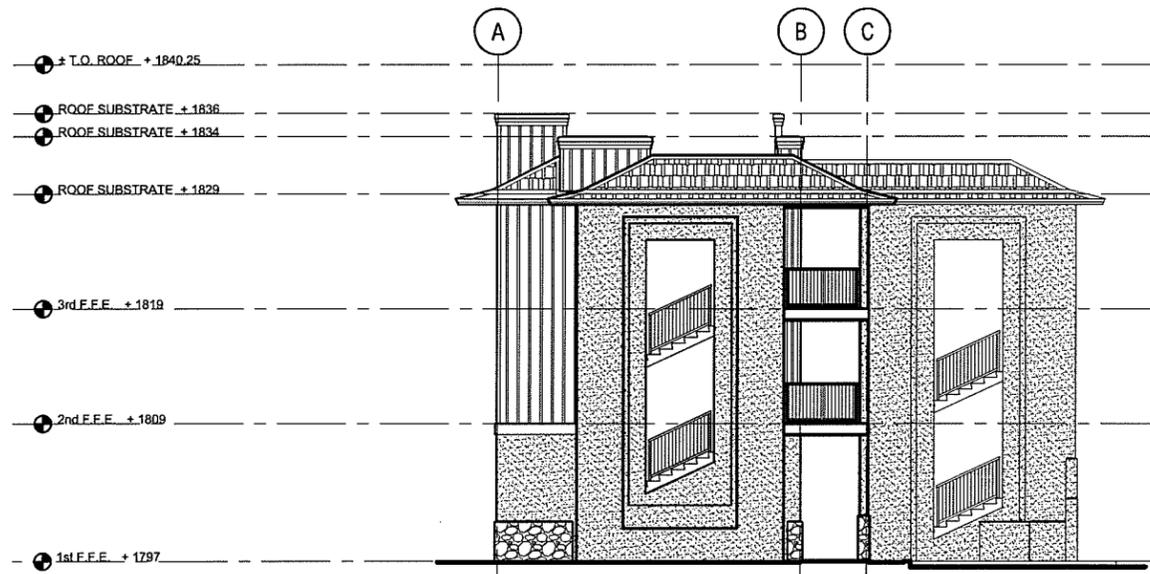
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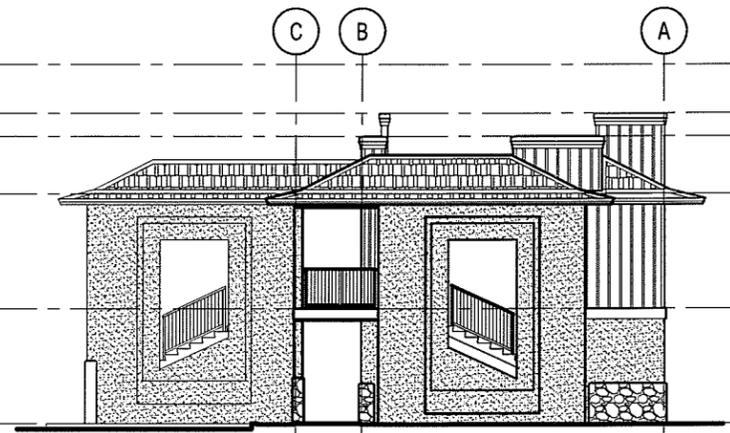
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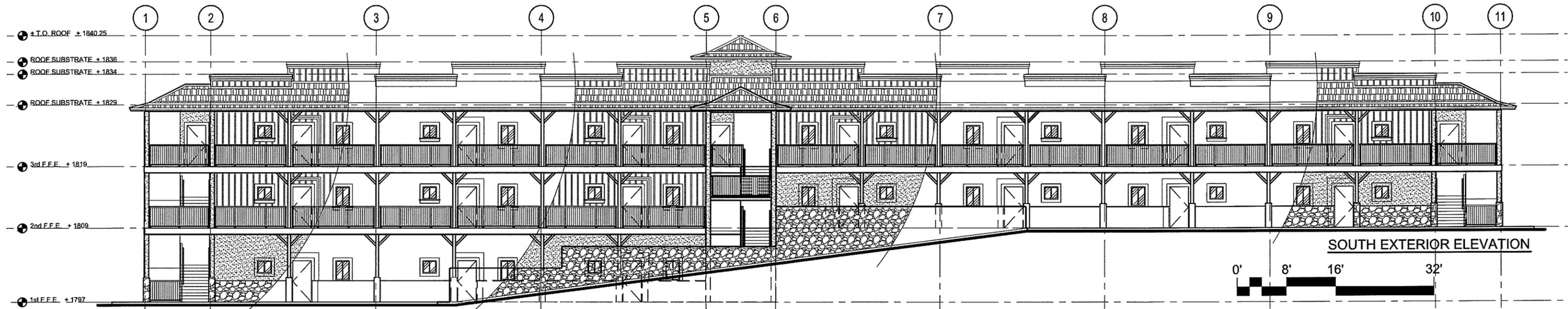
NORTH EXTERIOR ELEVATION



WEST EXTERIOR ELEVATION



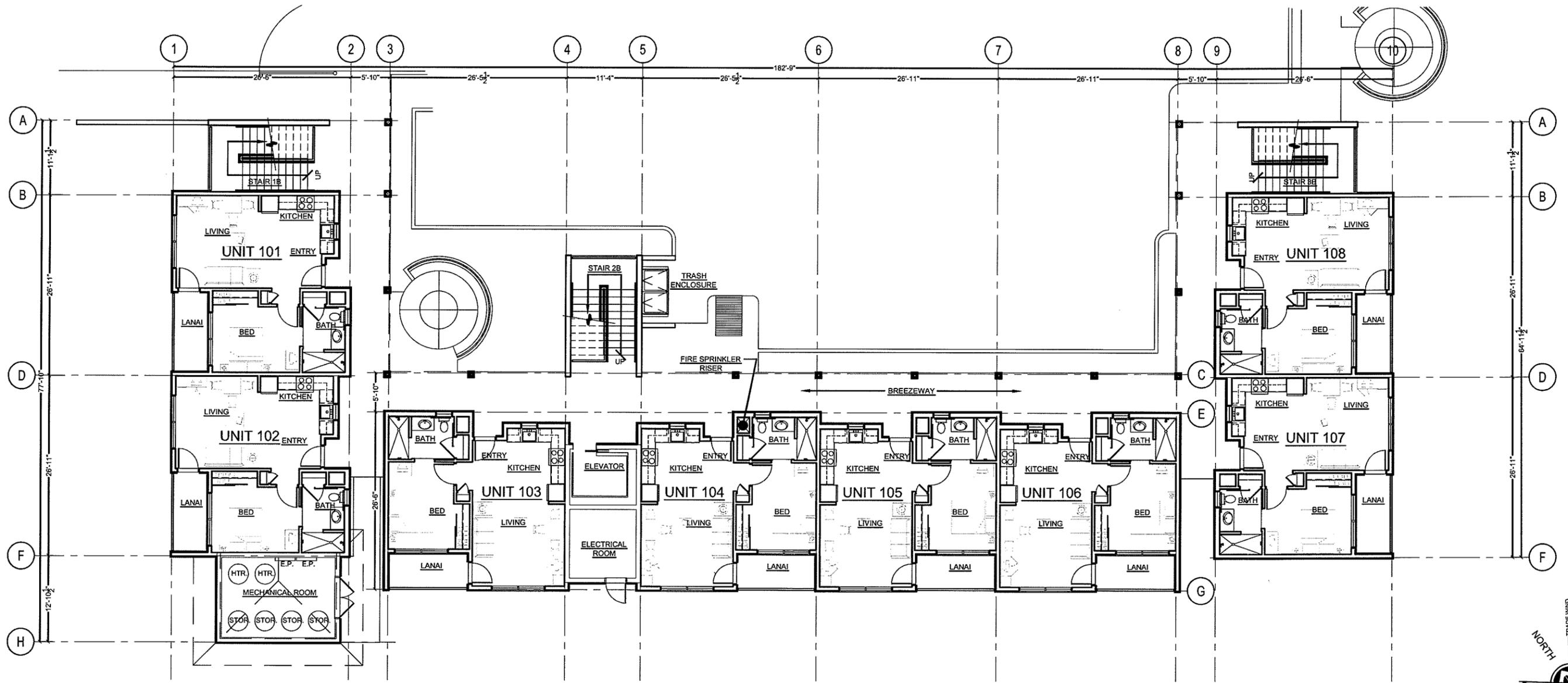
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SOUTH EXTERIOR ELEVATION



RESIDENTIAL BUILDING A - EXTERIOR ELEVATIONS



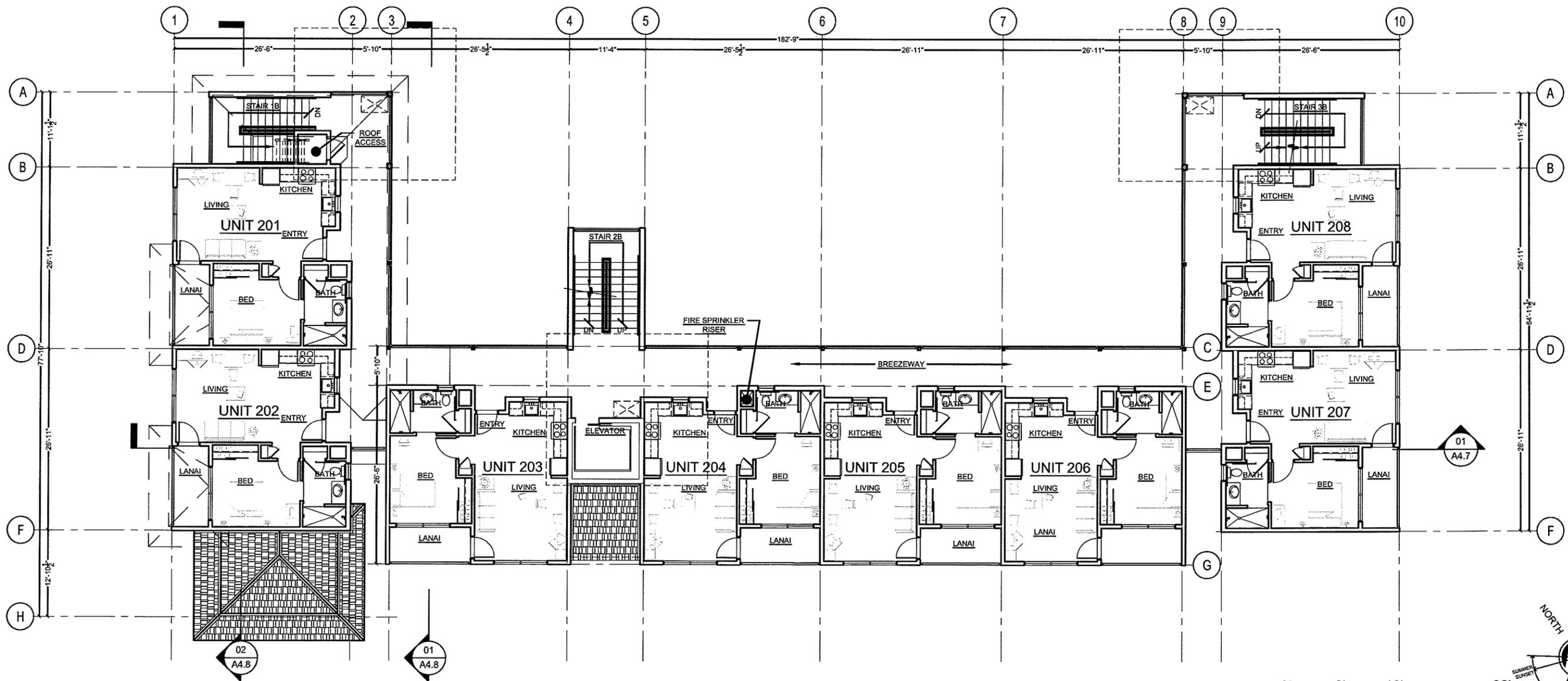
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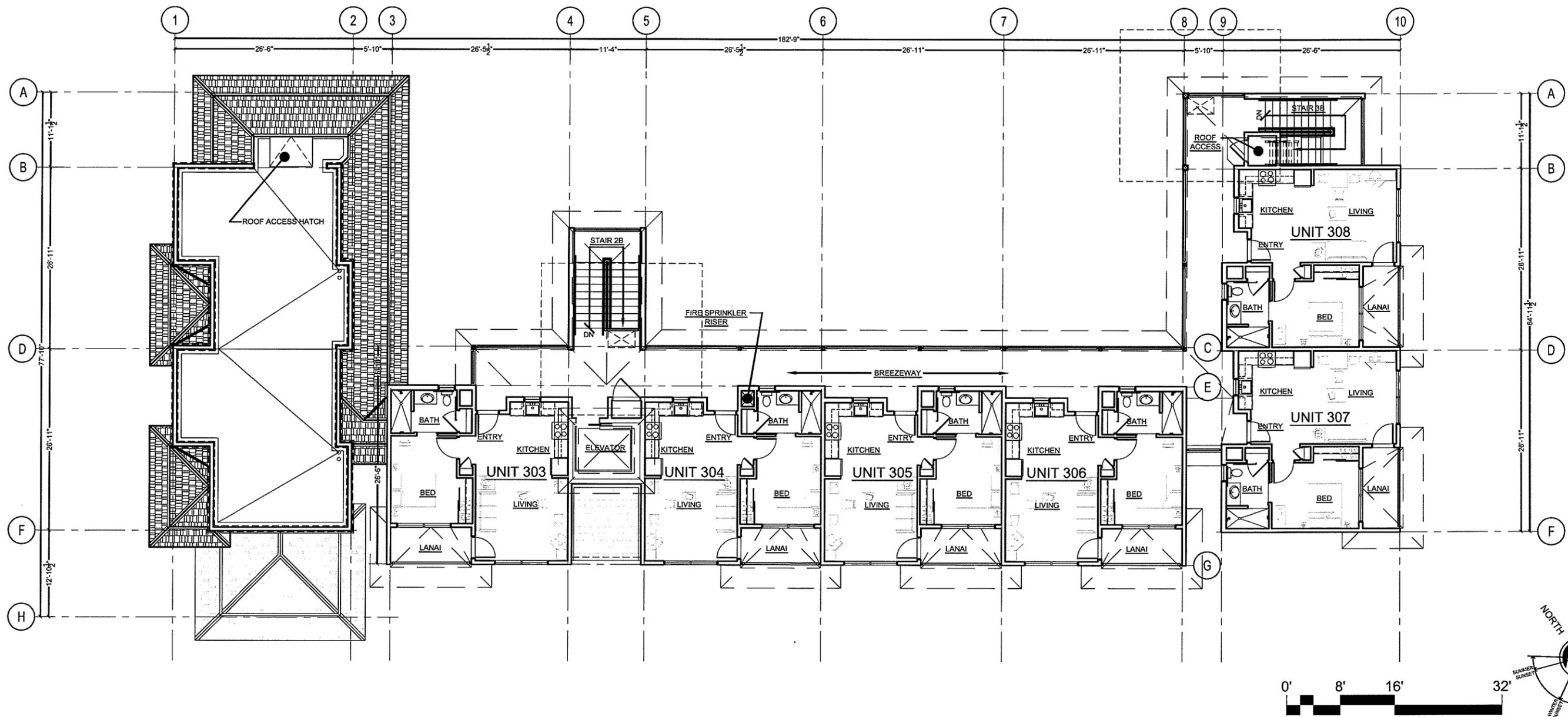
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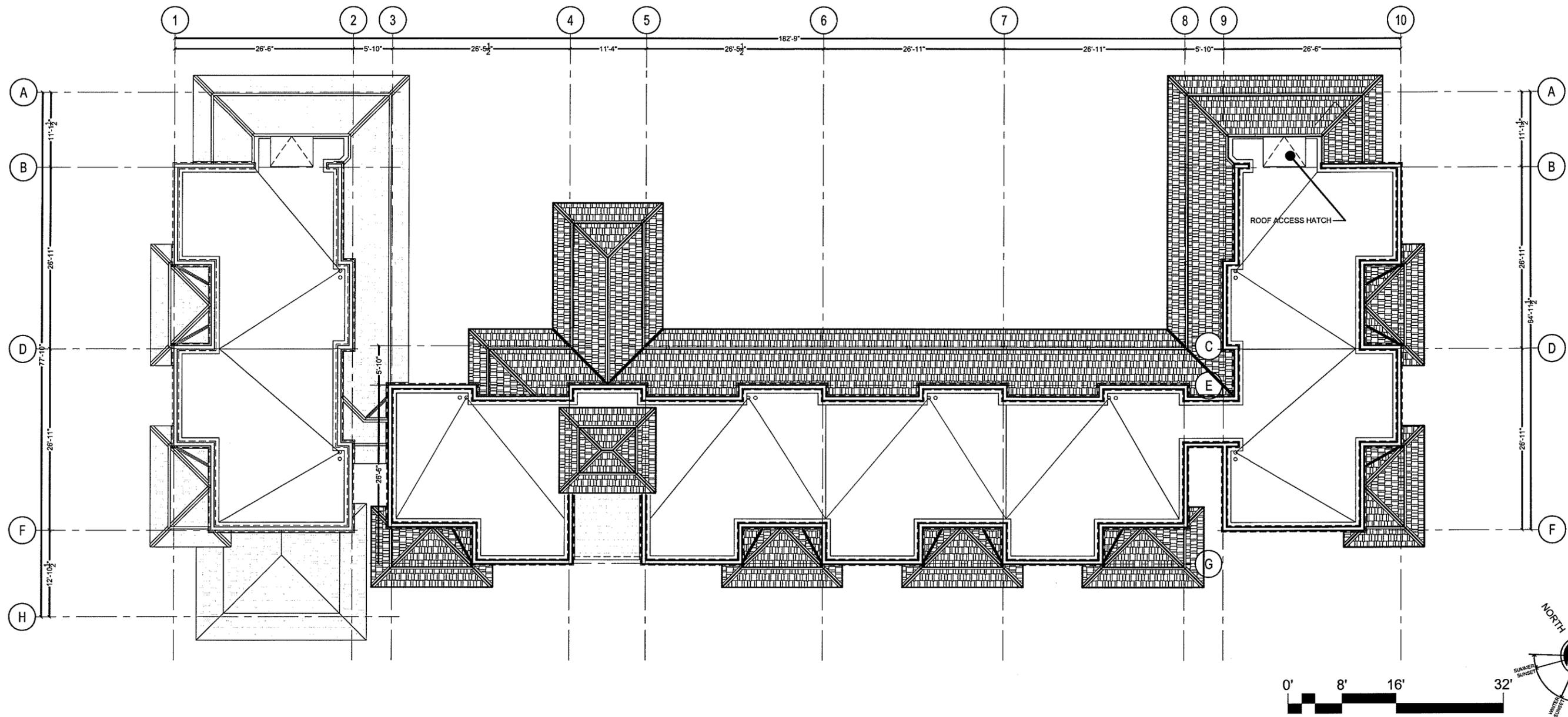
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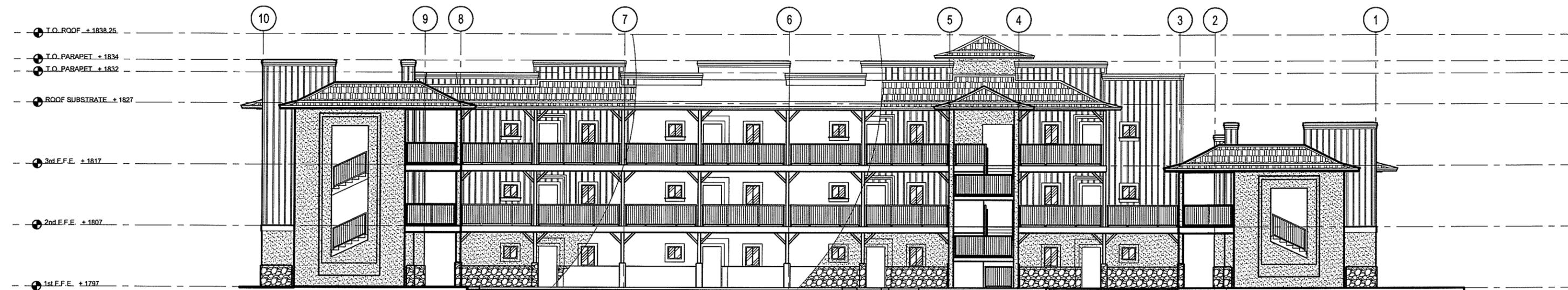
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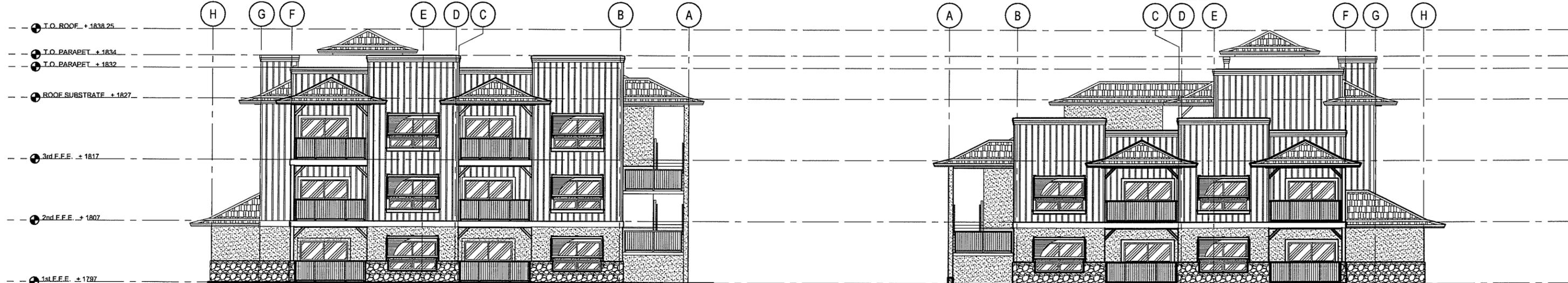
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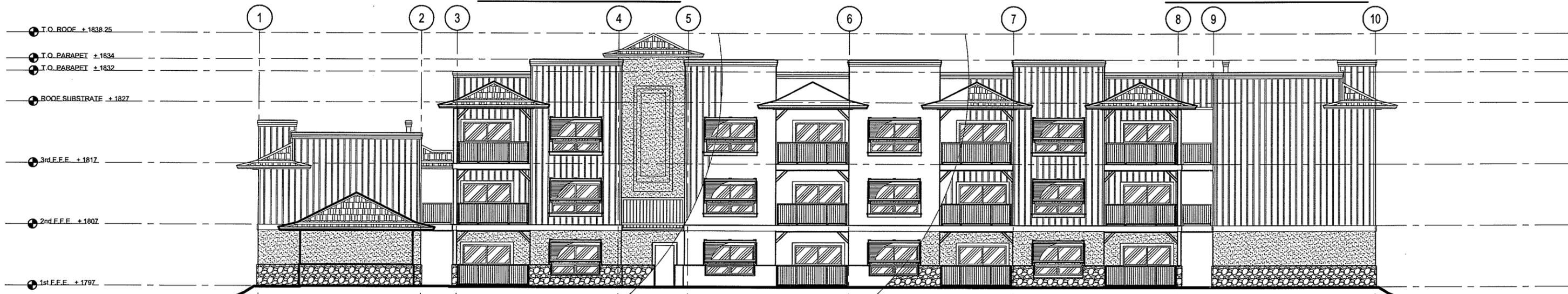


EAST EXTERIOR ELEVATION



SOUTH EXTERIOR ELEVATION

NORTH EXTERIOR ELEVATION



WEST EXTERIOR ELEVATION



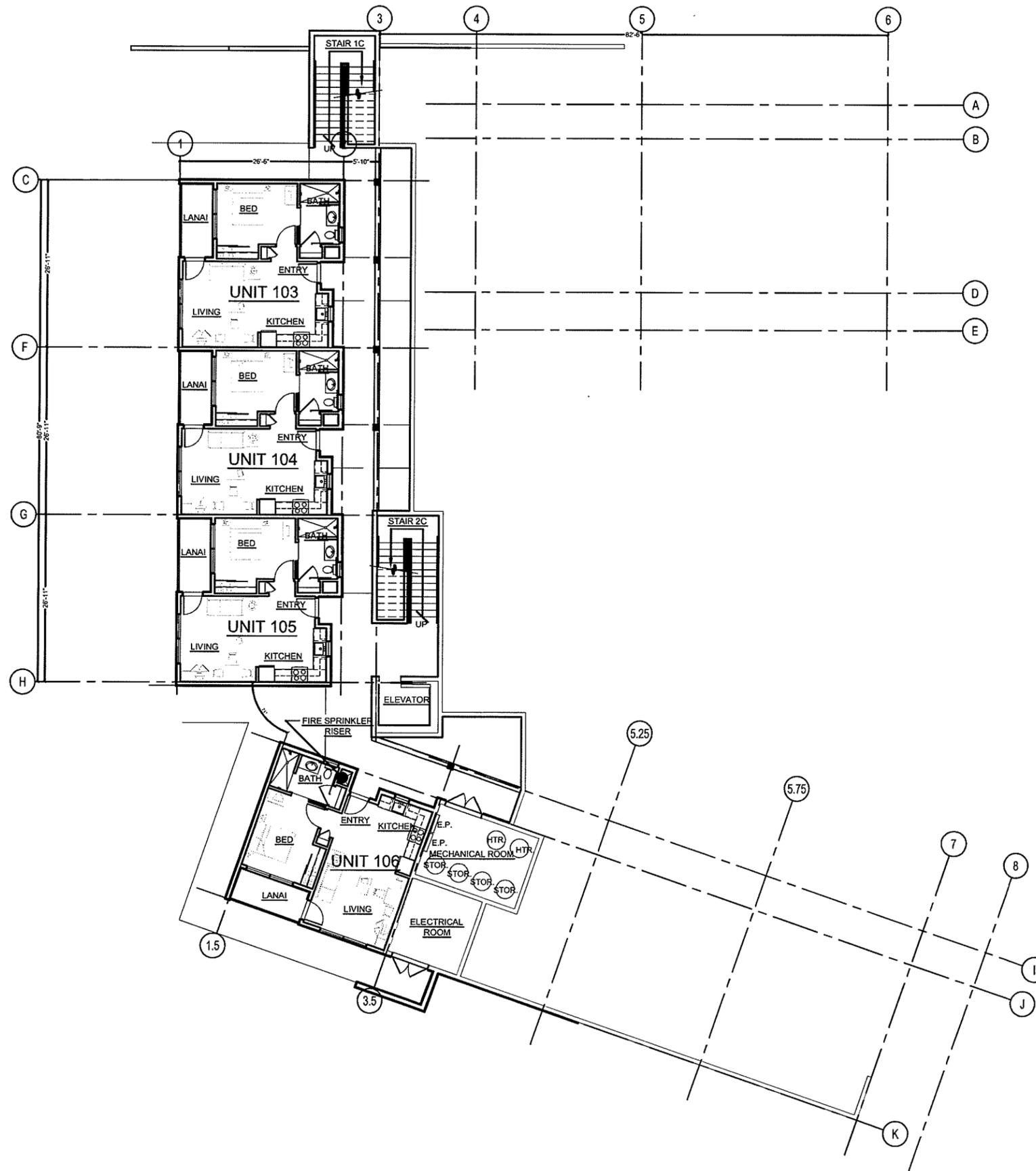
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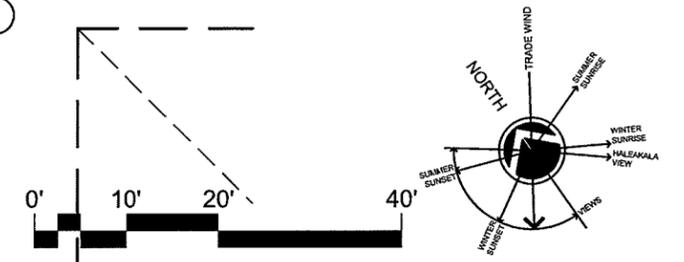
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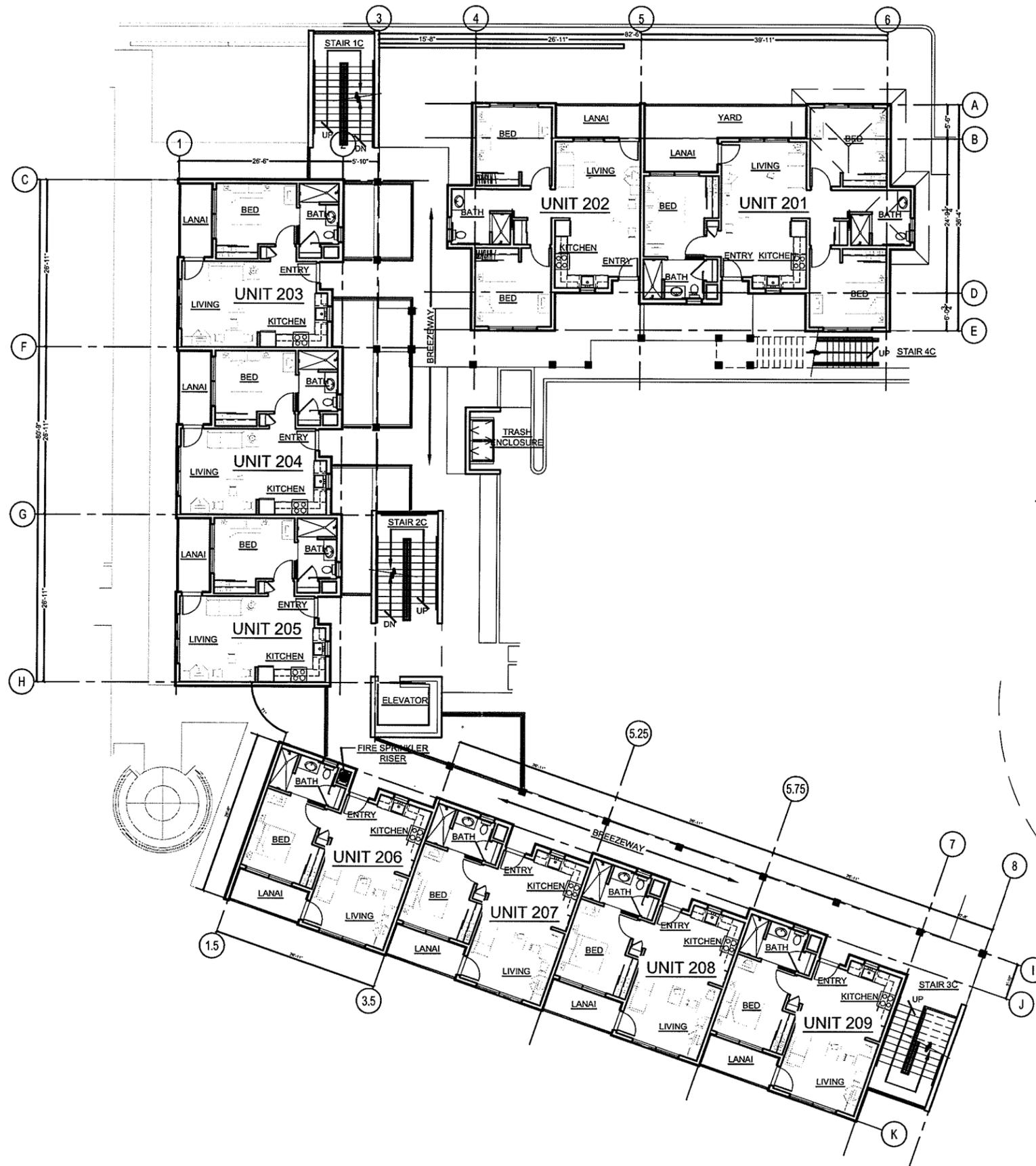
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RESIDENTIAL BUILDING C - 1ST FLOOR PLAN

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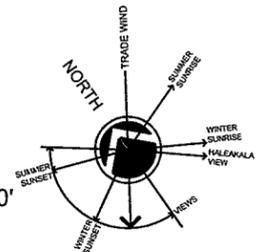
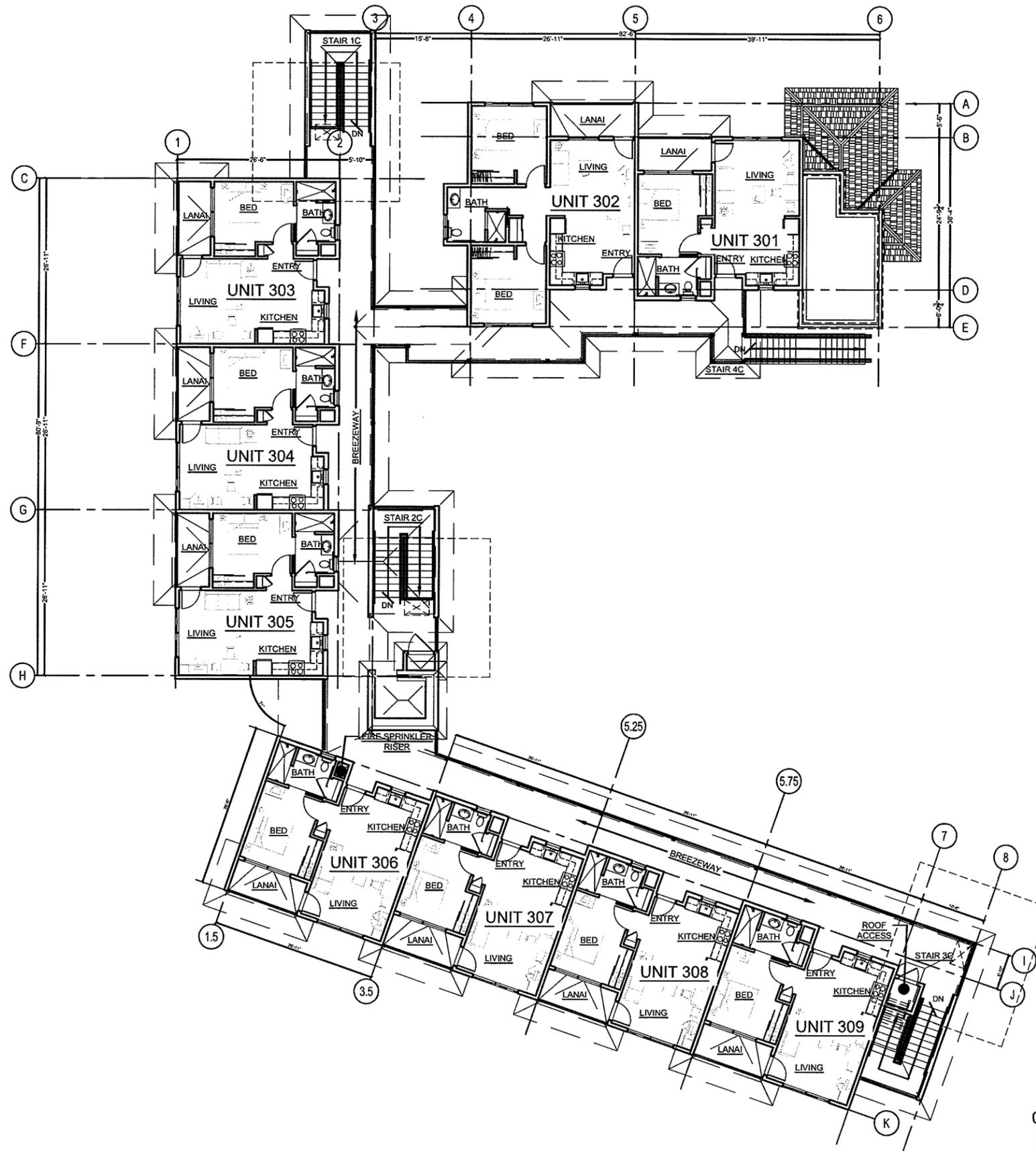




RESIDENTIAL BUILDING C - 2ND FLOOR PLAN

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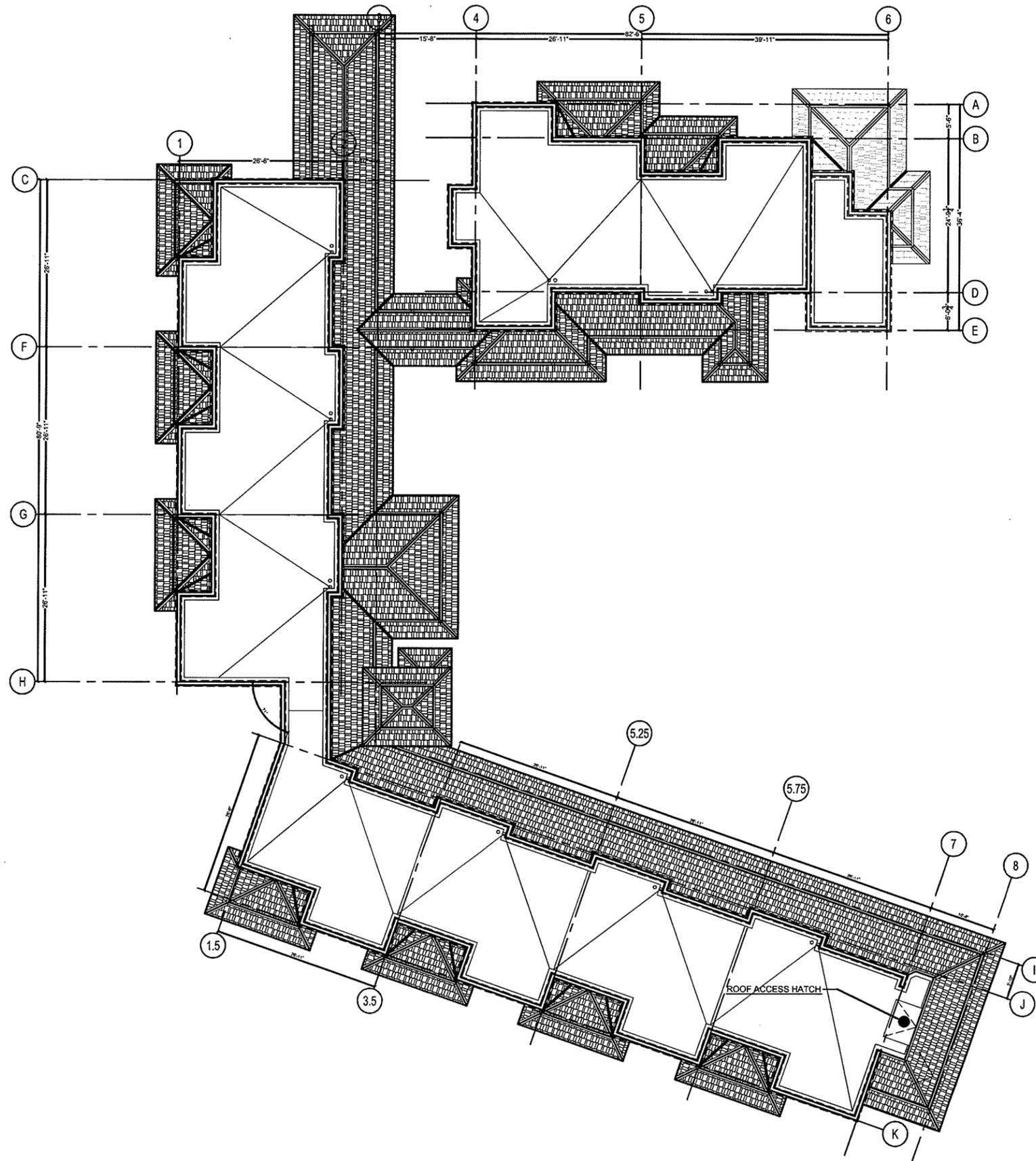
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RESIDENTIAL BUILDING C - 3RD FLOOR PLAN

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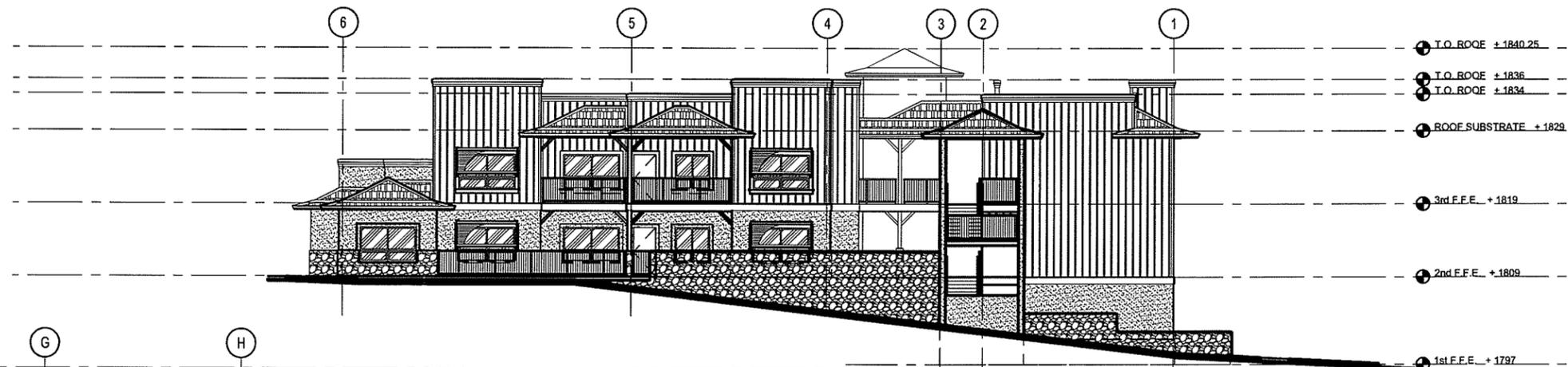
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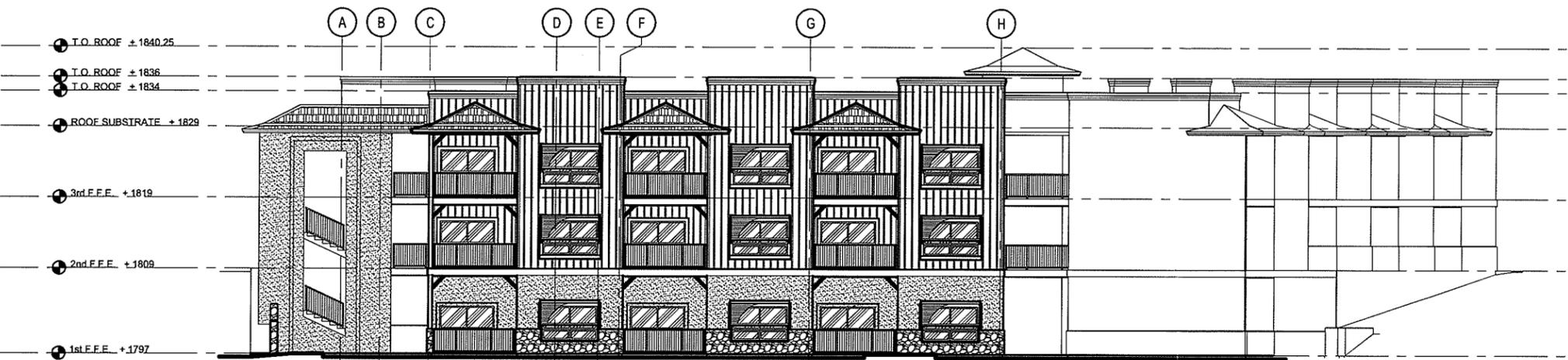
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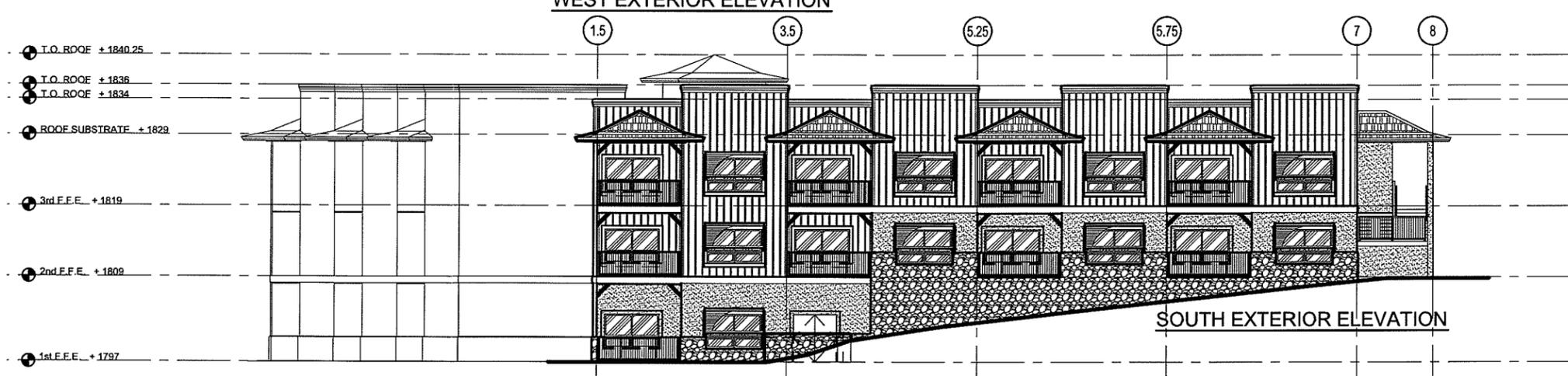
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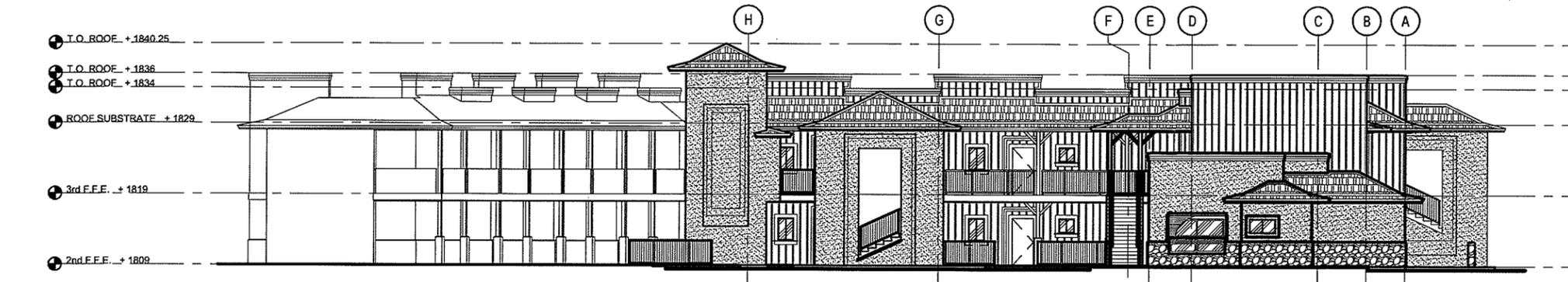
NORTH EXTERIOR ELEVATION



WEST EXTERIOR ELEVATION



SOUTH EXTERIOR ELEVATION



EAST EXTERIOR ELEVATION



RESIDENTIAL BUILDING C - EXTERIOR ELEVATIONS

PROJECT NO 2012-035
DATE OCTOBER 2013

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APPENDIX C-1.

**Kulamalu LLC Letter dated
October 14, 2013**

KULAMALU LLC

October 14, 2013

Roy Katsuda
Executive Director
Hale Mahaolu
200 Hina Ave
Kahului, HI 96732

Subject: Hale Mahaolu Ewalu Preliminary Design Review

Aloha Roy,

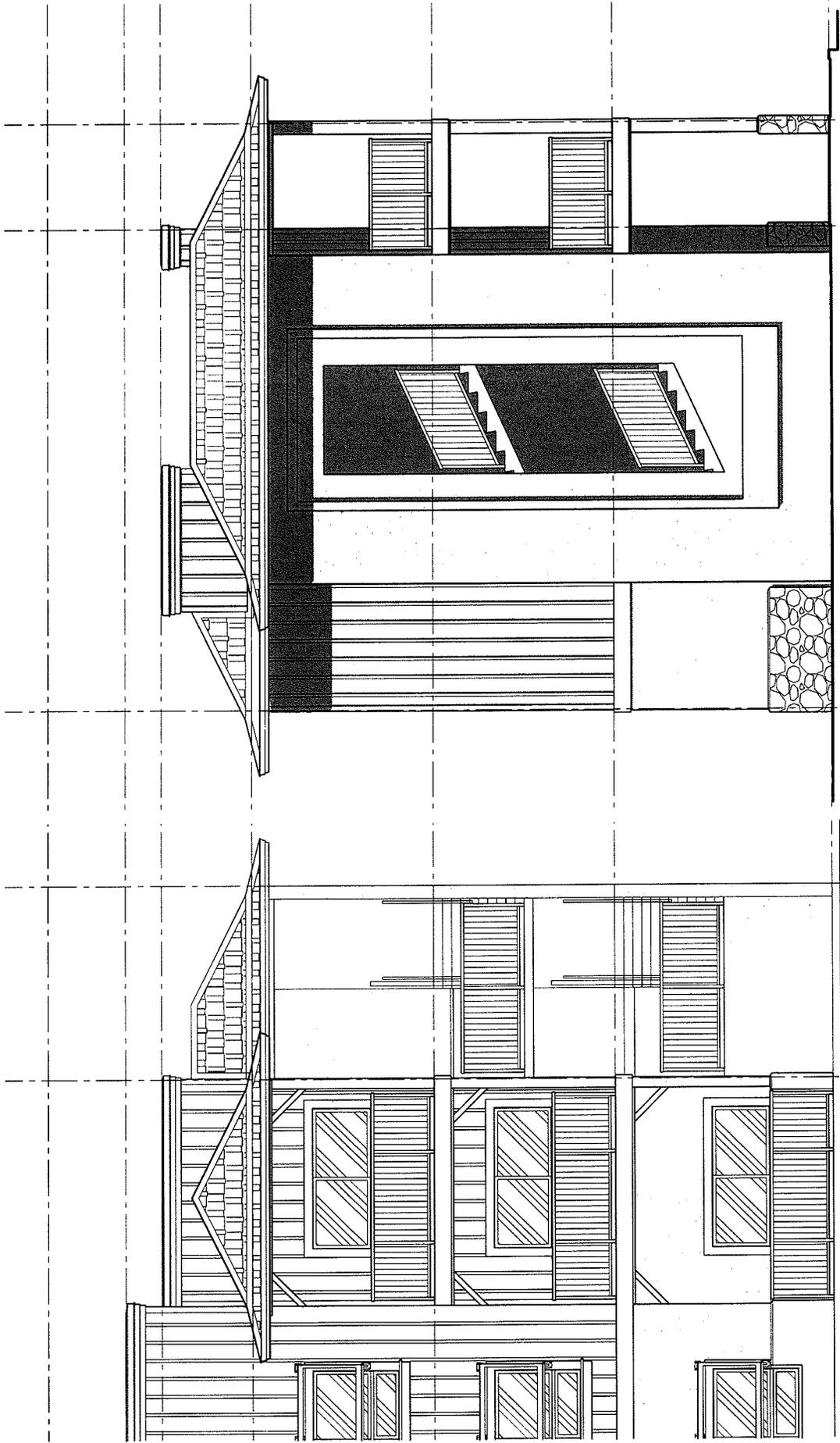
The attached proposed typical stair – exterior elevation is approved. This satisfies the preliminary design review of Hale Mahaolu Ewalu.

Thank you for addressing our concerns and we look forward to working with you on the next plan review.

Sincerely,



Mei Lee Wong
Project Manager



STAIR 1A FROM DRIVEWAY
SCALE: 3/16" = 1'-0"

STAIR 1A FROM OHIA, KU STREET
SCALE: 3/16" = 1'-0"

PROPOSED TYPICAL STAIR - EXTERIOR ELEVATIONS

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LLC
KONO

HALE MAHAOLU EWALU
KULAMALU TOWN CENTER
T.M.K.C. (712-3-0665) 019 & 020

APPENDIX D.

Market Study

Market Study

PROPOSED HALE MAHAOLU EWALU SENIOR HOUSING PROJECT, PUKALANI, MAUI, HAWAII

**Prepared for:
Hale Mahaolu**

January 2014

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by Munekiyo & Hiraga, Inc.**



CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
A. PROJECT OVERVIEW	1
B. SITE DESCRIPTION	5
C. GEOGRAPHIC DEFINITION OF MARKET STUDY	5
D. METHODOLOGY	6
II. ECONOMIC AND DEMOGRAPHIC TRENDS.....	8
A. POPULATION AND HOUSEHOLD TRENDS.....	8
B. DEMOGRAPHIC OVERVIEW	8
1. Age Distribution.....	8
2. Household Income	10
C. SENIOR HOUSEHOLD CHARACTERISTICS	11
D. EMPLOYMENT TRENDS	13
1. Unemployment.....	13
2. Employment Base	14
III. RESIDENTIAL MARKET OVERVIEW	17
A. HOUSING INVENTORY	17
B. RESIDENTIAL CONSTRUCTION PATTERNS	17
C. RESIDENTIAL HOUSING DEMAND	18
D. AFFORDABLE SENIOR HOUSING.....	19
E. MARKET RATE SENIOR HOUSING.....	22
F. MARKET RATE RENTAL HOUSING	23
G. EXPECTED MARKET ABSORPTION	23
H. PROPOSED SENIOR HOUSING.....	24
IV. ADULT DAY-CARE CENTER MARKET OVERVIEW.....	25
V. MARKET OUTLOOK AND CONCLUSION.....	27
VI. STATEMENT OF QUALIFICATIONS	29
VII. REFERENCES	31

LIST OF FIGURES

	<u>Page</u>
Figure 1. Regional Location Map.....	2
Figure 2. Site Location Map.....	3
Figure 3. Conceptual Site Plan.....	4
Figure 4. Age Distribution, Maui County and Island of Maui, 2010.....	9
Figure 5. Household Income Distribution, Island of Maui, 2010.....	11
Figure 6. Distribution of Senior Households by Tenure and Income Category.....	12
Figure 7. Cost Burden of Senior Renter Households by Income Category.....	13
Figure 8. Unemployment Rate, State of Hawaii and Maui County,.....	14
Figure 9. Total Jobs, Island of Maui, 2000 to 2012.....	15

LIST OF TABLES

Table 1. Development Program.....	1
Table 2. Household Categories and Income Limits.....	7
Table 3. Population and Household Trends.....	8
Table 4. Household Characteristics, 2010.....	10
Table 5. Total Non-Agricultural Jobs by Industry, Maui Island, Q1 2008 and Q1 2013 ...	16
Table 6. Housing Type, 2010.....	17
Table 7. Residential Building Permits Issued, Maui County 1990-2011.....	18
Table 8. Senior Housing Units Needed, 2012 to 2016, County of Maui.....	19
Table 9. Affordable Senior Housing.....	21
Table 10. Market Rate Senior Housing on Maui.....	22
Table 11. Maui Adult Day Care Centers Locations.....	25

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I. INTRODUCTION

I. INTRODUCTION

A. PROJECT OVERVIEW

This Market Study has been prepared for the proposed Hale Mahaolu Ewalu Senior Housing project in Pukalani, Maui, Hawaii.

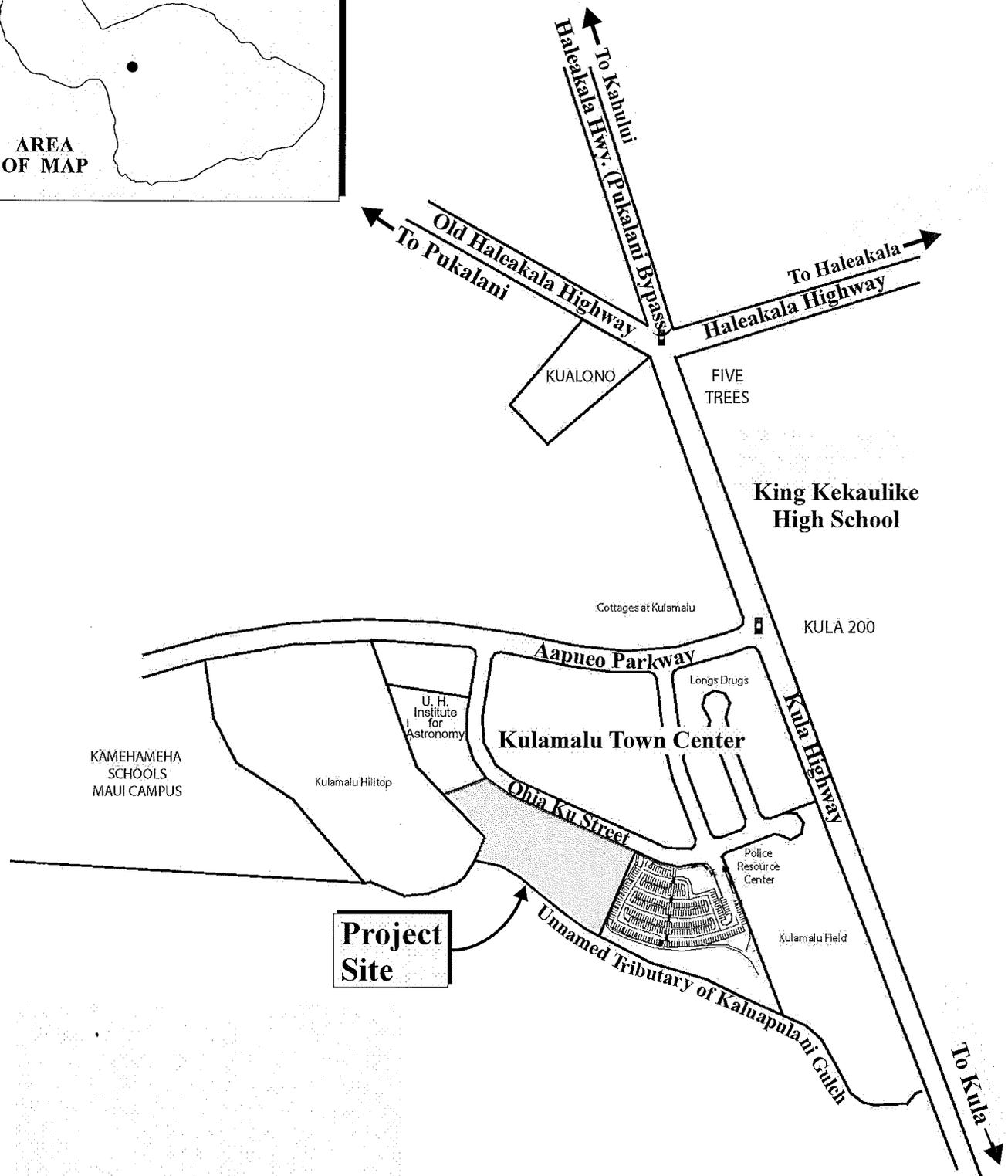
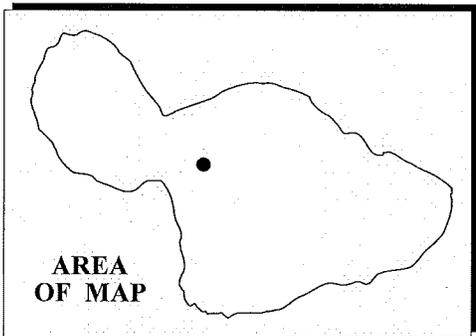
Hale Mahaolu is proposing the Hale Mahaolu Ewalu Senior Residential Housing Project on approximately 4.0 acres of land identified as Tax Map Keys (2)2-3-066:019 and 020 (hereafter identified as "Project Site"), Pukalani, Makawao District, Maui, Hawaii. See **Figure 1** and **Figure 2**. Hale Mahaolu is a nonprofit organization dedicated to providing quality affordable housing in Maui County. Hale Mahaolu currently owns and/or manages approximately 1,000 units of affordable elderly housing throughout Maui County.

The proposed project involves the construction of three (3) two- and three-story apartment buildings containing one- and two-bedroom units for seniors and a three-bedroom unit for a resident manager. Sixty-one units will be provided. See **Table 1**. A one-story approximately 7,500 square foot senior center, one-story approximately 4,700 square foot adult day care center, 83 parking spaces (61 spaces for the residential units and 22 spaces for the adult day care), two (2) loading zone spaces, and landscaping are planned. See **Figure 3**.

Table 1. Development Program

Unit Type	Size (sq. ft.)	Total Units
1 BR/1 BA		58
2 BR/1 BA		2
3 BR (Manager's Unit)		1
TOTAL		61
Source: Hale Mahaolu. Prepared by: Munekiyo & Hiraga, Inc.		

The Hale Mahaolu Ewalu Senior Residential Housing Project is being developed to meet the criteria for a Section 201H-38, Hawaii Revised Statutes (HRS) project, which promotes the delivery of affordable housing by allowing the exemption of a project from various planning and zoning standards. The units will be available to persons age 62 years and older with an annual income equal to or less than 60 percent of the area median income (AMI). Currently, the planned rates for the units will be no more than \$850 for one-bedroom units and \$1,000 for two-bedroom units per month.

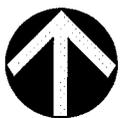


Source: Dowling Company, Inc.

Figure 1

Hale Mahaolu Ewalu Senior Residential Housing Regional Location Map

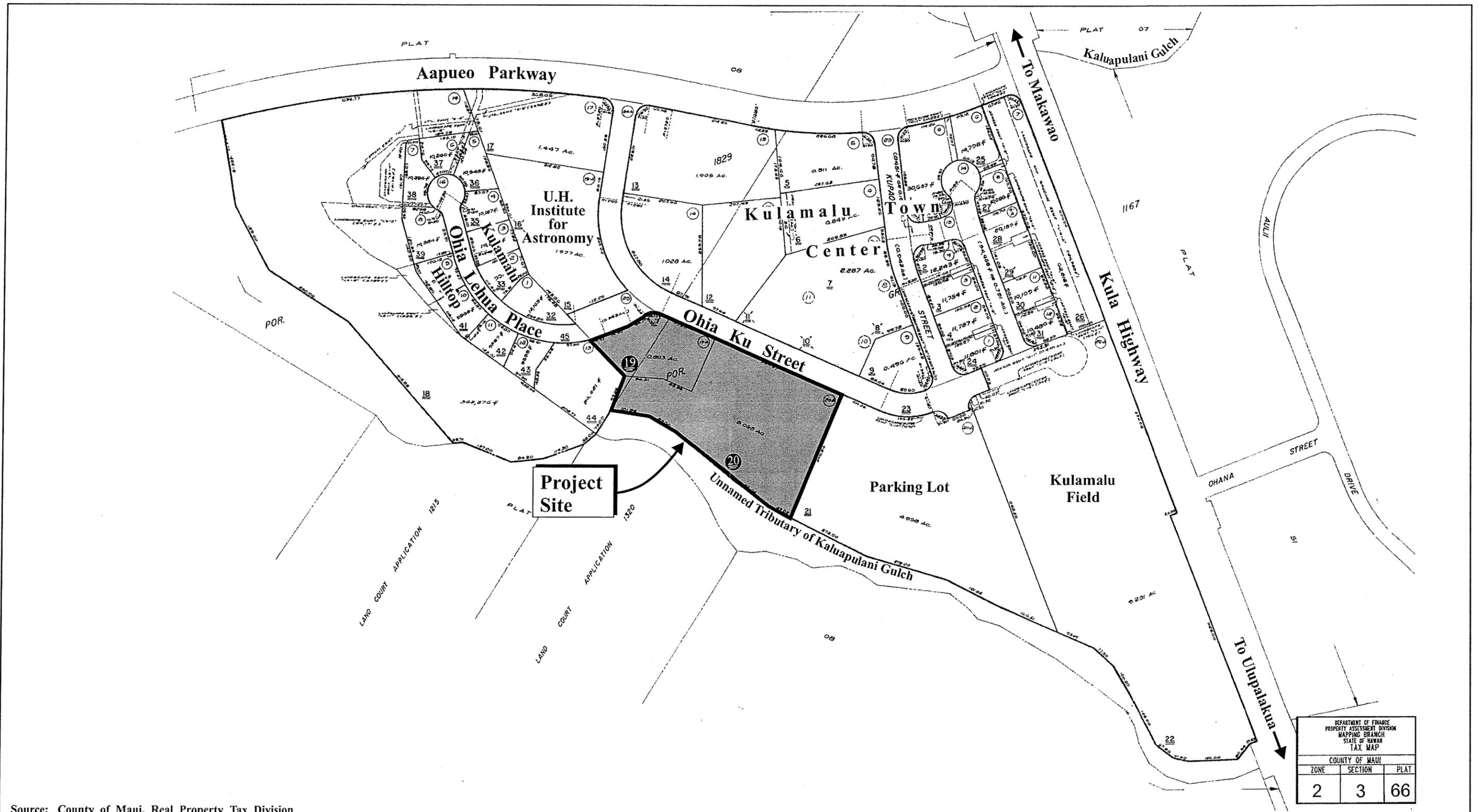
NOT TO SCALE



Prepared for: Hale Mahaolu

MUNEKIYO & HIRAGA, INC.

Hale Mahaolu/KulamaluSrHsingRegional Location Map



Source: County of Maui, Real Property Tax Division

Figure 2

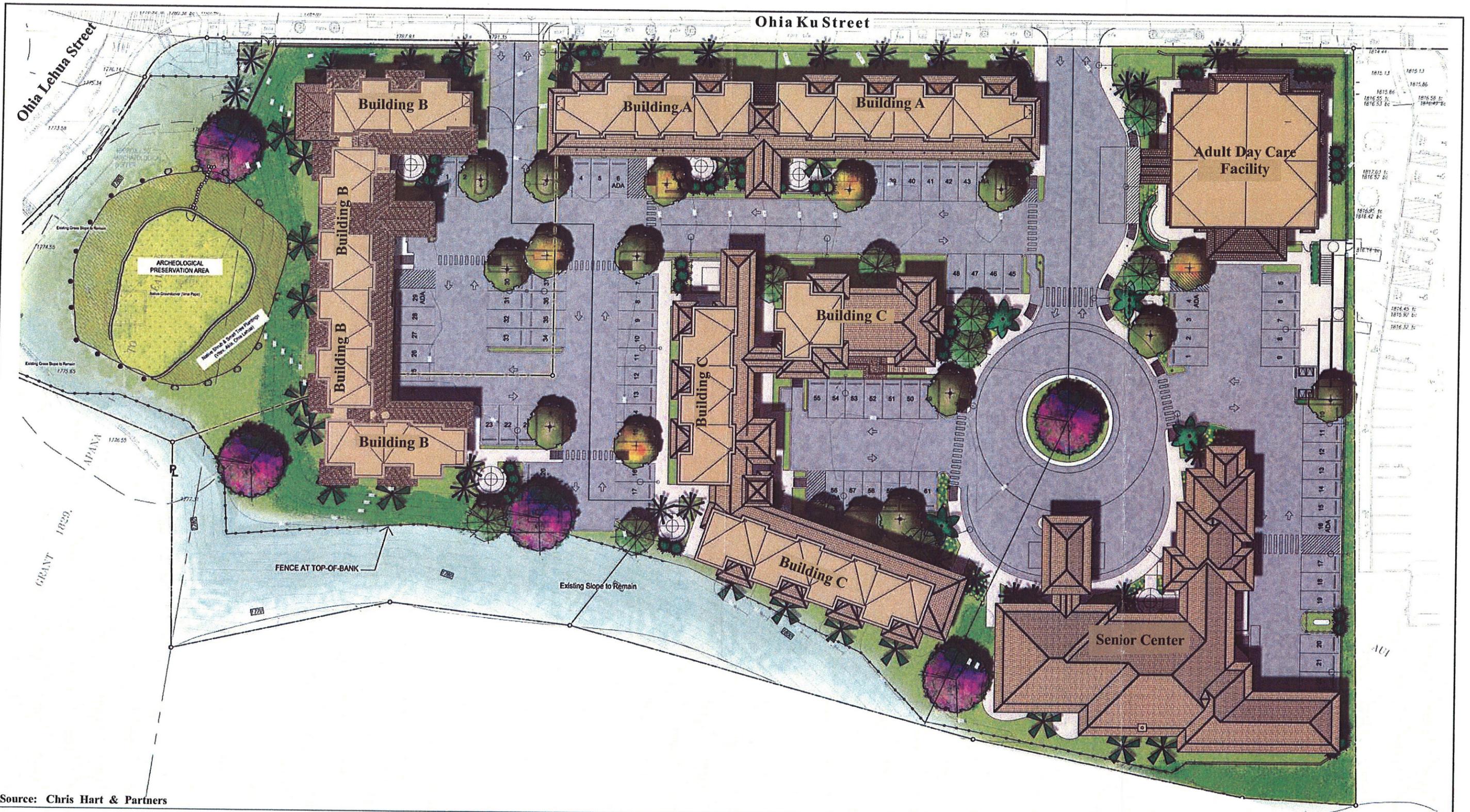
Hale Mahaolu Ewalu Senior Residential Housing Site Location Map

NOT TO SCALE



Prepared for: Hale Mahaolu

MUNEKIYO & HIRAGA, INC.



Source: Chris Hart & Partners

Figure 3

Hale Mahaolu Ewalu Senior Residential Housing Conceptual Site Plan

NOT TO SCALE



Prepared for: Hale Mahaolu



B. SITE DESCRIPTION

The Hale Mahaolu Ewalu Senior Residential Housing project site is currently vacant and located at the southeast corner of the Ohia Ku Street and Ohia Lehua Place intersection. Access to the project site will be from Ohia Ku Street. North of the project site is the Kulamalu Town Center, to the east is an existing parking lot and park, south of the site is an un-named tributary of Kaluapulani Gulch and to the west are the University of Hawaii Institute for Astronomy and Kulamalu Hilltop Subdivision. Refer to **Figure 1**.

The project site is located within the Kulamalu Commercial Subdivision developed by the Dowling Company, Inc. (DCI). The Kulamalu Commercial Subdivision includes the Kulamalu Town Center, Kulamalu Field and parking lot, University of Hawaii Institute for Astronomy, and Kulamalu Hilltop Subdivision. Refer to **Figure 1**. In 1997, prior to development of the Kulamalu Commercial Subdivision, Dowling Company, Inc. obtained land use amendments for the subdivision. Amendments from the Makawao-Pukalani-Kula Community Plan were obtained through Ordinance Nos. 2619, 2620 and 2621.

Concurrently, changes in zoning from the “R-2, Residential District” to “A-1, Apartment District” (Ordinance No. 2618), “P-1, Public/Quasi-Public District” (Ordinance No. 2623), “PK-1, Park District” (Ordinance No. 2625) and “BCT, Country Town Business District” (Ordinance No. 2626); from the “R-2, Residential District” and “Open Space District” to “P-1, Public/Quasi-Public District” (Ordinance No. 2622); and from the “Open Space District” to “R-2, Residential District” (Ordinance No. 2624) were secured. The project site is zoned “P-1, Public/Quasi-Public District” by Ordinance No. 2623.

Construction of the Kulamalu Commercial Subdivision included the infrastructure improvements, fronting the project site as well as previous grading work, including the placement of fill material.

C. GEOGRAPHIC DEFINITION OF MARKET STUDY

The market area for the proposed project is defined as the island of Maui. Encompassing approximately 729 square miles, Maui is the second largest of the Hawaiian Islands and is one (1) of three (3) populated islands which comprise Maui County. In addition to Maui, Maui County consists of the islands of Lanai and Molokai, and the uninhabited island of Kahoolawe.

The island of Maui is comprised of several geographic communities: Hana, West Maui, Upcountry, Kihei-Makena, Paia-Haiku, and Wailuku-Kahului. The proposed Hale Mahaolu Ewalu project is located within the Upcountry district of the island of Maui.

However, because Maui is a relatively small island and the communities are relatively well connected and accessible, it would not be unreasonable for individuals and households to consider many communities across the island when making housing decisions. As will be discussed further, due to the large demand for affordable senior housing, it is expected that the proposed project will attract residents from across the island. Based on these factors, the entire island of Maui is utilized for the basis of analysis presented in this Market Study.

D. METHODOLOGY

To facilitate an understanding of the market conditions that may impact the proposed project, this study analyzes demographic, economic, and residential market conditions for Maui County as a whole, as well as conditions for the island of Maui specifically, where possible. It is noted that in some instances, only countywide data is available.

This Market Study incorporates data from numerous sources. Demographic data was gathered from the U.S. Census Bureau and employment statistics from the State of Hawaii, Department of Labor and Industrial Relations. The U.S. Department of Housing and Urban Development (HUD) receives custom tabulations of data called Comprehensive Housing Affordability Strategy (“CHAS”) data to assess the extent of housing problems and housing needs, particularly for low income households. CHAS data collected between 2006 and 2010 provides information for senior households, defined as those with a householder age 62 and above, within the County of Maui. Market research on comparable affordable and market rate senior rental projects was collected by Hale Mahaolu and Munekiyo & Hiraga, Inc.

The U.S. Department of Housing and Urban Development (HUD) characterizes households by income group. This market study will contain analysis of housing needs by these income groups. Households are categorized as extremely low-income, very low-income, low-income, moderate-income, or above moderate-income, based on household size and percentages of the AMI. **Table 2** presents the income categories by percentage of AMI and the maximum household income for each category based on household size.

Table 2. Household Categories and Income Limits

	Household Size			
	1 person	2 person	3 person	4 person
Extremely Low Income (30% AMI)	\$17,850	\$20,400	\$22,950	\$25,450
Very Low Income (50% AMI)	\$29,750	\$34,000	\$38,250	\$42,450
Low Income (80% AMI)	\$47,600	\$54,400	\$61,200	\$67,950

Source: U.S. Department of Housing and Urban Development, 2013.
Prepared by: Munekiyo & Hiraga, Inc.

II. ECONOMIC AND DEMOGRAPHIC TRENDS

II. ECONOMIC AND DEMOGRAPHIC TRENDS

A. POPULATION AND HOUSEHOLD TRENDS

Maui County's population has exhibited strong growth over the past decade. Between 2000 and 2010, the County's population increased by 21 percent to 154,834 residents. See **Table 3**. By comparison, the State of Hawaii experienced a 12 percent population increase over the same time period. Population on the island of Maui has grown at a slightly faster rate than the County as a whole, increasing by 23 percent over the decade.

Table 3. Population and Household Trends

	2000	2010	% Change 2000-2010	2020	2030	% Change 2010-2030
Maui County						
Population	128,094	154,834	20.9%	174,500	199,600	28.9%
Households	43,507	53,886	23.9%	64,100	75,000	39.2%
Maui Island						
Population	117,644	144,444	22.8%	162,400	186,300	28.9%
Households	40,041	50,215	25.4%	59,700	70,100	39.5%
Sources: U.S. Census Bureau, 2000 and 2010; County of Maui Planning Department, 2006. Prepared by: Munekiyo & Hiraga, Inc.						

Household growth has outpaced population growth over the past 10 years in all in both the County and on the island, indicating that household sizes are shrinking. In 2010, there were 53,886 households in the County, including 50,215 households on the island of Maui.

Looking to the future, the island's population is anticipated to increase by 29 percent between 2010 and 2030, with population reaching approximately 186,300 by 2030. Continued population and household growth will generate demand for new housing into the future.

B. DEMOGRAPHIC OVERVIEW

1. Age Distribution

The median age of residents in Maui County is 39.6 years old, slightly older than the State of Hawaii as a whole, where the median age of residents was 38.6 in 2010. The age profile of residents within Maui County and the island of Maui are

similar. Residents age 65 years and older represent approximately 13 percent of the population within the County and island. See **Figure 4**.

Figure 4. Age Distribution, Maui County and Island of Maui, 2010

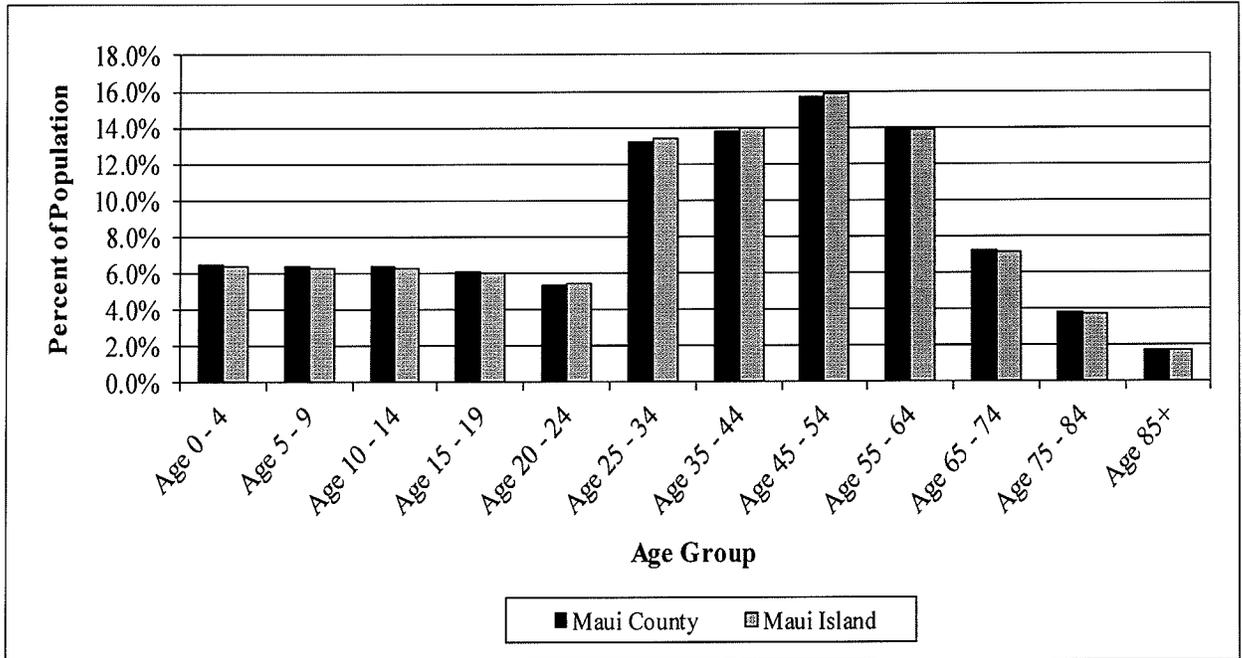


Table 4 presents household characteristics for the County and island in 2010. The average household size on the island of Maui was 2.82 persons per household. Families with children represent 65.6 percent of all households on the island. Seniors, age 65 years and older who are living alone, represent 7.4 percent of households on Maui. The percentage of seniors living alone has increased slightly from 2000, when 6.1 percent of households on the island were seniors living alone.

Table 4. Household Characteristics, 2010

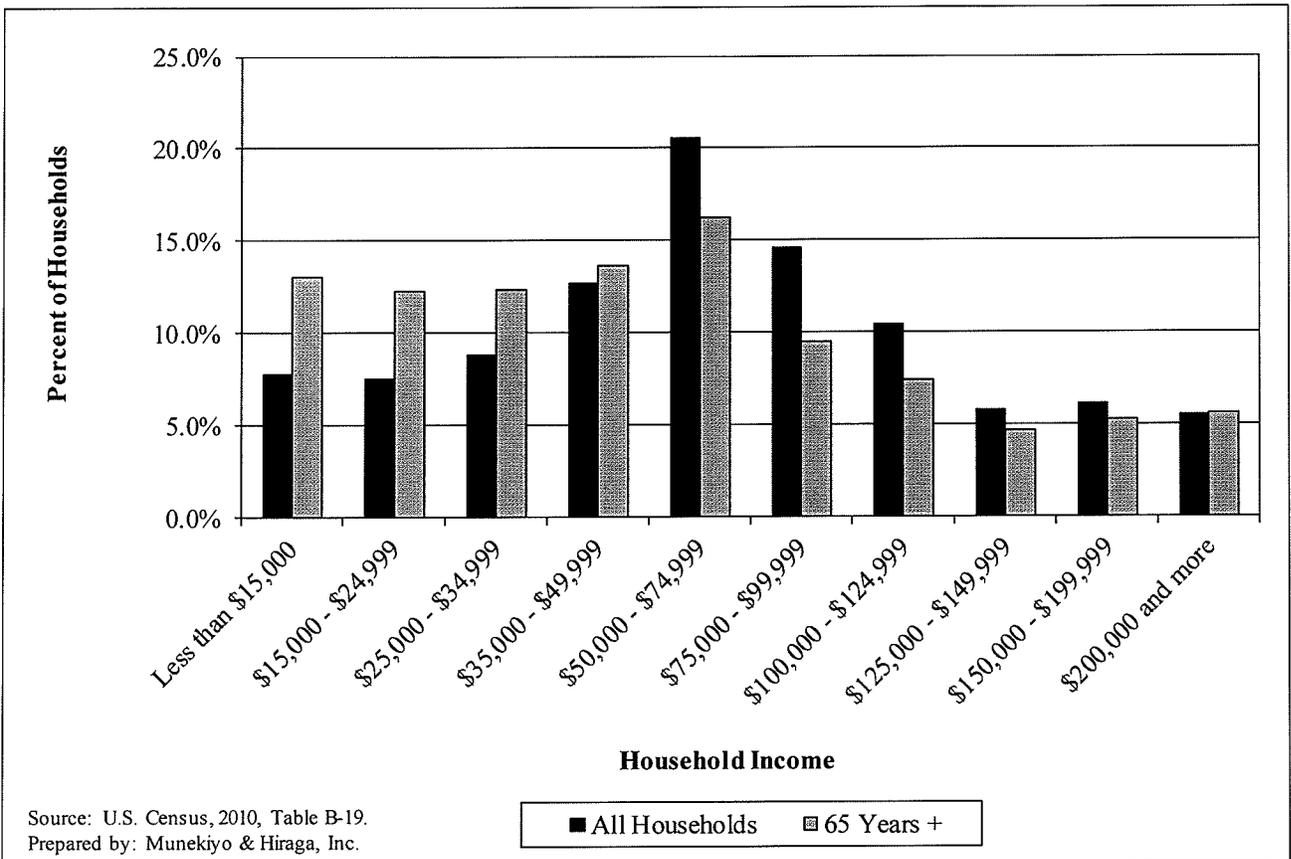
	Maui County	Maui Island
Average Household Size	2.82	2.82
Household Type ^(a)		
Families	65.9%	65.6%
Families w/ Children	28.4%	28.3%
Families w/o Children	37.5%	37.3%
Non-Family	34.1%	34.4%
Living Alone, 65+ years old	7.6%	7.4%
Tenure		
Owner	55.8%	55.4%
Renter	44.2%	44.6%
Notes:		
^(a) The Census defines a family as a group of two or more people related by birth, marriage, or adoption and residing together.		
Source: U.S. Census Bureau, 2010, Table DP-1.		
Prepared by: Munekiyo & Hiraga, Inc.		

The homeownership rate on the island of Maui is 55.4 percent, comparable to the County's homeownership rate of 55.8 percent.

2. Household Income

According to the U.S. Census, the 2010 median household income for the County of Maui was \$60,600. **Figure 5** illustrates the distribution of household incomes for the island of Maui for all households and householders age 65 years or older in 2010. As expected, a larger proportion of senior households fall within the lower income categories when compared to the island's population as a whole. Approximately 25 percent of senior households earned less than \$25,000 in 2010 and 51 percent had an income of less than \$50,000. By comparison, only 37 percent of all households islandwide earned less than \$50,000 in 2010.

Figure 5. Household Income Distribution, Island of Maui, 2010



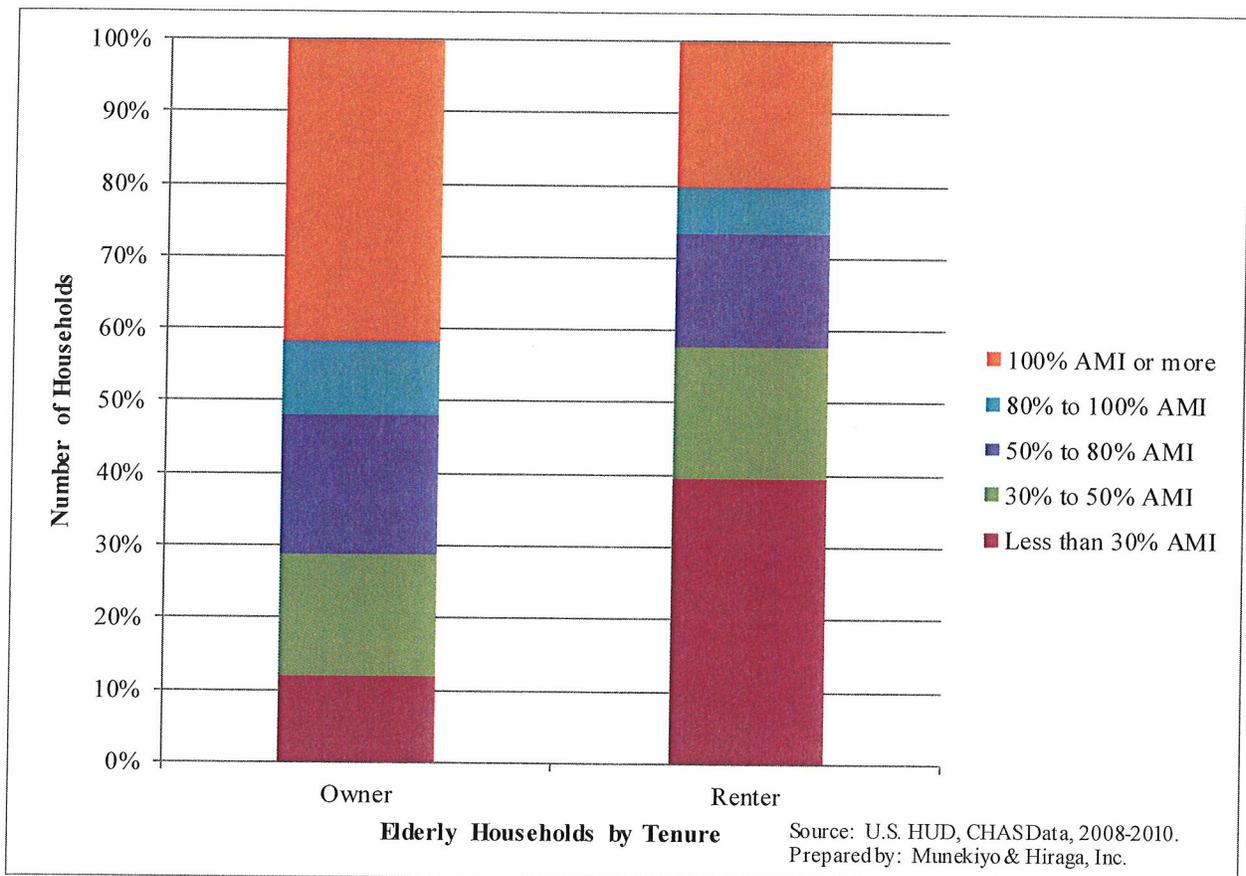
C. SENIOR HOUSEHOLD CHARACTERISTICS

Senior households have unique tenure, income, and housing needs compared to the general population. An analysis of economic characteristics of senior households has been conducted utilizing CHAS data collected between 2006 to 2010 for the County of Maui¹. A higher percentage of seniors households own their homes compared to the population as a whole. Within Maui County, 73 percent of senior households were homeowners, compared to 56 percent within the County as a whole. Twenty-seven percent of senior households, or approximately 3,150 households, are renters. However, among senior renter households, a large majority are lower-income. **Figure 6** illustrates the distribution of senior owner and senior renter households across standard HUD income categories. As shown, 40 percent of senior renter households within the County

¹ It is noted that CHAS data is only available at the County level; however, the island of Maui is generally representative of the County as a whole.

income categories. As shown, 40 percent of senior renter households within the County are considered “extremely low-income”, earning less than 30 percent of AMI. Another 18 percent are “very low-income” (earning 30 percent to 50 percent of AMI) while 16 percent are “low-income” (earning 50 percent to 80 percent of AMI). In total, 73 percent of senior renter households are extremely low-, very low-, or low-income. The proposed Hale Mahaolu Ewalu project will serve senior households earning less than 60 percent of AMI.

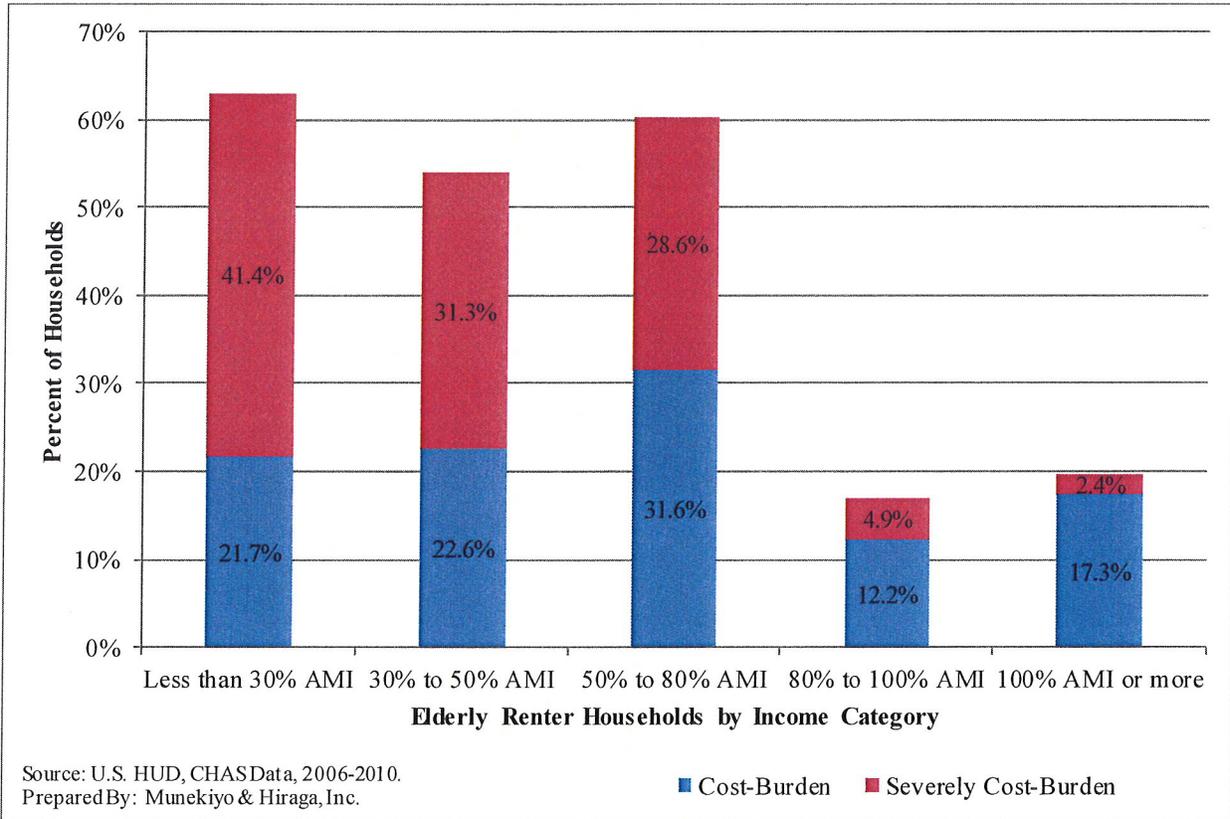
Figure 6. Distribution of Senior Households by Tenure and Income Category



According to HUD standards, a household is considered “cost-burdened” (i.e., overpaying for housing) if it spends more than 30 percent of gross income on housing-related costs. Households are “severely cost burdened” if they pay more than 50 percent of their income on housing costs. The majority of extremely low-, very low-, and low-income senior households were cost burdened or severely cost burdened according to CHAS data for Maui County. **Figure 7** shows the percent of senior renter households across the various income categories that were cost burdened or severely cost burdened. As illustrated, 63 percent of extremely low-income senior renter households were cost burdened, paying a disproportionate percentage of their income towards housing costs.

Among very low-income and low-income senior renter households, 54 percent and 60 percent, respectively, experience housing cost burden. This data demonstrates the need for affordable senior rental housing within Maui County.

Figure 7. Cost Burden of Senior Renter Households by Income Category

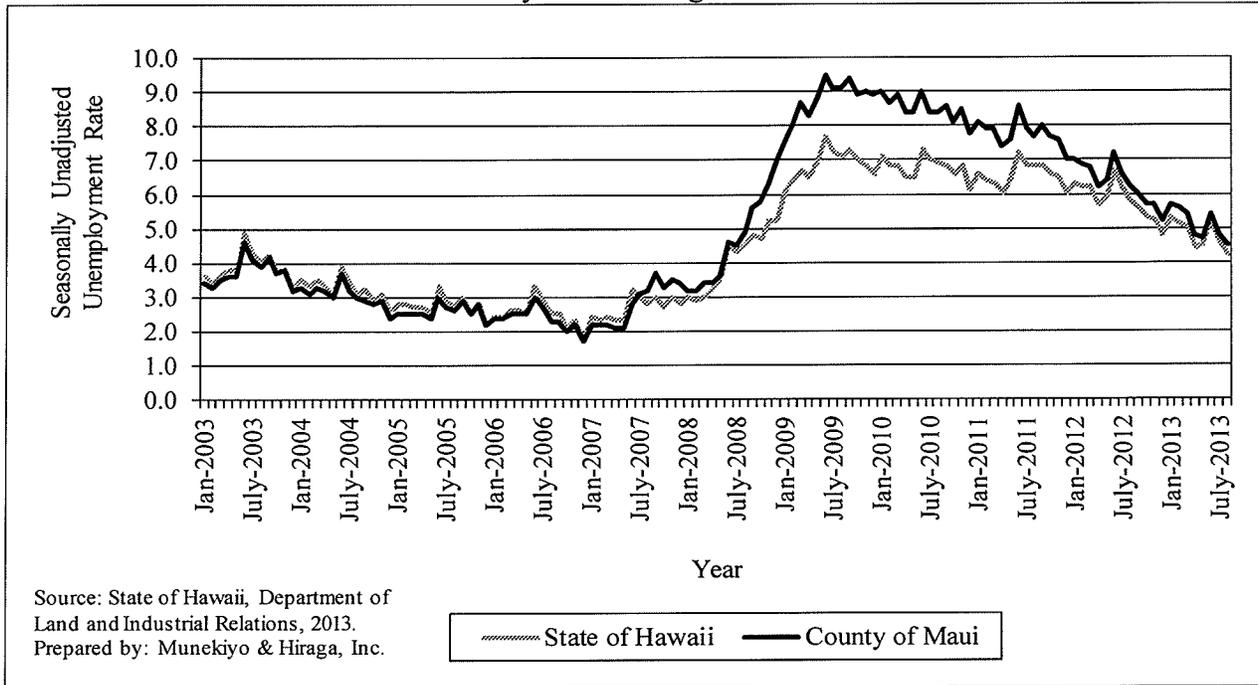


D. EMPLOYMENT TRENDS

1. Unemployment

The State and County economies have been impacted by the nation’s recent economic recession. As shown in **Figure 8**, unemployment rates peaked in the State and Maui County in the summer of 2009. Since that time, the unemployment rate has slowly declined. In August 2013, the seasonally unadjusted unemployment rate in Hawaii stood at 4.2 percent. The unemployment rate in Maui County was higher at 4.5 percent. Nevertheless, this represents a slight improvement from one (1) year ago, when the seasonally unadjusted unemployment rate in the County was 6.2 percent in August 2012.

Figure 8. Unemployment Rate, State of Hawaii and Maui County, January 2003 to August 2013



2. Employment Base

While the island of Maui experienced substantial job growth between 2000 and 2007, the economic recession resulted in a contraction of the employment base at the end of the decade. As shown in **Figure 9**, over 10,000 jobs were created on Maui between 2000 and 2007, when the number of islandwide jobs peaked. In 2007, there were 68,850 jobs on Maui. However, that number fell to 61,700 in 2010. The number of jobs in the County has increased slightly since that time, totaling 64,800 jobs in 2012.

Figure 9. Total Jobs, Island of Maui, 2000 to 2012

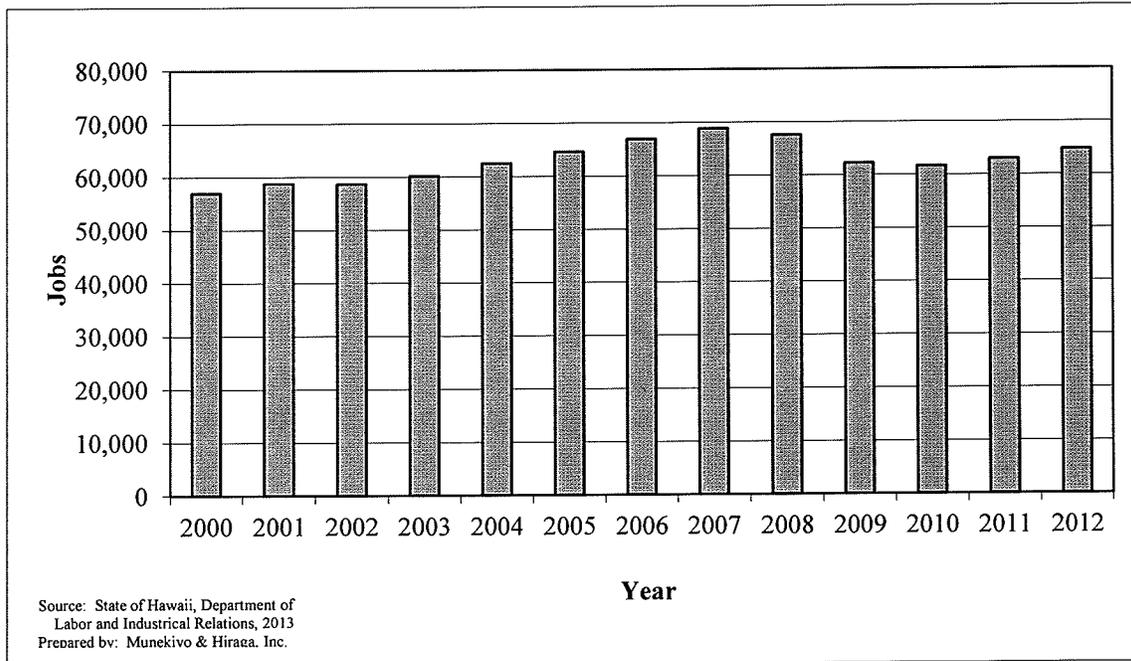


Table 5 presents a distribution of islandwide non-agricultural jobs by industry. Maui County's economy is dominated by service-providing industries, with heavy dependence upon the visitor industry. The Leisure and Hospitality industry accounts for 21,130 jobs, or 31.2 percent of the total employment base on the island, making it the single largest industry islandwide.

Table 5. Total Non-Agricultural Jobs by Industry, Maui Island, Q1 2008 and Q1 2013

	Q1 2008		Q1 2013		% Change
	Total	% of Total	Total	% of Total	2008-2013
Goods-Producing	5,830	8.4%	3,770	8.4%	-35.3%
Nat. Resources & Mining & Construction	4,600	6.7%	2,870	6.7%	-37.6%
Manufacturing	1,230	1.8%	900	1.8%	-26.8%
Service-Providing	63,170	91.6%	61,700	91.6%	-2.3%
Trade, Transportation & Utilities	14,680	21.3%	13,600	21.3%	-7.4%
Information	800	1.2%	500	1.2%	-37.5%
Financial Activities	2,780	4.0%	2,370	4.0%	-14.7%
Professional & Business Services	6,830	9.9%	6,130	9.9%	-10.2%
Educational & Health Services	5,320	7.7%	5,770	7.7%	8.5%
Leisure and Hospitality	21,500	31.2%	21,130	31.2%	-1.7%
Other Services	2,770	4.0%	3,200	4.0%	15.5%
Government	8,480	12.3%	9,000	12.3%	6.1%
TOTAL JOBS	69,000	100.0%	65,470	100.0%	-5.1%
Source: State of Hawaii, Department of Labor and Industrial Relations, 2013. Prepared by: Munekiyo & Hiraga, Inc.					

While employment levels have increased slightly since lows in 2010, the number of jobs on Maui is still lower than they were five (5) years ago. Employment levels have declined across most industries on the island. However, the construction industry has been particularly hard hit. The number of jobs during the first quarter of 2013 in the Natural Resources and Mining and Construction industry was 38 percent lower than the first quarter of 2008. The three (3) industries that have a larger number of jobs in the first quarter of 2013 compared to 2008 are the Educational and Health Services industry, the Other Services Industry, and government.

III. RESIDENTIAL MARKET OVERVIEW

III. RESIDENTIAL MARKET OVERVIEW

A. HOUSING INVENTORY

Maui County's housing inventory has experienced substantial growth over the past decade. According to the recent decennial Census, there were 70,379 housing units Countywide in 2010, a 25 percent increase over 10 years.

Maui County's and the island's housing stock is dominated by single-family homes. As shown in **Table 6**, nearly 60 percent of homes on the island are single-family residences. Units in large multifamily complexes with five (5) or more units are the second most common housing type, comprising 31 percent of the County's housing stock. Duplexes and small multifamily complexes are less common throughout the island.

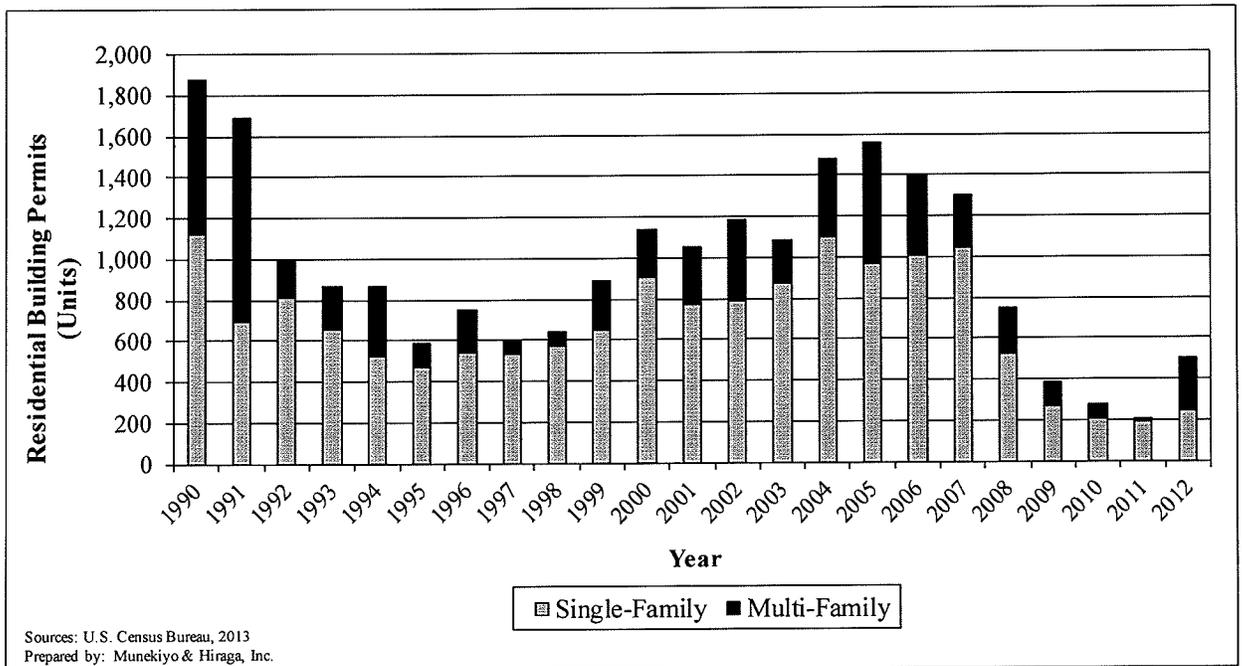
Table 6. Housing Type, 2010

	Maui County	Maui Island
Housing Unit Distribution		
Total Housing Units	68,417	63,561
Single-Family	60.9%	59.2%
Duplex	4.9%	5.2%
3-4 units	4.1%	4.3%
5+ units	29.9%	31.2%
Other (a)	0.2%	0.1%
Notes: (a) Other includes mobile homes, trailers, boats, RVs, vans, etc. Source: U.S. Census Bureau, 2010, Table DP-4. Prepared by: Munekiyo & Hiraga, Inc.		

B. RESIDENTIAL CONSTRUCTION PATTERNS

Residential construction in Maui County, measured by building permit issuance, has fluctuated over the past twenty (20) years. As shown in **Table 7** below, residential construction was particularly strong in the early 1990s. Construction slowed in the mid-1990s before increasing again towards the end of the decade.

Table 7. Residential Building Permits Issued, Maui County 1990-2011



While many parts of the nation suffered during the dot-com bust in the early 2000s, residential construction on Maui remained fairly strong, with the number of residential building permits issued exceeding 1,000 units annually. Construction trends accelerated in 2004 and 2005, when over 1,400 residential building permits were issued annually.

The recent economic recession is evident in residential construction patterns on Maui. Since peaking in 2005, the number of building permits issued has decreased substantially, particularly between 2009 and 2011. In 2011, just 210 residential building permits were issued, by far the lowest number of permits issued over the past 20 years. Residential construction began to rebound in 2012, when 506 permits were issued countywide.

As shown above, single-family construction has been the dominant form of residential development. Between 2000 and 2012, 12,346 permits were issued in Maui County, of which 72 percent were for single-family homes.

C. RESIDENTIAL HOUSING DEMAND

The Hawaii Housing Planning Study 2011 for the County of Maui was prepared by SMS Research and provides a near-term forecast of housing needs in the State and County. Utilizing data on housing demand and housing supply, the Study estimates the number of new housing units needed in each County. The number of new housing units that would need to be built between 2012 and 2016 in Maui County is estimated to be 3,454 units.

The Study also estimates the number of housing units needed for elderly households, defined as households with one (1) or more persons 60 years or older with no children under 18 years old and no persons other than the immediate family. **Table 8** presents the number of senior housing units needed by income category and tenure between 2012 and 2016 in the County.

Table 8. Senior Housing Units Needed, 2012 to 2016, County of Maui

	HUD Income Level		Total
	Under 80% AMI	Over 80% AMI	
Ownership Units	60	107	167
<i>Single-Family</i>	50	62	112
<i>Multi-Family</i>	10	45	55
Rental Units	188	57	245
<i>Single-Family</i>	54	0	54
<i>Multi-Family</i>	134	57	191
TOTAL	248	164	412
Source: SMS Hawaii Housing Planning Study, 2011. Prepared by: Munekiyo & Hiraga, Inc.			

As shown, an estimated 412 units of senior housing are needed between 2012 and 2016 to fill the gap between housing units demanded and housing units produced over the five (5) year period. This includes 134 multi-family rental units for households earning less than 80 percent of AMI.

The State Department of Business, Economic Development, and Tourism (DBEDT) provides longer-term estimates of senior housing needs through 2030. Seniors are anticipated to account for a growing percentage of the State’s overall population and housing demands for seniors will rise accordingly. DBEDT estimates a need for 54,816 new units for senior households by 2030, including 2,644 units within Maui County alone. Maui County’s need for new senior housing through 2030 includes 1,971 units for homeowners and 673 units for renters (SMS, 2011).

D. AFFORDABLE SENIOR HOUSING

Hale Mahaolu operates the majority of affordable senior rental housing on Maui. There are nine (9) affordable senior rental properties on Maui, seven (7) of which are owned and operated by Hale Mahaolu. Hale Mahaolu also operates the Lokenani Hale project in Wailuku. These properties provide 677 studio and one-bedroom units. **Table 9** details the affordable senior housing stock on the island. There are five (5) properties in Central Maui, two (2) properties in West Maui, and one (1) each in South Maui and Upcountry.

As shown in **Table 9**, the properties are age restricted for persons 62 years and older, with the exception of the Lokenani Hale property, which serves residents 55 years and older. These properties are income targeted, with the majority of units reserved for households earning 50 percent of AMI or less. Units that serve “RD - \$32,900” in **Table 9** are funded by Federal Rural Development funds and serve households earning up to \$32,900. As previously mentioned, for a 1-person household, the maximum income for a unit designated for 50 percent of AMI or less is \$29,750. There are 115 studio units available, which average 427 square feet in size and have gross rents averaging \$541 per month. One-bedroom units average 529 square feet in size and range, with rents averaging \$934 per month.

There is minimal vacancy within the existing supply of affordable senior housing. Vacancies that do occur are typically a function of normal turn over and are filled quickly. There is a lengthy waiting list for affordable rental units, with each property having at least 100 people on the list for a unit.

It is noted that there are no two-bedroom units currently provided in the existing affordable senior housing properties. The proposed project will provide two (2) two-bedroom units for seniors. Hale Mahaolu has received inquiries for two-bedroom units at its existing properties. In some cases, a married couple would prefer to have a larger unit with two (2) bedrooms or two (2) siblings would like to live together but have separate bedrooms.

Table 9. Affordable Senior Housing

Property Name	Address	Occupancy Target (ie Age group, AMI level)	Studio					1-bedroom					Total Units(a)	Community amenities	# of units Vacant	Wait List
			# of Units	Basic Rent	Util. Allow	Gross Rent	Sq. Ft.	# of Units	Basic Rent	Util. Allow	Gross Rent	Sq. Ft.				
Hale Mahaolu Akahi	300 W. Wakea Avenue, Kahului	HUD 50% AMI - \$29,750 62 & older	5	\$514	\$72	\$586	347	37	\$673	\$72	\$745	459	110	Community Hall, Laundry Room	2	201
Hale Mahaolu Elua	200 Hina Avenue, Kahului	HUD 50% AMI - \$29,750 62 & older						179	\$1,098	\$84	\$1,182	580	179	Community Hall, Laundry Room, Beauty Salon	0	372
Hale Mahaolu Ekolu	717 Makaala Drive, Wailuku	HUD 50% AMI - \$29,750 62 & older	10	\$1,336	\$75	\$1,411	458	31	\$1,487	\$78	\$1,565	514	41	Community Room & Laundry Room	0	252
Hale Mahaolu Eha	1057 Makawao Avenue	HUD 50% AMI - \$29,750 62 & older						39	\$825	\$80	\$905		39	Laundry Room	0	280
Hale Mahaolu Elima	11 Mahaolu Street, Kahului	HUD 50% AMI - \$29,750 62 & older						59	\$667	\$78	\$745	577-600	59	Community Hall & Laundry Room	1	302
Hale Mahaolu Eono	810 Kelaweia Street, Lahaina	HUD 50% AMI - \$29,750 62 & older						5	\$825	\$74	\$899	585	34	Community Hall & Laundry Room	1	136
		HUD 50% AMI - \$29,750 62 & older						10	\$1,020	\$82	\$1,102	585				
		RD-\$32,900						19				585				
Hale Mahaolu Ehiku	56 Ehiku Street, Kihei	RD-\$32,900						34	\$940	\$70	\$1,010	650	112	Community Hall, Laundry Room, Beauty Salon	0	330
		HUD 50% AMI - \$29,750 62 & older						15	\$800	\$60	\$860	625				
		Market						4	\$800	--	\$800	625				
		HUD -\$29,750						30	\$653	\$60	\$713	625				
		RD \$32,900						29	\$1,055	\$60	\$1,115	625				
Lokenani Hale	1889 Loke Street Wailuku, HI 96793	55 & older 50% AMI						61	\$625		\$625	485-565	61	Laundry Room, Community Room, Multi-purpose Room	0	100
Piilani Elderly Housing	1028 Wainee Street Lahaina, HI 96761	62 & older 100% AMI or less	32					10					42			
TOTAL Units (Average Rent/Sq. Ft.)			115	--	--	\$541	427	562	--	--	\$934	529	677			1,973
Source: Hale Mahaolu																
Notes: (a) Excludes Manager Units.																
Prepared by: Munekiyo & Hiraga, Inc.																

E. MARKET RATE SENIOR HOUSING

There are two (2) market-rate senior housing facilities on the island. Each provides a distinct level of services that are not directly comparable to the proposed project and other affordable senior housing facilities on Maui. Nevertheless, these two (2) properties are profiled to provide a baseline for senior housing available in the market. See **Table 10**.

Table 10. Market Rate Senior Housing on Maui

	Roselani Place	Kalama Heights
Address	88 S. Papa Avenue Kahului, HI 96732	101 Kanani Road Kihei, HI 96753
Property Description	Independent & Assisted Living	Independent Living
Occupancy Target	55+ years old	55+ years old
Number of Units	119 beds total Up to 79 beds available for independent living, including companion rooms, studios, and 1 bedroom units	120 units 46 Studio 60 1-Bedroom 14 2-Bedroom
Monthly Rent	Rents vary depending on level of service, beginning at: Companion Rooms - \$2,275 Studio - \$3,275 1 Bedroom - \$3,875	Studio - \$2,500 1 Bedroom - \$3,150 2 Bedroom - \$3,800-\$5,000
Community Amenities	Dining room, beauty salon/barber, , library, computer center, activity and recreation rooms, and TV rooms	Laundry, Fitness Center, Game Room, Media Room, On-Site Dining
Services Offered	Assisted Living, Personal Care Services, Memory Care, Respite Care, housekeeping	Transportation, travel program, housekeeping
Vacancy Rates	20% - 30%	15%
Prepared by: Munekiyo & Hiraga, Inc.		

The Kalama Heights property in Kihei is an independent living facility operated by Holiday Retirement. There are 120 studios, one-bedroom, and two-bedroom units available to residents 55 years and older. The facility has an all-inclusive rent structure which includes utilities, meals, transportation, and activities. Rents for these units range from \$2,500 for studio units to \$3,800 or more for two-bedroom units.

Roselani Place is an independent and assisted living facility located in Kahului. There are 119 beds in studios, one-bedroom, and companion rooms. Of the 119 beds on

property, 40 are reserved for special services; the remaining 79 beds are available for either independent or assisted living, depending on the level of service desired by the resident. Residents have access to planned activities, transportation, and amenities such as dining, beauty and barber salon, library, computer center, activity and recreation rooms, and TV rooms. As an assisted living facility, there is 24-hour staff availability and nurse care.

F. MARKET RATE RENTAL HOUSING

In addition to age-restricted rental housing, this Market Study also assesses non-age restricted market rate housing on Maui. HUD establishes Fair Market Rent (FMR) to determine payment standard amounts for various housing assistance programs sponsored by the Federal government. FMR is based on market-rate rents for standard-quality rental housing units in a given geography.² In 2013, the FMR for Maui County was \$1,018 for a one-bedroom unit and \$1,315 for a two-bedroom unit. A review of online rental listings for one- and two-bedroom units on Maui conducted in October 2013 found rental rates to be consistent with the FMRs established by HUD.

G. EXPECTED MARKET ABSORPTION

There is strong demand for the proposed Hale Mahaolu Ewalu Senior Housing project. The demand for the proposed project is supported by the current waitlist for existing affordable senior housing properties alone. As shown in **Table 9** previously, the combined waitlist for the nine (9) existing affordable senior housing projects contains approximately 2,000 names. While these individuals may have their names on multiple waiting lists, each property has at least 100 people waiting. The Hale Mahaolu Eha property in Makawao, the closest property to the proposed project, has a waiting list of 280 people.

Based on the pent-up demand for affordable senior housing on Maui, the units at the proposed Ewalu project are anticipated to be absorbed quickly. Introduction of these units are not anticipated to have an adverse effect on other senior housing properties on the island due to the long waiting lists that exist for each affordable rental property and the distinct level of services offered at existing market rate senior housing facilities.

² FMR are established at the dollar amount below which 40 percent of standard-quality rental housing units are rented in the market.

H. PROPOSED SENIOR HOUSING

Based on information that is currently available, there is one (1) other affordable senior housing project proposed for the island of Maui. The proposed Kula Ridge Affordable Housing Subdivision includes 34 affordable senior housing units. The units will be duplexes for below-moderate and moderate-income senior households. Unlike the proposed Hale Mahaolu Ewalu project, the Kula Ridge senior housing units will be for-sale units. Completion of the units is anticipated by 2015 or 2016.

**IV. ADULT DAY-CARE
CENTER MARKET
OVERVIEW**

IV. ADULT DAY-CARE CENTER MARKET OVERVIEW

As previously mentioned, the proposed project includes a one-story approximately 4,700 square foot adult day care center. Hale Mahaolu proposes to enter into a low-cost lease with an operator such as the Maui Adult Day Care Centers (MADCC) to manage the facility. MADCC provides a social daytime therapeutic program for individuals who are frail, elderly, individuals diagnosed with Alzheimer’s disease or other related forms of dementia, and adults who are physically and mentally challenged.

There are five (5) adult day care centers currently operated by MADCC on Maui. See **Table 11**. Three (3) of the five (5) adult day care centers are located at an existing Hale Mahaolu senior housing facility. Hale Mahaolu leases the day care facilities to MADCC for a nominal fee to cover the cost of repair and maintenance, insurance, reserves, and other facility operating expenses.

Table 11. Maui Adult Day Care Centers Locations

Location	Address	Hours of Operation
Maui Adult Day Care Centers Central (Hale Mahaolu Elima Senior Housing)	11 Mahaolu Street, Suite B Kahului, Hawaii 96732	6:30am to 6:00pm Monday – Friday 3:00pm to 8:30pm Friday Sun Downing Program 7:30am to 4:30pm Saturday Respite
West Maui Adult Day Care Center (Hale Mahaolu Eono Senior Housing)	810 Kelaweia Street Lahaina, Hawaii 96761	7:00am to 5:30pm Monday – Friday 7:30am to 4:30pm Saturday Respite
Ocean View Facility (Nisei Veterans Memorial Site)	665 Kahului Beach Road Kahului, Hawaii 96732	7:00am to 5:30pm Monday – Friday
Hale Hulu Mamo (Hana Senior Center)	5101 Uakea Street, Building G Hana, Hawaii 96713	8:30am to 4:30pm, Monday – Friday
South Maui Adult Day Care Center (Hale Mahaolu Ehiku Senior Housing)	16 Ehiku Street Kihei, Hawaii 96753	6:30am to 6:00pm Monday – Friday
Source: Maui Adult Day Care Centers. Prepared by: Munekiyo & Hiraga, Inc.		

MADCC facilities offer a variety of programs and activities designed to assist seniors and their families. These include the following:

- Daily upper and lower body physical exercises commensurate with their ability
- Memory enhancement activities to stimulate their cognitive ability
- Music, singing, and dancing
- Intergenerational activities

- Supervised care by a loving trained staff
- Personal care, e.g. bathing services, haircuts, and manicures
- Hot meals and snacks
- Individual and group games
- Excursions
- Old time movies
- Animal visitation
- Activities (e.g. chair bowling, bingo)
- Karaoke

Daily rates for the adult day care centers are approximately \$50. Scholarships from private and public funds are available for eligible clients.

In addition to the five (5) MADCC facilities, there are several senior centers on Maui run by the County of Maui including the Kaunoha Senior Center in Paia and the West Maui Senior Center in Lahaina. These senior centers provide a variety of programs and activities for seniors but are different from adult day care centers in terms of the level of care provided.

As illustrated in **Table 11**, there are no adult day care centers in the Makawao-Pukalani-Kula region of Maui. The closest adult day care center to the Upcountry region would be in Kahului at the Hale Mahaolu Elima Senior Housing facility. The proposed adult day care center at the Hale Mahaolu Ewalu Senior Housing facility will provide a valuable social service to elderly and physically and mentally challenged adults living in the Upcountry region.

V. MARKET OUTLOOK AND CONCLUSION

V. MARKET OUTLOOK AND CONCLUSION

The proposed Hale Mahaolu Ewalu Senior Housing project is anticipated to meet the demand for affordable rental housing for the island of Maui's elderly population. There is a limited number of affordable rental units on the island that are specifically designed or designated to meet the requirements of the senior population. Demographic and economic data presented herein supports the need for the proposed project.

1. Population trends show that growth in the resident population will continue over the next 20 years. In 2010, the island of Maui's resident population was 144,444 people and is expected to grow by 29 percent to 186,300 residents by 2030. Households on the island are expected to grow at an even faster rate, increasing by 40 percent to 70,100 households in 2030.
2. The island's elderly population is expected to follow the population and household trends over the next few years. In 2010, seniors age 65 years and older comprised 13 percent of all residents on the island. Seniors living alone represented 7 percent of all households on the island in 2010.
3. Of seniors age 62 and older, 27 percent, or approximately 3,150 households, are renters.
4. Senior renter households are lower-income and many experience housing cost burden. CHAS data for the County of Maui indicates that 73 percent of elderly (62 years and older) renter households are extremely low-, very low-, or low-income. The majority of extremely low-, very low- and low-income elderly households are cost burdened, meaning they pay more than 30 percent of their income towards housing costs.
5. The Hawaii Housing Planning Study 2011 for the County of Maui identified the need for 412 new units of senior housing between 2012 and 2016, including 134 multi-family rental units for households earning less than 80 percent of AMI. Furthermore, DBEDT projects a need for 2,644 new senior housing units in Maui County through 2030.
6. There is a limited number affordable senior housing properties on the island of Maui with minimal vacancy. The nine (9) properties provide 677 studio and one-bedroom units for seniors. The majority of these units are restricted for persons age 62 years and older and most are reserved for households earning 50 percent of AMI or less. Vacancies typically occur as a result of normal turnover only and there is a lengthy waitlist of at least 100 people for each property.
7. Kalama Heights and Roselani Place, the only two (2) market rate senior housing properties on the island, offer a distinct level of service and are at a much higher price point than the proposed Hale Mahaolu Ewalu Senior Housing Project.

8. The Fair Market Rent for one- and two-bedroom units within Maui County are \$1,018 and \$1,315, respectively. Rents for the proposed Ewalu project are expected to be up to \$850 for one-bedroom units and up to \$1,000 for two-bedroom units.
9. The demand for affordable senior housing will still remain strong due to the number of waitlisted households, the growth of the elderly population, and seniors that fall within the low- and very low-income levels.
10. There are currently five (5) adult day care centers on the island of Maui providing daytime therapeutic programs and services to seniors and adults with physical or mental challenges. However, there are no facilities currently serving the Upcountry area. The closest adult day care center to the Makawao-Pukalani-Kula region is located in Kahului. The proposed adult day care center at the Hale Mahaolu Ewalu project will provide valuable social services to adults in need living in the Upcountry area.

Current demographic trends and market conditions are favorable for the rapid absorption of the 60 units at the Hale Mahaolu Ewalu Senior Housing Project. The strong demand for affordable senior rental housing is amplified by the limited inventory of these units and the number of households that are currently on waitlists for the existing projects. Given the preceding conditions and the growing senior population on the island of Maui, demand for affordable senior housing in the market area is considered significant. The absorption of the proposed project is anticipated to occur almost immediately once the project is ready for occupancy.

VI. STATEMENT OF QUALIFICATIONS

VI. STATEMENT OF QUALIFICATIONS

Munekiyo & Hiraga, Inc. has prepared various land use applications, environmental assessments, and market assessments for a number of Hale Mahaolu's projects as well as other specialized housing and facilities. These assignments include the following:

Application for Housing Development Pursuant to Section 201G-118, Hawaii Revised Statutes for Proposed Hale Mahaolu Ehiku Elderly Housing, October 2004

Special Management Area Use Permit Application for Proposed Hale Mahaolu Ehiku Project, April 2004

Hale Mahaolu Ehiku -Market Study, February 2004

Hale Mahaolu Ehiku Phase II – Market Study, January 2008

Application for District Boundary Amendment, Community Plan Amendment, Change in Zoning, Special Management Area Use Permit, and Off-Site Parking Approval for Molokai Day Care Senior Center, September 2000

Application for Special Management Area Use Permit for Proposed Kaunoa Senior Wellness Center, November 2003

Application for Special Use Permit for Luana Gardens II Community Building and Child Day Care Facility, May 1995

Application for Special Management Area Minor Permit for Proposed Manager's Unit at Home Pumehana, June 2003

Application for Variance from Section 19.36.080 Relating to Paved Parking for the Home Pumehana Senior Center, March 2002

Draft Environmental Assessment (State) for Proposed Kaunoa Senior Wellness Center, November 2003

Draft Environmental Assessment (State) for Luana Gardens II Community Building and Child Day Care Facility, May 1995

Draft Environmental Assessment (State) for Molokai Day Care/Senior Center, January 1999

Environmental Assessment (Federal) for Hale Mahaolu Akahi, December 2002

Environmental Assessment (Federal) for Molokai Day Care Senior Center, September 2000

Environmental Assessment (Federal) for Molokai Day Care/Senior Center, January 1999

Final Environmental Assessment (State) for Molokai Day Care/Senior Center, March 1999

Final Environmental Assessment (State) for Luana Gardens II Community Building and Child Day Care Facility, August 1995

Market Assessment for Kihei Elderly Housing Project, May 2002

Market Assessment for Lanai Senior Housing, August 1996

Market Assessment for Hale Mahaolu Eono, February 1999

Request to Amend Section 201 G, Hawaii Revised Statutes, Approval for Hale Mahaolu Eono, November 2001

Special Management Area Use Permit Application for Proposed Hale Mahaolu Ehiku Elderly Housing, April 2004

Supplemental Environmental Assessment (State) for Molokai Day Care/Senior Center, November 2000

Supplemental Draft Environmental Assessment (State) for Molokai Day Care Center, September 2000

In analyzing elderly services projects, the preparer has, over a number of years, undertaken extensive coordination with public and non-profit agencies and service providers involved in meeting elderly needs. The preparer, through these projects, has gained an understanding and knowledge of market conditions to undertake this assignment.

VII. REFERENCES

VII. REFERENCES

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U.S. Department of Housing and Urban Development, FY 2013 Income Limits, Maui County, <http://www.huduser.org/portal/datasets/il/il13/index.html>, Accessed October 2013.

APPENDIX E.

Preliminary Engineering Report

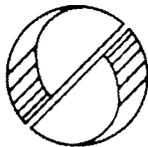
**ENGINEERING REPORT
FOR
HALE MAHAOLU EWALU**

Kula, Maui, Hawaii
TMK: (2) 2-3-066: 019 & 020

Prepared for

RIECKE SUNNLAND KONO ARCHITECTS, LTD.
33 LONO AVE., SUITE 200
KAHULUI, HAWAII 96732

Prepared by

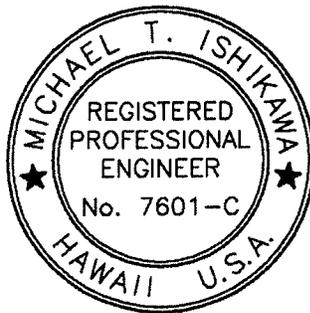


SATO & ASSOCIATES, INC.
Consulting Engineers
2115 Wells St.
Wailuku, Hawaii 96793

December 2013

**ENGINEERING REPORT
FOR
HALE MAHAOLU EWALU**

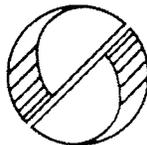
Kula, Maui, Hawaii
TMK: (2) 2-3-066: 019 & 020



A handwritten signature in black ink, appearing to read "M. T. Ishikawa".

This work was prepared by me or under my supervision.
Expiration Date: 4/30/14

Prepared by



SATO & ASSOCIATES, INC.
Consulting Engineers
2115 Wells St.
Wailuku, Hawaii 96793

December 2013

TABLE OF CONTENTS

I. INTRODUCTION 1

II. PROPOSED PROJECT 1

Location 1

Project Description 1

II. EXISTING CONDITIONS 1

Existing and Adjacent Land Use 1

Topography and Soil Conditions 1

Flood Hazard 1

Drainage 2

IV. PROPOSED IMPROVEMENTS 3

Drainage Improvements 3

Basin Volume 3

Roadway 3

Electrical, Telephone and Cable TV Service 4

Temporary Erosion Control During Construction 4

VI. REFERENCES 5

EXHIBITS

1. LOCATION & VICINITY MAP
2. FLOOD HAZARD
3. EXISTING DRAINAGE CONDITIONS
4. POST-DEVELOPMENT DRAINAGE CONDITIONS
5. TOPOGRAPHIC SURVEY
6. GRADING PLAN
7. UTILITY PLAN

APPENDIX

- A. DRAINAGE CALCULATIONS
 - B. DOMESTIC WATER CONSUMPTION CALCULATIONS
 - C. WASTEWATER CONTRIBUTION CALCULATIONS
-

I. INTRODUCTION

This report will summarize the existing infrastructure and utilities at the proposed Hale Mahaolu project site. Probable improvements to support the new elderly housing facility will also be evaluated.

II. PROPOSED PROJECT

Location

The project is situated in Kula, Maui, Hawaii. The 3.94-acre site is identified by Tax Map Key (2) 2-3-066:019 & 020 and is bordered by 'Ohi'a Lehua Place to the west and 'Ohi'a Ku Street to the north. A tributary branch of Kaluapulani Gulch is located south of the project site. Refer to Exhibit 1.

Project Description

Hale Mahaolu proposes to consolidate and re-subdivide the two existing lots for development of elderly housing buildings, a senior center, and an adult day care facility. The project will consist of 60 units, with residential structures varying between two to three stories in height. The future subdivision will separate the adult day care building and senior center from the residential buildings into two lots.

II. EXISTING CONDITIONS

Existing and Adjacent Land Use

The site is within the Kulamalu Commercial Village, which is a mix of business, residential, park and public/quasi-public use. Currently, the parcels are zoned under the County of Maui P-1 Public/Quasi-Public District and the State Urban District. East of the site is a privately-owned paved parking lot and 9-acre park owned by the County of Maui. The University of Hawaii Institute for Astronomy is located to the west, across 'Ohi'a Lehua Place. Further down 'Ohi'a Lehua Place is Kulamalu Hilltop, which is a residential subdivision.

The land across 'Ohi'a Ku Street to the north is undeveloped. Directly south of the project site is a tributary branch of Kaluapulani Gulch. An existing retention basin which collects runoff from the commercial subdivision is located southwest of the project site.

Topography and Soil Conditions

Presently the site is covered with dry brush, grasses, weeds and shrubs. The average grade of the site is about 7% and slopes from east to west. Elevations range from 1810 to 1765 feet above mean sea level. See Exhibit 5.

Flood Hazard

Flood Insurance Rate Maps published by the Federal Emergency Management Agency indicate that the project site is located within Zone X. Zone X is categorized as areas determined to be outside the 0.2% annual chance floodplain. See Exhibit 2.

Drainage

Stormwater runoff currently sheet flows to the west across the site. For a 10-year, 1-hour storm, approximately 2.21 cfs flows into the adjacent gulch and 2.89 cfs flows to the offsite drainage system on 'Ohi'a Lehua and 'Ohia Ku Street. This drainage system conveys the runoff to the aforementioned southwest existing basin. The runoff generated from the site under existing conditions for a 10-year, 1-hour storm event is 5.10 cfs and 6.03 for a 50-year, 1-hour storm event.

Roadway

'Ohi'a Lehua Place and 'Ohi'a Ku Street are both two-lane, privately-owned roads with a total right-of-way width of 60 feet. The roadways include 19-foot wide lanes, curb, gutter and 6 to 9 feet wide sidewalk on both sides of the street. 'Ohi'a Lehua Place is a dead-end street which encompasses developed commercial and residential lots. 'Ohi'a Ku Street intersects with Kupaoa Street to the east and A'apueo Parkway to the northwest.

Currently, both streets do not include driveway access to the proposed project.

Water

According to the Kulamalu Commercial Village Preliminary Engineering Report, an offsite reservoir of approximately 1 MG located near King Kekaulike High School services a portion of Kulamalu, which includes the project site. The outflow at the reservoir is a 12-inch main which traverses along Haleakala Highway to Kulamalu.

A 12-inch waterline is located within the 'Ohi'a Ku Street corridor with laterals for existing fire hydrants.

Sewer

Wastewater generated from the Kulamalu subdivision is conveyed westward by an 8-inch sewerline to a gravity system within Pukalani Terrace, Unit II Subdivision. Wastewater is transmitted to a privately-owned treatment plant and treated before being used by the Pukalani Golf Course for irrigation.

Electric, Telephone and Cable TV Service

The Maui Electric Company (MECO) and Hawaiian Telcom provide electrical and telephone services to Kulamalu. Electrical and telephone lines are located underground adjacent to the site. MECO's facilities are serviced from a Pukalani substation through a 12.47 kilovolt distribution circuit. The subdivision has existing provisions for cable tv service.

IV. PROPOSED IMPROVEMENTS

Drainage Improvements

The developed site will consist of asphaltic concrete pavement surfaces, concrete walkways and roof tops. Landscaped areas surrounding the new buildings will also be included. Stormwater from parking areas will sheet flow to grated inlets and catch basins, and stormwater from roofs will be piped to the on-site drainage system. The post-development runoff is 17.23 cfs for a 10-year, 1-hour storm and 20.94 cfs for a 50-year, 1-hour storm.

Basin Volume

The on-site drainage system will connect to an existing privately-owned 24" drainline on 'Ohi'a Ku Street which outlets into the existing basin. According to the drainage report¹ for the commercial subdivision, the total basin volume is 96,000 cubic feet. The estimated volume for the project site is 28,258 cubic feet. The existing basin is expected to retain the project site runoff generated for the 50-year 1-storm.

Roadway

The project will have two access driveways off 'Ohi'a Ku Street. An accessible pedestrian access route from the 'Ohi'a Ku Street sidewalk to the site will be provided. Appropriate signage and striping will be installed in accordance with the County of Maui Department of Public Works standards. Based on the existing lane and sidewalk width on 'Ohi'a Ku Street and 'Ohi'a Lehua Place, no major roadway improvements are anticipated as a result of the Hale Mahaolu development.

Water

In accordance with the Department of Water Supply Water System Standards, the proposed project will have an average daily consumption of 36,980 gallons per day and a maximum daily demand of 55,470 gallons per day. The project will utilize two 1-1/2" water meters. In reference to Table 100-19 – Fire Flow Requirements of the 2002 Water System Standards, a flow of 2000 GPM for a duration of 2 hours is required for fire protection. The project will not require upsizing of the main waterlines on 'Ohi'a Ku Street.

Sewer

The project intends to provide two connections to the existing 8-inch sewerline off 'Ohi'a Ku Street with 8-inch laterals. The estimated wastewater flow is 16,495 gallons per day. The project has purchased a sewer capacity credit of 8,384 GPD from Hawaii Water Service.

¹ "GRADING AND DRAINAGE REPORT FOR KULAMALU COMMERCIAL VILLAGE AT KOHOILA, KULA, MAUI, HAWAII TMK: (2) 2-3-08:05 & POR. OF 39" Prepared by Austin, Tsutsumi & Associates Inc. Dated Sept. 2000, Revised June 2003.

Electrical, Telephone and Cable TV Service

The electrical and telephone systems will be installed underground in conformance with MECO and Hawaiian Telcom requirements. The future west driveway onto 'Ohi'a Ku Street will require the relocation of an existing MECO box. This electrical box also services the properties across the street, thus the relocation work may be costly and require coordination with existing customers within the area. Preliminary discussions with MECO's Engineering Department concluded that there are no other major foreseen issues with providing service to the site.

Temporary Erosion Control During Construction

The project contract documents will require the Contractor to utilize best management practices such as stabilized entrances at the site ingress and egress, silt and dust fences, inlet and catch basin filters and temporary sediment basins. The Contractor shall also be responsible for accommodating storm runoff, protecting drainage structures, keeping the project site free from dust nuisance, and containing any vehicle and equipment leakage. Slope and exposed areas shall be watered, mulched, sodded or planted as soon as backfill and final grading has been established in order to control dust, erosion and sedimentation. Prior to construction the Contractor will be required to submit a site-specific BMP plan to the Department of Public Works and the State Department of Health for approval.

VI. REFERENCES

Federal Emergency Management Agency, National Flood Insurance Program, Maui County, Hawaii, Flood Insurance Rate Maps. Revised September 2009.

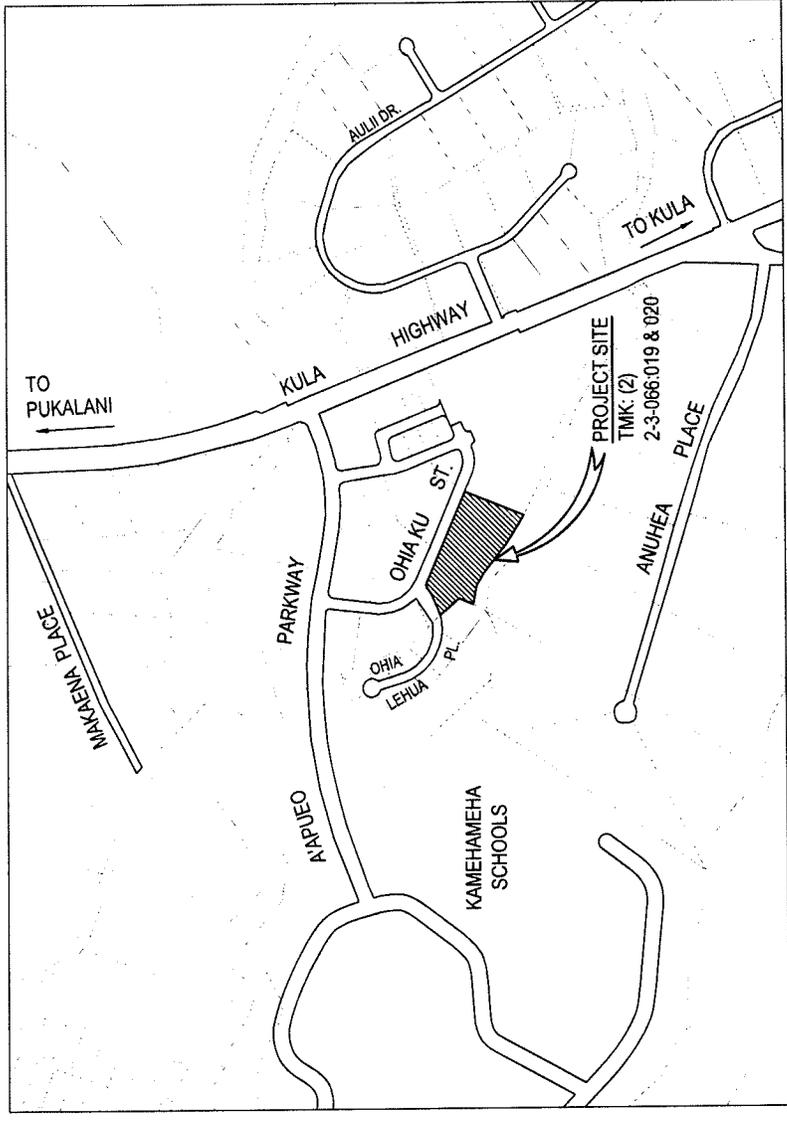
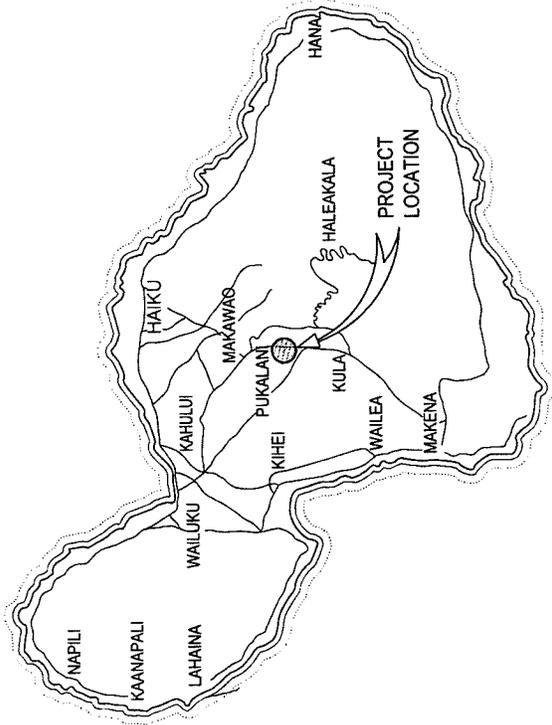
Title MC-15, Department of Public Works and Waste Management, County of Maui, Subtitle 01, Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui.

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EXHIBITS

1. *Location & Vicinity Map*
 2. *Flood Hazard*
 3. *Existing Drainage Conditions*
 4. *Post-Development Drainage Conditions*
 5. *Topographic Survey*
 6. *Grading Plan*
 7. *Utility Plan*
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TMK (2) 2-3-066:019 & 020
MAKAWAO, MAUI, HAWAII

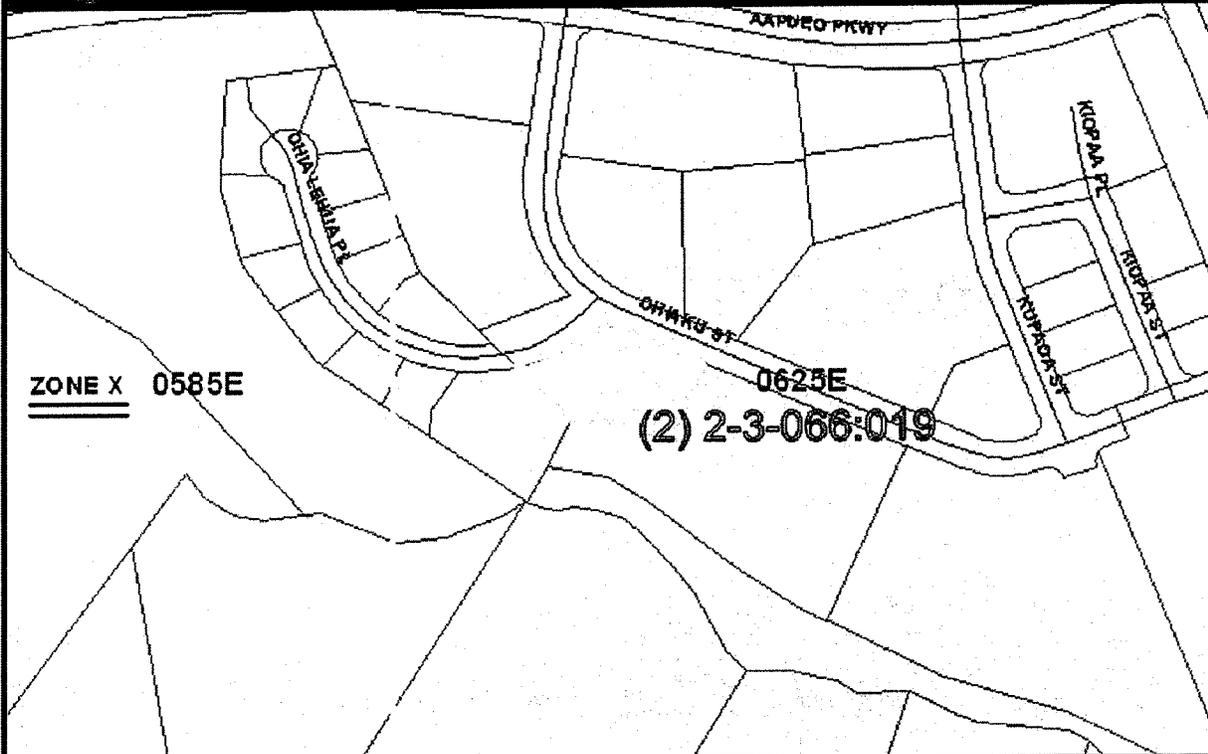
EXHIBIT 1 - LOCATION & VICINITY MAP

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FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones.

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action), no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action), BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY: MAUI
TMK NO: (2) 2-3-066-019
PARCEL ADDRESS: 56 OHIA KU ST
 MAKAWAO, HI 96768
FIRM INDEX DATE: SEPTEMBER 19, 2012
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S): 1500030625E
PANEL EFFECTIVE DATE: SEPTEMBER 25, 2009

PARCEL DATA FROM: MAY 2012
IMAGERY DATA FROM: MAY 2005

IMPORTANT PHONE NUMBERS

County NFIP Coordinator
 County of Maui
 Francis Cerizo, CFM (808) 270-7774
State NFIP Coordinator
 Carol Tyau-Beam, P.E., CFM (808) 587-0267

Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR from any liability, which may arise from its use.

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

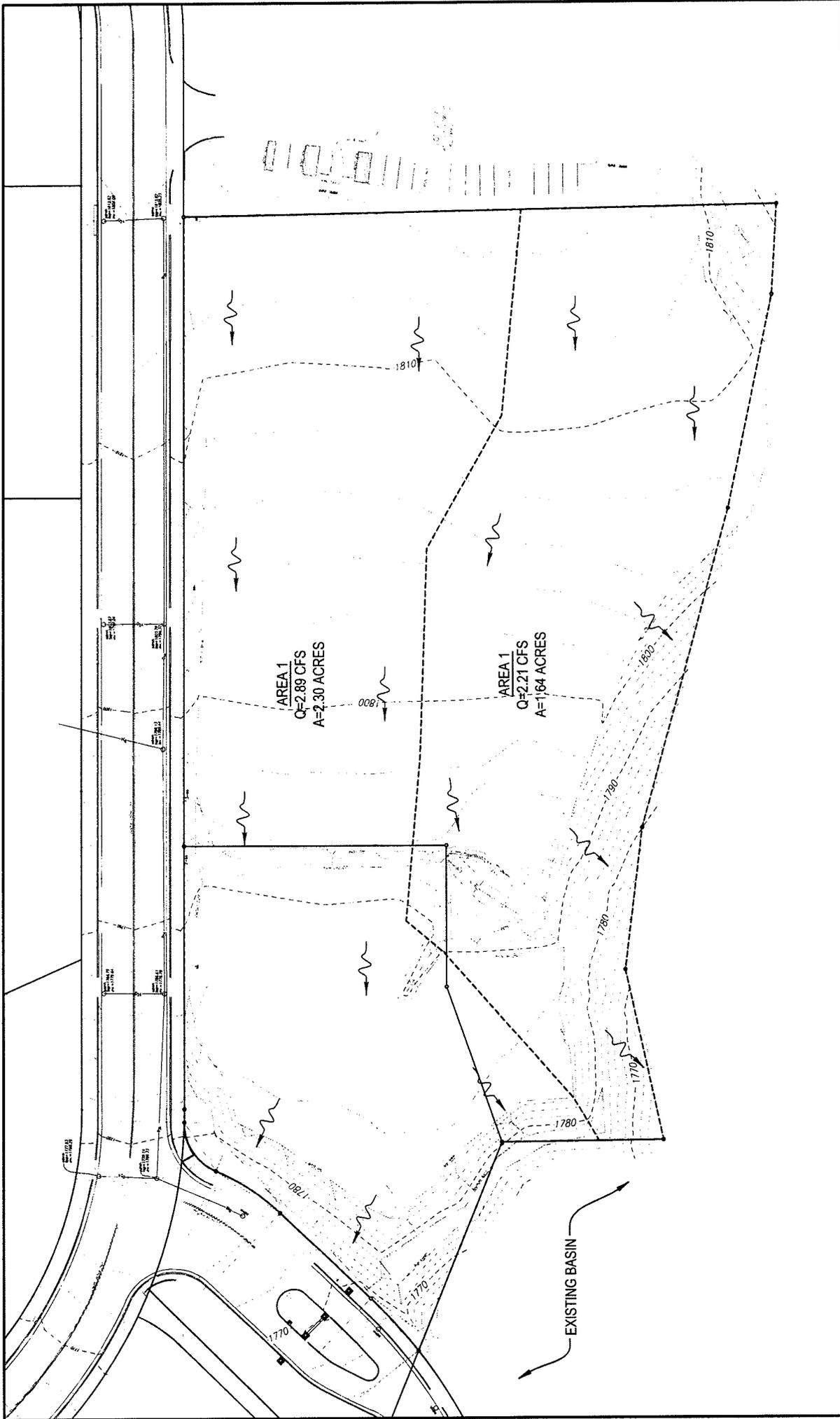
EXHIBIT 2 - FLOOD HAZARD ASSESSMENT



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 KULA, MAUI, HAWAII



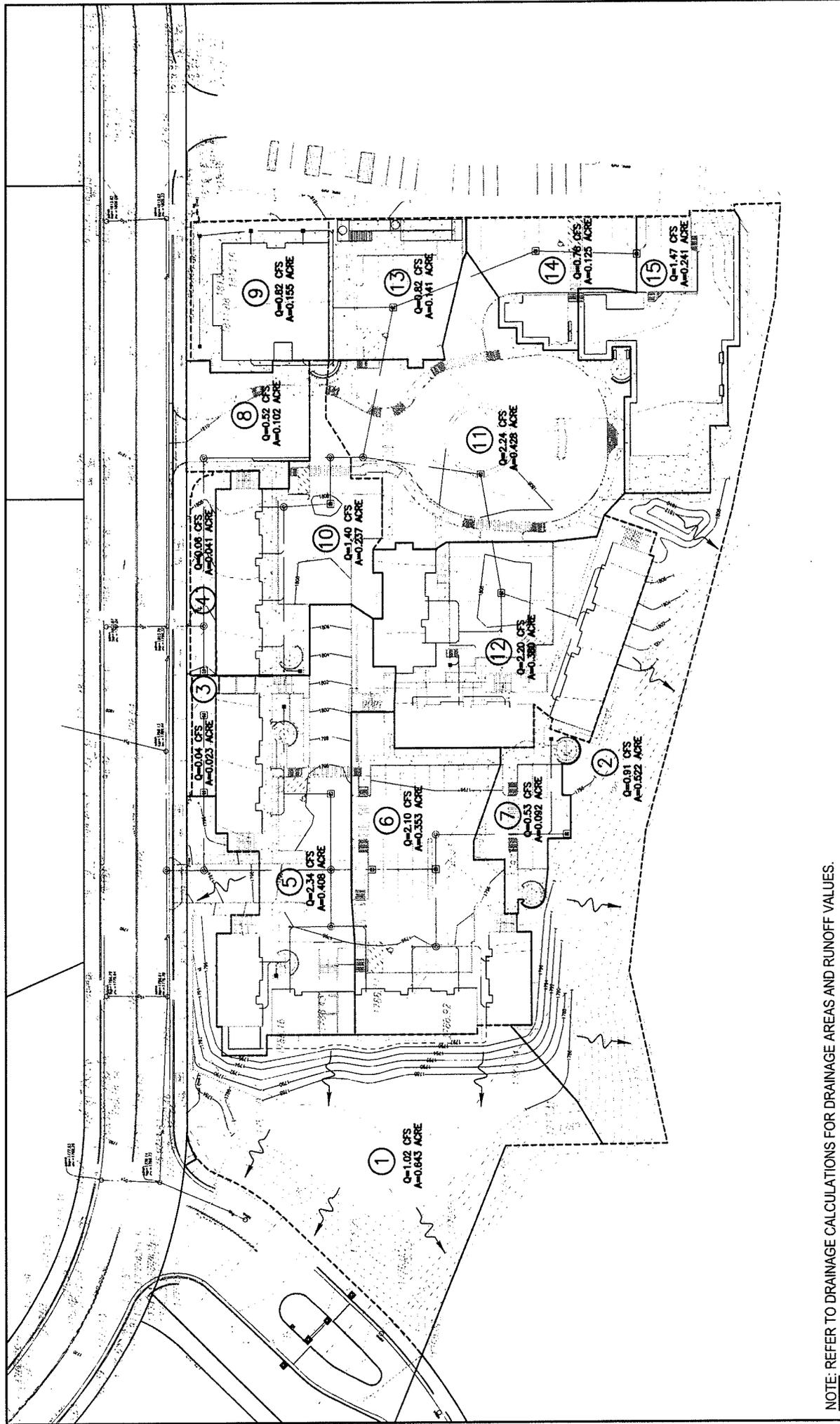
HALE MAHAOLU EWALU
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EXHIBIT 3 - EXISTING DRAINAGE CONDITIONS
 SCALE: 1" = 50'



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NOTE: REFER TO DRAINAGE CALCULATIONS FOR DRAINAGE AREAS AND RUNOFF VALUES.

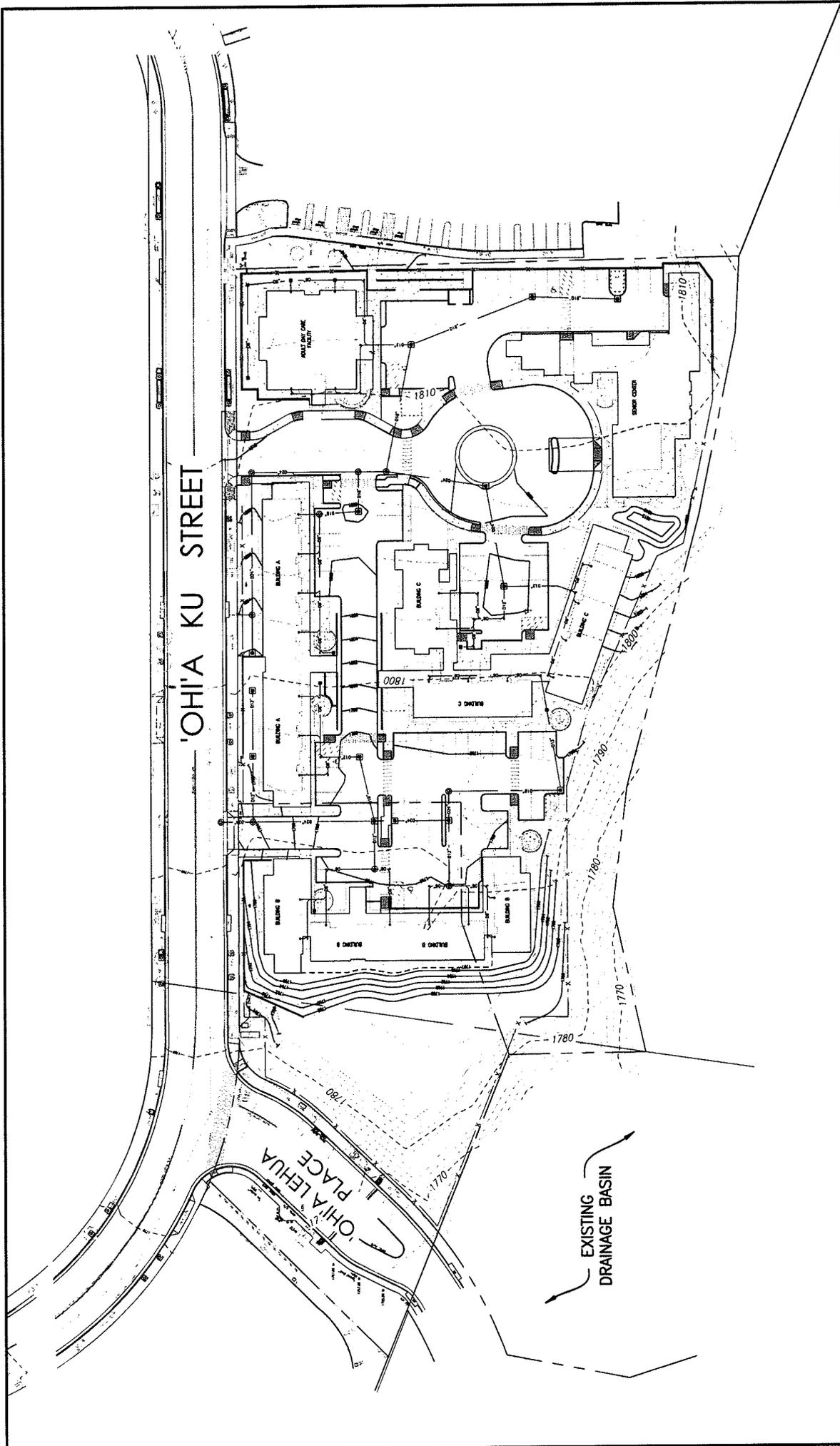


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EXHIBIT 4 - POST-DEVELOPMENT DRAINAGE CONDITIONS

SCALE: 1" = 50'

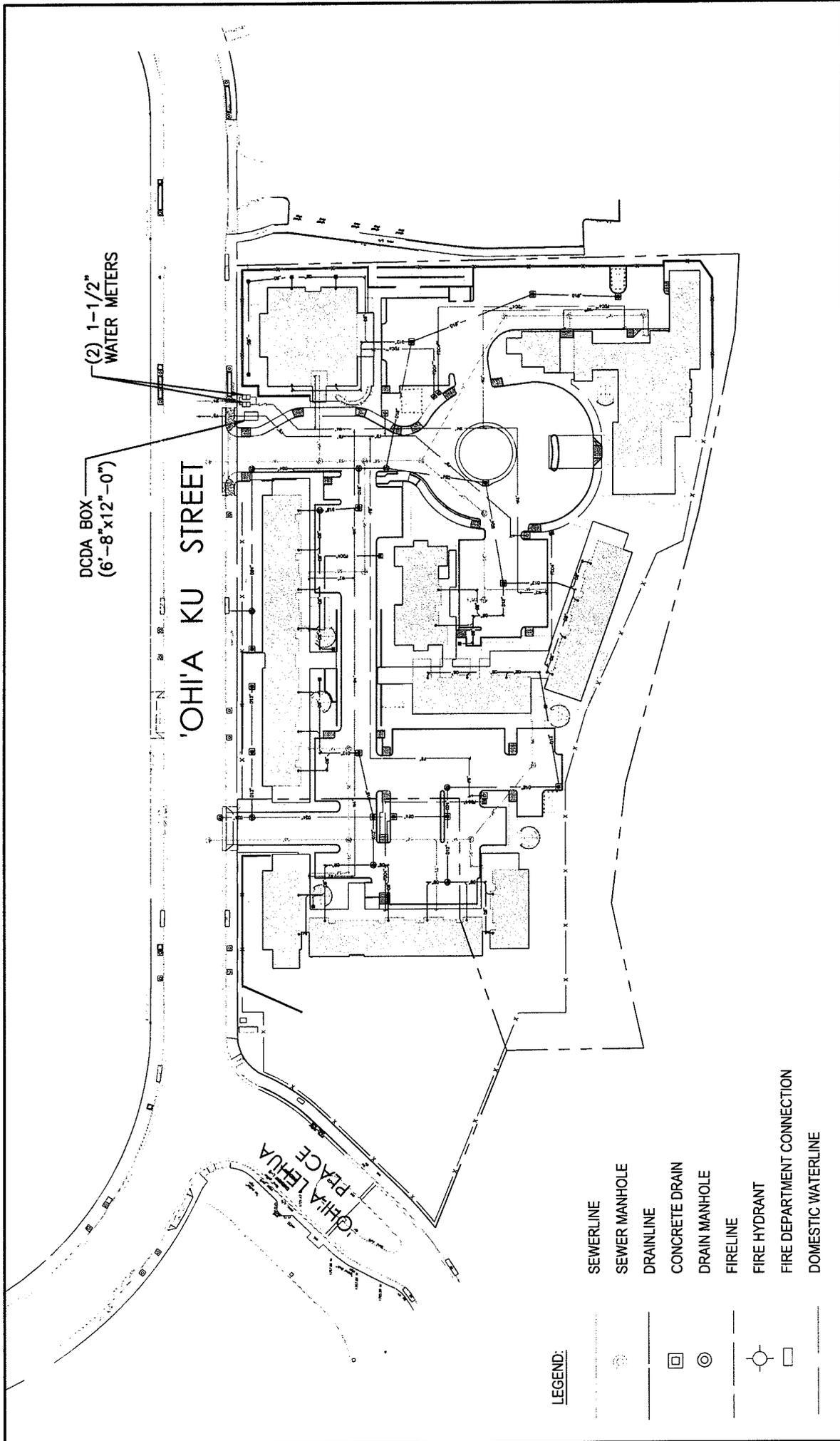
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 TMK (2) 2-3-066.019 & 020
 MAKAWAO, MAUI, HAWAII



HALE MAHAOLU EWALU AT KULAMALU
 TMK (2) 2-3-066:019 & 020
 KULA, MAUI, HAWAII

EXHIBIT 6 - GRADING PLAN
 SCALE: 1" = 60'
 NORTH

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 KULA, MAUI, HAWAII

EXHIBIT 7 - UTILITY PLAN
 NORTH
 SCALE: 1" = 60'

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APPENDIX

- A. *Drainage Calculations*
 - B. *Domestic Water Consumption Calculations*
 - C. *Wastewater Contribution Calculations*
-

HYDROLOGIC RUNOFF CALCULATIONS

Hydrologic calculations for both existing and developed conditions were performed using the Rational Method. Factors used in the calculations were taken from the County of Maui's Drainage Standards as outlined in "Title MC-15, Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui."

Rational Method: $Q = CiA$

Q	=	Peak flow rate (cfs)
C	=	Runoff coefficient
i	=	Intensity (in/hr)
A	=	Area (acre)

The following factors were used:

A. Recurrence Intervals:

10 year, 1-hour storm
I = 2.5" (From Plate 4)

50 year, 1-hour storm
I = 3.0" (From Plate 4)

B. Time of Concentration:

Overland flow time was determined from Plate 1, using hydraulic length, slope, and ground characteristics to the intake point.

C. Rainfall Intensity:

Rainfall intensity (i) was determined by using Plate 2, comparing the time of concentration with 1 hour rainfall.

D. Runoff Coefficient:

Runoff coefficient (C) was determined from Tables 1 and 2, as follows:

Pavement, roof	C = 0.95
Driveways & walkways	C = 0.85
Landscaping	C = 0.30

For areas with multiple surfaces, a weighted "c" value was calculated using the above.

STORM RUNOFF CALCULATIONS, EXISTING RUNOFF SUMMARY

PROJECT: Hale Mahaolu Ewalu at Kulamalu
 LOCATION Kula, Maui, Hawaii

Tm = 10 YEARS 1-HR. RAINFALL = 2.5 INCHES
 50 YEARS 1-HR. RAINFALL = 3 INCHES

AREA	OVERLAND FLOW TIME			i (IN./HR.)		A (SQ. FT.)	A (ACRES)	Q (CFS)		C VALUE	INLET	GOES TO	
	LENGTH (FEET)	SLOPE (FT/FT)	Tc (MIN.)	10YR	50YR			10 YR	50 YR				
1	580	5%	21	4.2	4.9	100072.000	2.297	2.89	3.38	0.30	-	Basin	
2	440	8%	17	4.5	5.4	71364.000	1.638	2.21	2.65	0.30	-	Gulch	
TOTAL								5.10	6.03				

STORM RUNOFF CALCULATIONS, POST-DEVELOPMENT RUNOFF SUMMARY

PROJECT: Hale Mahaolu Ewalu at Kulamalu

LOCATION: Kula, Maui, Hawaii

T_m = 10 YEARS 1-HR. RAINFALL = 2.5 INCHES
 50 YEARS 1-HR. RAINFALL = 3 INCHES

AREA	OVERLAND FLOW TIME			i (IN./HR.)		A (SQ. FT.)	A (ACRES)	Q (CFS)		C VALUE	INLET	GOES TO
	LENGTH (FEET)	SLOPE (FT/FT)	T _c (MIN.)	10YR	50YR			10 YR	50 YR			
1	180	15%	14	4.8	5.7	27998	0.643	1.02	1.22	0.33	Sheet flow	Basin
2	70	30%	8	5.7	6.8	22738	0.522	0.91	1.09	0.31	Sheet flow	Gulch
3	25	2%	7.5	5.8	7	1009	0.023	0.04	0.05	0.30	CDI	Basin
4	110	2%	13	4.9	5.8	1793	0.041	0.06	0.07	0.30	CDI	Basin
5	175	7%	5	6.4	7.8	17754	0.408	2.34	2.85	0.90	CDI	Basin
6	110	2%	5	6.4	7.8	15397	0.353	2.10	2.55	0.93	CDI	Basin
7	75	2%	5	6.4	7.8	3989	0.092	0.53	0.64	0.90	CDI	Basin
8	50	6%	5	6.4	7.8	4459	0.102	0.52	0.63	0.79	CDI	Basin
9	70	2%	5	6.4	7.8	6767	0.155	0.82	1.00	0.83	CDI	Basin
10	130	2%	5	6.4	7.8	10336	0.237	1.40	1.71	0.92	CDI	Basin
11	115	2%	5	6.4	7.8	18628	0.428	2.24	2.73	0.82	CDI	Basin
12	80	2%	5	6.4	7.8	16537	0.380	2.20	2.68	0.91	CDI	Basin
13	60	2%	5	6.4	7.8	6122	0.141	0.82	1.00	0.91	CDI	Basin
14	80	2%	5	6.4	7.8	5435	0.125	0.76	0.93	0.95	CDI	Basin
15	130	2%	5	6.4	7.8	10489	0.241	1.47	1.79	0.95	CDI	Basin

17.23 20.94

TOTAL RUNOFF TO EXISTING BASIN **16.32 19.85**

Basin volume check:

$$Q_T = C \times I_{50} \times A \times 3630$$

Q_T = Required storage volume

C = Runoff coefficient of contributing areas

$$\frac{2.08(0.95) + 0.85(0.30) + 0.44(0.85)}{3.37}$$

3.37

C = 0.77

A = Contributing area

A = 3.37 acres

I₅₀ = 3 inches (50-year, 1-hour storm)

$$Q_T = 0.77 \times 3 \times 3.37 \times 3630$$

Q_T = **28,258 cf.**

Revised on 11/14/2013, KH

Printed on 11/14/2013

M:\Projects\M1303-00 Hale Mahaolu Ewalu\Drainage Report\Final\runoff_sum REV 2013-10-31.xlsx



**DOMESTIC WATER CONSUMPTION CALCULATIONS
FOR
HALE MAHAOLU EWALU**

DECEMBER 2013

Reference: County of Maui, Department of Water Supply, Water System Standards, 2002, Table 100-18

Description: The proposed project will consist of 60 elderly housing units and one manager's unit. Also proposed are a community and office building, and an adult day care building.

<u>Type of Use</u>	<u>No. Units</u>	<u>No. Users</u>	<u>Usage</u>	<u>Ave. Daily Demand</u>
Elderly Housing	60		560 gal/unit	33,600
Manager's Unit	1		560 gal/unit	560
Adult Day Care				
Staff		6	60 gal/person	360
Offsite Users		30	60 gal/person	1,800
Comm/Office Bldg.				
Staff		1	60 gal/person	60
Offsite Users		10	60 gal/person	600
				<hr/>
			Average Daily Consumption =	36,980 GPD
			Maximum Daily Demand =	55,470 GPD



**WASTEWATER CONTRIBUTION CALCULATIONS
FOR
HALE MAHAOLU EWALU**

DECEMBER 2013

Reference: County of Maui, Department of Environmental Management,
Wastewater Reclamation Division, Wastewater Flow Standards

Description: The proposed project will consist of 60 elderly housing units and one manager's unit. Also proposed are a community and office building, and an adult day care building.

Estimated Wastewater Flow

<u>Type of Use</u>	<u>No. Units</u>	<u>No. Users</u>	<u>Usage</u>	<u>Flow (gal)</u>
Elderly Housing	60		255 gal/unit	15,300
Manager's Unit	1		255 gal/unit	255
Adult Day Care				
Staff		6	20 gal/staff	120
Offsite Users		30	20 gal/user	600
Comm/Office Bldg.				
Staff		1	20 gal/staff	20
Offsite Users		10	20 gal/user	200
Average Wastewater Flow =				16,495 GPD

APPENDIX F.

Preliminary Drainage Report

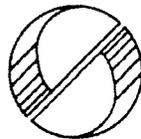
**DRAINAGE REPORT
FOR
HALE MAHAOLU EWALU**

Kula, Maui, Hawaii
TMK: (2) 2-3-066: 019 & 020

Prepared for

RIECKE SUNNLAND KONO ARCHITECTS, LTD.
33 LONO AVE., SUITE 200
KAHULUI, HAWAII 96732

Prepared by



SATO & ASSOCIATES, INC.
Consulting Engineers
2115 Wells St.
Wailuku, Hawaii 96793

November 2013

**DRAINAGE REPORT
FOR
HALE MAHAOLU EWALU**

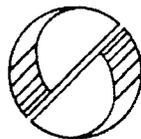
Kula, Maui, Hawaii
TMK: (2) 2-3-066: 019 & 020



A handwritten signature in black ink, appearing to read "Michael T. Ishikawa".

This work was prepared by me or under my supervision.
Expiration Date: 4/30/14

Prepared by



SATO & ASSOCIATES, INC.
Consulting Engineers
2115 Wells St.
Wailuku, Hawaii 96793

November 2013

TABLE OF CONTENTS

I.	INTRODUCTION.....	2
II.	PROPOSED PROJECT	2
	<i>Location.....</i>	<i>2</i>
	<i>Project Description.....</i>	<i>2</i>
II.	EXISTING CONDITIONS.....	2
	<i>Flood Hazard.....</i>	<i>2</i>
	<i>Topography.....</i>	<i>2</i>
	<i>Drainage.....</i>	<i>2</i>
IV.	PROPOSED DRAINAGE.....	2
	<i>Proposed Drainage Improvements</i>	<i>2</i>
	<i>Basin Volume</i>	<i>3</i>
	<i>Hydraulic Design Criteria.....</i>	<i>3</i>
	<i>Stormwater Quality.....</i>	<i>3</i>
V.	CONCLUSION	3
VI.	REFERENCES.....	4

EXHIBITS

1. Location & Vicinity Map
2. Flood Hazard Assessment
3. Existing Drainage Conditions
4. Post-Development Drainage Conditions
5. Drainage Area Comparison

APPENDIX

- A. Hydrologic Runoff Calculations
- B. Existing Offsite Runoff Summary
- C. Post-Development Runoff Summary
- D. Post-Development Runoff Summary –
Comparison With Original Drainage Report For Kulamalu Commercial Village
- E. Excerpts from Kulamalu Commercial Village Drainage Report
- F. Stormwater Quality Calculations

I. INTRODUCTION

This report will evaluate the drainage impacts resulting from the proposed Hale Mahaolu Ewalu project. The new senior housing facility will be constructed on two existing, undeveloped parcels.

II. PROPOSED PROJECT

Location

The project is located in Kula, Maui, Hawaii. The 3.94-acre property is identified by Tax Map Key (2) 2-3-066:019 & 020 and is bordered by 'Ohi'a Lehua Place to the west and 'Ohi'a Ku Street to the north. A tributary branch of Kaluapulani Gulch is located south of the project site.

Project Description

The proposed project includes three residential apartment buildings, a Senior Center, Adult Day Care facility, concrete walkways, paved parking and landscaping areas. Utility improvements, such as sewer, water and electrical lines will also be constructed to accommodate the new structures.

III. EXISTING CONDITIONS

Flood Hazard

Flood Insurance Rate Maps published by the Federal Emergency Management Agency indicate that the project site is located within Zone X. Zone X is categorized as areas determined to be outside the 0.2% annual chance floodplain.

Topography

Presently the site is vacant and mostly covered with dry brush. The average grade of the site is about 7% and slopes from east to west. An existing retention basin which collects runoff from the commercial subdivision is located southwest of the project site.

Drainage

Stormwater runoff currently sheet flows to the west across the site. For a 10-year, 1-hour storm, approximately 2.21 cfs flows into the adjacent gulch and 2.89 cfs flows to the offsite drainage system on 'Ohi'a Lehua and 'Ohia Ku Street. This drainage system conveys the runoff to the aforementioned southwest existing basin. The runoff generated from the site under existing conditions for a 10-year, 1-hour storm event is 5.10 cfs and 6.03 for a 50-year, 1-hour storm event.

IV. PROPOSED DRAINAGE

Proposed Drainage Improvements

The developed site will consist of asphaltic concrete pavement surfaces, concrete walkways and roof tops. Landscaped areas surrounding the new buildings will also be included. Stormwater from parking areas will sheet flow to grated inlets and catch basins, and stormwater from roofs will be piped to the on-site drainage system. The post-development runoff is 17.23 cfs for a 10-year, 1-hour storm and 20.94 cfs for a 50-year, 1-hour storm.

Basin Volume

The on-site drainage system will connect to an existing privately-owned 24" drainline on 'Ohi'a Ku Street which outlets into the existing basin. According to the drainage report¹ for the commercial subdivision, the total basin volume is 96,000 cubic feet. The estimated volume for the project site is 28,258 cubic feet. The existing basin is expected to retain the project site runoff generated for the 50-year 1-storm.

Hydraulic Design Criteria

The hydraulic grade line (HGL) for the design flow shall be below the top of the manhole or drain inlet to prevent flooding during a 10-year, 1-hour storm event. The HGL shall be at least 1 foot below the top of the manhole at the connection to the offsite drainage system. The elevation of the HGL was based on a freeboard elevation of the top of pipe connecting to the offsite drainage system.

Stormwater Quality

This project will manage stormwater quality through use of infiltration methods. On-site runoff will be piped to a private drainage system. As mentioned previously, this system discharges to an existing basin. The retention basin is expected to detain the stormwater for a length of time which allows pollutants to settle.

The required design volume is 0.21 acre-ft – refer to Appendix for calculations. The drainage report for the commercial subdivision shows that the basin has a total capacity of 96,000 cubic ft. or 2.20 acre-ft. Therefore, it is anticipated that adequate volume for treatment is provided.

V. CONCLUSION

The proposed Hale Mahaolu Ewalu project will increase the runoff generated on site by 12.13 cfs to a total of 17.23 cfs for a 10-year, 1-hour storm. The runoff will be collected by on-site drain inlets and catch basins and conveyed to an existing basin. No adverse effects to surrounding properties, existing drainage systems, and streets are anticipated as a result of the proposed construction.

¹ "GRADING AND DRAINAGE REPORT FOR KULAMALU COMMERCIAL VILLAGE AT KOHOILA, KULA, MAUI, HAWAII TMK: (2) 2-3-08:05 & POR. OF 39" Prepared by Austin, Tsutsumi & Associates Inc. Dated Sept. 2000, Revised June 2003.

VI. REFERENCES

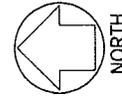
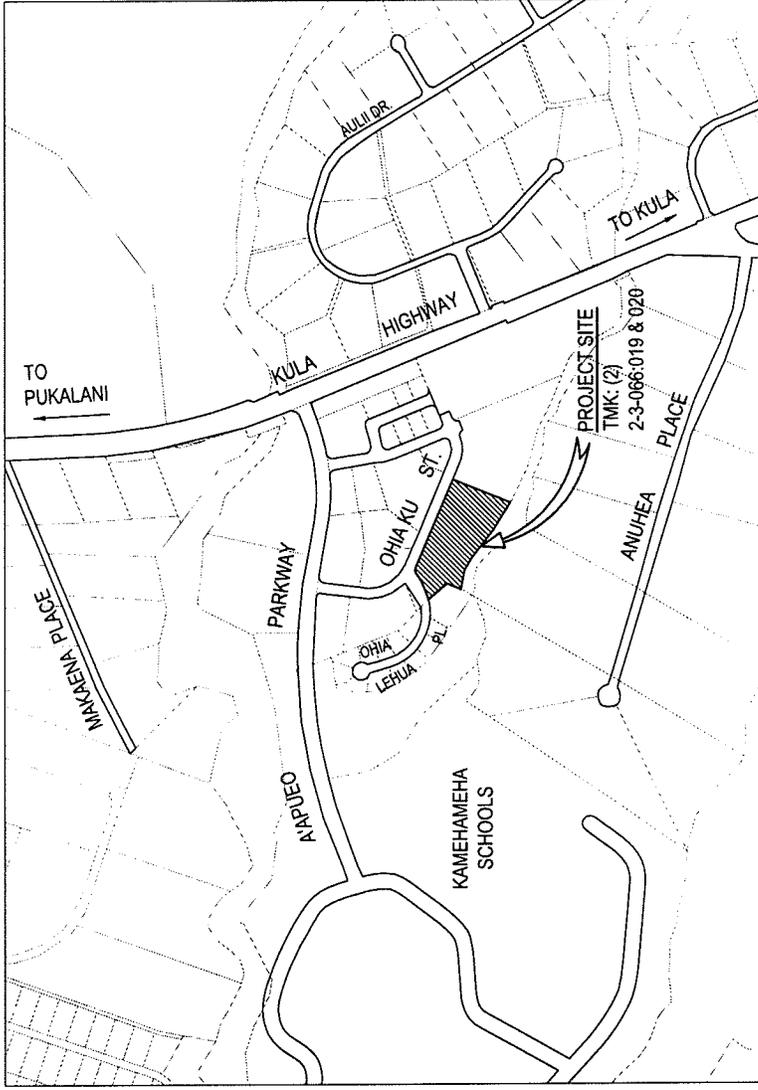
Federal Emergency Management Agency, National Flood Insurance Program, Maui County, Hawaii, Flood Insurance Rate Maps. Revised September 2009.

Title MC-15, Department of Public Works and Waste Management, County of Maui, Subtitle 01, Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui.

"Grading And Drainage Report For Kulamalu Commercial Village At Kohoila, Kula, Maui, Hawaii TMK: (2) 2-3-08:05 & POR. OF 39" Prepared by Austin, Tsutsumi & Associates Inc. Dated Sept. 2000, Revised June 2003.

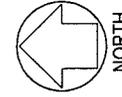
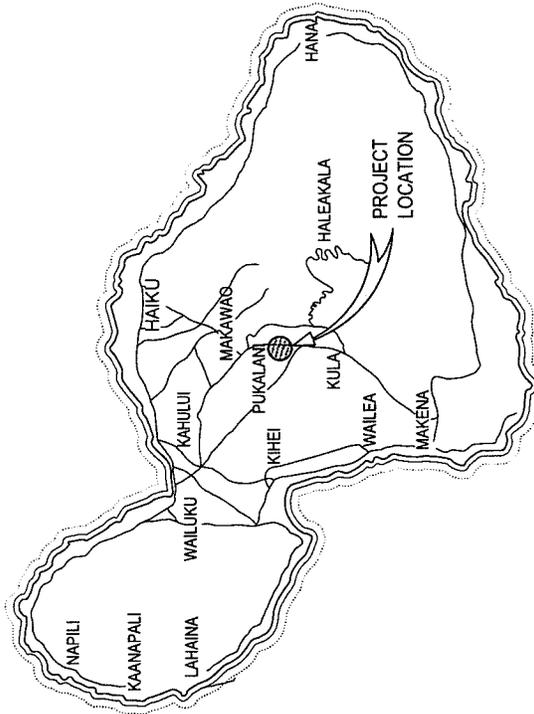
EXHIBITS

1. *Location & Vicinity Map*
 2. *Flood Hazard Assessment*
 3. *Existing Drainage Conditions*
 4. *Post-Development Drainage Conditions*
-



VICINITY MAP

NOT TO SCALE



LOCATION MAP

NOT TO SCALE

HALE MAHAOLU EWALU
 TMK (2) 2-3-066:019 & 020
 MAKAWAHO, MAUI, HAWAII

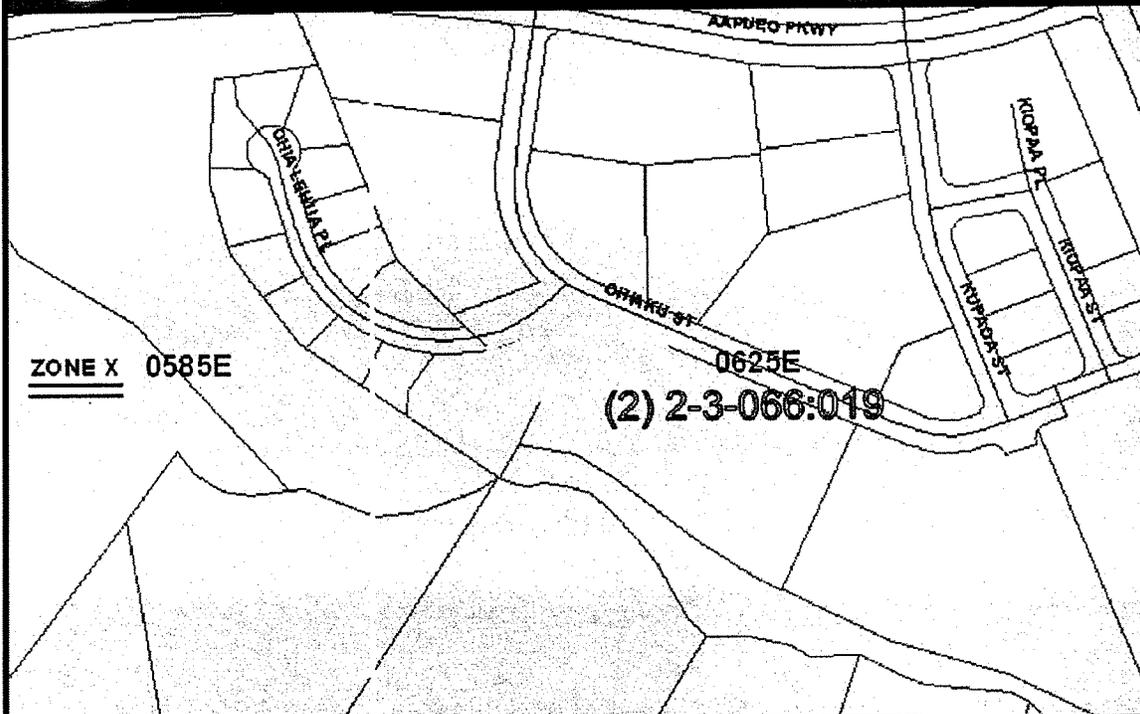
EXHIBIT 1 - LOCATION & VICINITY MAP

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State of Hawaii FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones.

- Zone A:** No BFE determined.
- Zone AE:** BFE determined.
- Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V:** Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE:** Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY: MAUI
 TMK NO: (2) 2-3-066-019
 PARCEL ADDRESS: 56 OHIA KU ST
 MAKAWAO, HI 96768
 FIRM INDEX DATE: SEPTEMBER 19, 2012
 LETTER OF MAP CHANGE(S): NONE
 FEMA FIRM PANEL(S): 1900030025E
 PANEL EFFECTIVE DATE: SEPTEMBER 25, 2009

PARCEL DATA FROM: MAY 2012
 IMAGERY DATA FROM: MAY 2005

IMPORTANT PHONE NUMBERS

County NFIP Coordinator
 County of Maui
 Francis Cerizo, CFM (808) 270-7771
 State NFIP Coordinator
 Carol Tyau-Beam, P.E., CFM (808) 587-0267

Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR from any liability, which may arise from its use.

If this map has been identified as "PRELIMINARY" or "UNOFFICIAL", please note that it is being provided for informational purposes and is not to be used for official decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management guidelines.

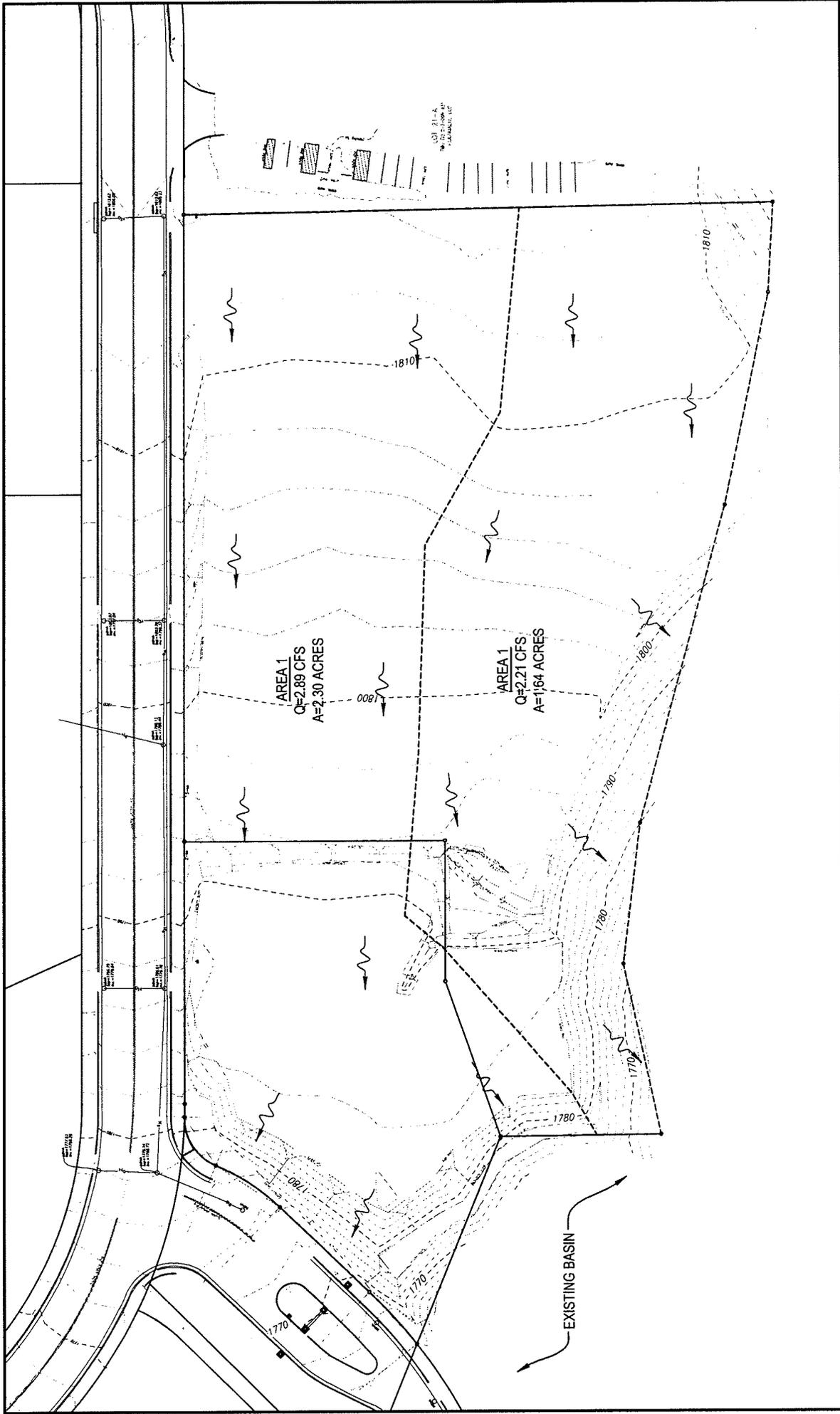
EXHIBIT 2 - FLOOD HAZARD ASSESSMENT



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HALE MAHAOLU EWALU

TMK (2) 2-3-066:019 & 020
 KULA, MAUI, HAWAII

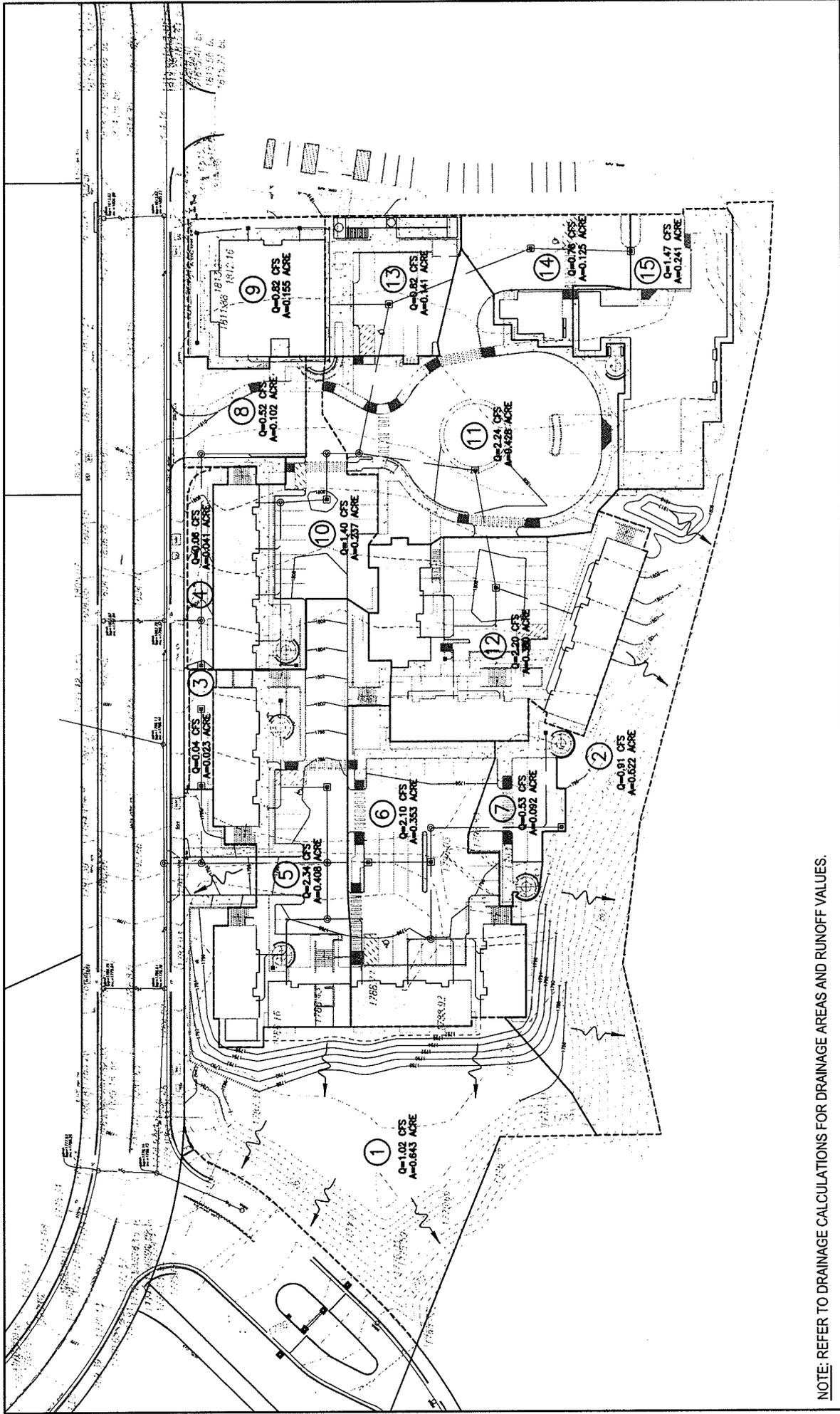


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HALE MAHAOLU EWALU
 TMK (2) 2-3-066-019 & 020
 MAKAWAHO, MAUI, HAWAII

EXHIBIT 3 - EXISTING DRAINAGE CONDITIONS

SCALE: 1" = 50'



NOTE: REFER TO DRAINAGE CALCULATIONS FOR DRAINAGE AREAS AND RUNOFF VALUES.



EXHIBIT 4 - POST-DEVELOPMENT DRAINAGE CONDITIONS

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HALE MAHAOLU EWALU
 TMK (2) 2-3-066-019 & 020
 MAKAWAHO, MAUI, HAWAII

SCALE: 1" = 50'

APPENDIX

- A. *Hydrologic Runoff Calculations*
 - B. *Existing Offsite Runoff Summary*
 - C. *Post-Development Runoff Summary*
 - D. *Hydraulic Calculations*
 - E. *Excerpts from Kulamalu Commercial Village Drainage Report*
 - F. *Stormwater Quality Calculations*
-

HYDROLOGIC RUNOFF CALCULATIONS

Hydrologic calculations for both existing and developed conditions were performed using the Rational Method. Factors used in the calculations were taken from the County of Maui's Drainage Standards as outlined in "Title MC-15, Chapter 4, Rules for the Design of Storm Drainage Facilities in the County of Maui."

Rational Method: $Q = CiA$

Q	=	Peak flow rate (cfs)
C	=	Runoff coefficient
i	=	Intensity (in/hr)
A	=	Area (acre)

The following factors were used:

A. Recurrence Intervals:

10 year, 1-hour storm
I = 2.5" (From Plate 4)

50 year, 1-hour storm
I = 3.0" (From Plate 4)

B. Time of Concentration:

Overland flow time was determined from Plate 1, using hydraulic length, slope, and ground characteristics to the intake point.

C. Rainfall Intensity:

Rainfall intensity (i) was determined by using Plate 2, comparing the time of concentration with 1 hour rainfall.

D. Runoff Coefficient:

Runoff coefficient (C) was determined from Tables 1 and 2, as follows:

Pavement, roof	C = 0.95
Driveways & walkways	C = 0.85
Landscaping	C = 0.30

For areas with multiple surfaces, a weighted "c" value was calculated using the above.

STORM RUNOFF CALCULATIONS, EXISTING RUNOFF SUMMARY

PROJECT: Hale Mahaolu Ewalu at Kulamalu
 LOCATION: Kula, Maui, Hawaii

T_m = 10 YEARS 1-HR. RAINFALL = 2.5 INCHES
 50 YEARS 1-HR. RAINFALL = 3 INCHES

AREA	OVERLAND FLOW TIME			i (IN./HR.)		A (SQ. FT.)	A (ACRES)	Q (CFS)		C VALUE	INLET	GOES TO
	LENGTH (FEET)	SLOPE (FT/FT)	T _c (MIN.)	10YR	50YR			10 YR	50 YR			
				4.2	4.9			2.89	3.38			
1	580	5%	21	4.2	4.9	100072.000	2.297	2.89	3.38	0.30	-	Basin
2	440	8%	17	4.5	5.4	71364.000	1.638	2.21	2.65	0.30	-	Gulch
							TOTAL	5.10	6.03			

STORM RUNOFF CALCULATIONS, POST-DEVELOPMENT RUNOFF SUMMARY

PROJECT: Hale Mahaolu Ewalu at Kulamalu
 LOCATION: Kula, Maui, Hawaii

T_m = 10 YEARS 1-HR. RAINFALL = 2.5 INCHES
 50 YEARS 1-HR. RAINFALL = 3 INCHES

AREA	OVERLAND FLOW TIME			i (IN./HR.)		A (SQ. FT.)	A (ACRES)	Q (CFS)		C VALUE	INLET	GOES TO
	LENGTH (FEET)	SLOPE (FT/FT)	T _c (MIN.)	10YR	50YR			10 YR	50 YR			
1	180	15%	14	4.8	5.7	27998	0.643	1.02	1.22	0.33	Sheet flow	Basin
2	70	30%	8	5.7	6.8	22738	0.522	0.91	1.09	0.31	Sheet flow	Gulch
3	25	2%	7.5	5.8	7	1009	0.023	0.04	0.05	0.30	CDI	Basin
4	110	2%	13	4.9	5.8	1793	0.041	0.06	0.07	0.30	CDI	Basin
5	175	7%	5	6.4	7.8	17754	0.408	2.34	2.85	0.90	CDI	Basin
6	110	2%	5	6.4	7.8	15397	0.353	2.10	2.55	0.93	CDI	Basin
7	75	2%	5	6.4	7.8	3989	0.092	0.53	0.64	0.90	CDI	Basin
8	50	6%	5	6.4	7.8	4459	0.102	0.52	0.63	0.79	CDI	Basin
9	70	2%	5	6.4	7.8	6767	0.155	0.82	1.00	0.83	CDI	Basin
10	130	2%	5	6.4	7.8	10336	0.237	1.40	1.71	0.92	CDI	Basin
11	115	2%	5	6.4	7.8	18628	0.428	2.24	2.73	0.82	CDI	Basin
12	80	2%	5	6.4	7.8	16537	0.380	2.20	2.68	0.91	CDI	Basin
13	60	2%	5	6.4	7.8	6122	0.141	0.82	1.00	0.91	CDI	Basin
14	80	2%	5	6.4	7.8	5435	0.125	0.76	0.93	0.95	CDI	Basin
15	130	2%	5	6.4	7.8	10489	0.241	1.47	1.79	0.95	CDI	Basin

17.23 20.94

TOTAL RUNOFF TO EXISTING BASIN **16.32 19.85**

Basin volume check:

$$Q_T = C \times I_{50} \times A \times 3630$$

Q_T = Required storage volume

C = Runoff coefficient of contributing areas

$$\frac{2.08(0.95) + 0.85(0.30) + 0.44(0.85)}{3.37}$$

C = 0.77

A = Contributing area
 A = 3.37 acres

I₅₀ = 3 inches (50-year, 1-hour storm)

$$Q_T = 0.77 \times 3 \times 3.37 \times 3630$$

Q_T = **28,258 cf.**

INFLOW OUTFLOW SUMMARY
FOR
KULAMALU COMMERCIAL
VILLAGE

Pre-Development Information

Runoff (cfs):	82.80
Tc (min):	18

Results: PASSED

Min Storage Requirement (cfs):	68,234.9
Min Storage Req'd w/ FS (cf) :	68,234.9
Additional Available Storage (cf):	27765.1
Available Factor of Safety:	1.4

Post-Development Information

Runoff (cfs):	160.93
Tc (min):	40

Basin Information

Use Basin Sizing Info. (Y/N):	N
Storage Available (cf):	96,000.0
Required Factor of Safety:	1

Available Storage Used
In Calculations:

96,000.0

REQUIRED DESIGN VOLUME FOR DETENTION BASED CONTROL

PROJECT: Hale Mahaolu Ewalu at Kulamalu
LOCATION: Kula, Maui, Hawaii

The required design volume for detention base control calculation is based on Title MC-15, Chapter 111 "RULES FOR THE DESIGN OF STORM WATER TREATMENT BEST MANAGEMENT PRACTICES"

The required design volume for detention based control is equal to the entire runoff volume that would occur from the area contributing to the detention facility with a one-inch rain storm.

Per § 15-111-5, "Management practices to meet criteria":

C = Runoff Coefficient
 $C = 0.05 + (0.009) \times (\text{IMP})$

IMP = Impervious Area (surface areas which allow little to no infiltration, include pavements, roofs, etc.) for a tributary watershed, expressed as a percentage

$\text{WQDV} = C \times 1" \times A \times 3630$
WQDV = Water quality design volume in cubic feet

C = Runoff Coefficient
A = Area of the site (acres)
3630 = conversion factor

IMP =	64%	
C =	$0.05 + (0.009 \times 64)$	
C =	0.63	
A =	3.94	acres
WQDV =	8953.18	cf.
	<u>0.21</u>	<u>acre-ft.</u>

APPENDIX G.

Botanical and Fauna Survey

BOTANICAL AND FAUNA SURVEYS
HALE MAHA'OLU 'EWALU
SENIOR RESIDENTIAL HOUSING PROJECT
'A'APUEO, KULA, MAUI

by

ROBERT W. HOB DY
ENVIRONMENTAL CONSULTANT
Kokomo, Maui
July 2013

Prepared for:
Munekiyo & Hiraga, Inc.

BOTANICAL AND FAUNA SURVEY
HALE MAHA'OLU 'EWALU SENIOR RESIDENTIAL HOUSING PROJECT

INTRODUCTION

The Hale Maha'olu 'Ewalu Senior Residential Housing Project is located on 3.936 acres of undeveloped land (TMKs (2) 2-3-66:019, 020) in A'apueo, Pukalani, Maui. On its north side is 'Ohi'a Ku Street, on its west side is Ohi'a Lehua Street, on its south side is Kaluapulani Gulch and on its east side is a parking lot. This biological resources study was initiated by the owners in fulfillment of environmental requirements of the planning process.

SITE DESCRIPTION

The project area was cleared and leveled during a previous subdivision project and is presently vegetated with a wide variety of grasses, agricultural weeds and a few scattered trees. The soil which has been altered by the clearing work consists of Keahua Cobbly Silty Clay, 7-15 % slopes (KnhC) with slow to medium runoff and slight to moderate erosion hazard (Foote et al, 1972). Elevations range from 1,760 feet up to 1,820 feet above sea level. Rainfall averages about 30 inches per year with winter maximums (Armstrong, 1983).

BIOLOGICAL HISTORY

This area was once a dry native shrubland dominated by such species as 'a'ali'i (*Dodonaea viscosa*), 'akia (*Wikstroemia oahuensis*), williwili (*Erythrina sandwicensis*), pili grass (*Heteropogon contortus*) and kalamalō (*Eragrostis atropioides*).

Over the past 150 years the area has alternated between cattle grazing and pineapple production and back to grazing. The land has been plowed and farmed as well as heavily grazed during this period. Today the land stands idle and is growing in with dense grass and shrubs and has an itinerant herd of deer. This has resulted in the loss of native plant species and their replacement with hardy non-native species that now dominate the site.

SURVEY OBJECTIVES

This report summarizes the findings of a flora and fauna survey of the proposed Hale Maha'olu 'Ewalu Kulamalu Project which was conducted in July 2013.

The objectives of the survey were to:

1. Document what plant and animal species occur on the property or may likely occur in the existing habitat.
2. Document the status and abundance of each species.
3. Determine the presence or likely occurrence of any native flora and fauna, particularly any that are Federally listed as Threatened or Endangered. If such occur, identify what features of the habitat may be essential for these species.
4. Determine if the project area contains any special habitats which if lost or altered might result in a significant negative impact on the flora and fauna in this part of the island.

BOTANICAL SURVEY REPORT

SURVEY METHODS

A walk-through botanical survey method was used following a route to ensure complete coverage of the area. Areas most likely to harbor native or rare plants such as the edge of the gulch or rocky outcroppings were more intensively examined. Notes were made on plant species, distribution and abundance as well as terrain and substrate.

DESCRIPTION OF THE VEGETATION

The project area is vegetated for the most part with low statured sub-shrubs and grasses of great diversity. Most common are: Rhodes grass (*Chloris gayana*), Guinea grass (*Megathyrsus maximus*), Natal redtop (*Melinis repens*), keeled goosefoot (*Chenopodium carinatum*), fireweed (*Senecio madagascariensis*), tumble mustard (*Sisymbrium altissimum*), hedge mustard (*Sisymbrium officinale*), glycine (*Neonotonia wightii*) and lesser snapdragon (*Misopates orontium*). Somewhat less common were: (*Amaranthus hybridus*) no common name, yellow star thistle (*Centaurea melitensis*), cocklebur (*Xanthium strumarium*), cheeseweed (*Malva parviflora*) and silk oak (*Grevillea robusta*).

A total of 70 plant species were recorded on the property during the survey. Of these only three species were native, the widespread and common koali awahia (*Ipomoea indica*), 'ilima (*Sida fallax*) and 'uhaloa (*Waltheria indica*), which are all indigenous in Hawaii as well as in other countries. The remaining 67 species are all non-native introductions that are of no particular environmental interest or concern.

DISCUSSION AND RECOMMENDATIONS

The vegetation throughout the project area is comprised mainly of non-native species with just three common native species koali awahia (*Ipomoea indica*), 'ilima (*Sida fallax*) and 'uhaloa (*Waltheria indica*) scattered about. No Federally listed Threatened or Endangered species (USFWS, 1999) were found on the property nor were any found that are candidates for such status. No special habitats were found on the property either. Nothing remotely resembling a wetland occurs on this well drained upland site. None of the defining wetland characteristics of vegetation, soils or hydrology occur on this property.

Because of the above existing conditions there is little of botanical concern with regard to this property and the proposed project is not expected to have a significant negative impact on the botanical resources in this part of Maui.

PLANT SPECIES LIST

Following is a checklist of all those vascular plant species inventoried during the field studies. Plant families are arranged alphabetically within two groups: Monocots and Dicots. Taxonomy and nomenclature of the plants are in accordance with Wagner et al. (1999).

For each species, the following information is provided:

1. Scientific name with author citation
2. Common English or Hawaiian name.
3. Bio-geographical status. The following symbols are used:

endemic = native only to the Hawaiian Islands; not naturally occurring anywhere else in the world.

indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).

Polynesian = those plants brought to the islands by the Polynesians in the course of their migrations.

non-native = all those plants brought to the islands intentionally or accidentally after western contact.

4. Abundance of each species within the project area:

abundant = forming a major part of the vegetation within the project area.

common = widely scattered throughout the area or locally abundant within a portion of it.

uncommon = scattered sparsely throughout the area or occurring in a few small patches.

rare = only a few isolated individuals within the project area.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MONOCOTS			
POACEAE (Grass Family)			
<i>Cenchrus ciliaris</i> L.	buffelgrass	non-native	uncommon
<i>Chloris barbata</i> (L.) Sw.	swollen fingergrass	non-native	uncommon
<i>Chloris gayana</i> Kunth	Rhodes grass	non-native	common
<i>Chloris virgata</i> Sw.	feather fingergrass	non-native	rare
<i>Cynodon dactylon</i> (L.) Pers.	Bermuda grass	non-native	uncommon
<i>Eragrostis amabilis</i> (L.) Wight & Arnott	Japanese lovegrass	non-native	rare
<i>Eragrostis pectinacea</i> (Michx.) Nees	Carolina lovegrass	non-native	uncommon
<i>Megathyrsus maximus</i> (Jacq.) Simon & Jacobs	Guinea grass	non-native	common
<i>Melinis repens</i> (Willd.) Zizka	Natal redtop	non-native	common
<i>Paspalum macrophyllum</i> Kunth	bigleaf paspalum	non-native	rare
DICOTS			
AMARANTHACEAE (Amaranth Family)			
<i>Amaranthus hybridus</i> L.	spiny amaranth	non-native	rare
<i>Chenopodium carinatum</i> R. Br.	keeled goosefoot	non-native	common
<i>Salsola tragus</i> L.	Russian thistle	non-native	rare
ANACARDIACEAE (Mango Family)			
<i>Schinus terebinthifolius</i> Raddi	Christmas berry	non-native	rare
APOCYNACEAE (Dogbane Family)			
<i>Asclepias physocarpa</i> (E.Meyen) Schlechter	balloon plant	non-native	rare
ASTERACEAE (Sunflower Family)			
<i>Bidens pilosa</i> L.	Spanish needle	non-native	uncommon
<i>Centaurea melitensis</i> L.	yellow star thistle	non-native	uncommon
<i>Cirsium vulgare</i> (Savi) Ten.	bull thistle	non-native	rare
<i>Conyza bonariensis</i> (L.) Cronq.	hairy horseweed	non-native	rare
<i>Emilia fosbergii</i> Nicolson	red pualele	non-native	uncommon
<i>Heterotheca grandiflora</i> Nutt.	telegraph weed	non-native	rare
<i>Lactuca sativa</i> L.	prickly lettuce	non-native	rare
<i>Pluchea carolinensis</i> (Jacq.) G.Don	sourbush	non-native	rare
<i>Senecio madagascariensis</i> Poir.	fire weed	non-native	common
<i>Sonchus oleraceus</i> L.	pualele	non-native	uncommon
<i>Tridax procumbens</i> L.	coat buttons	non-native	rare
<i>Verbesina encelioides</i> (Cav.) Benth. & Hook.	golden crown-beard	non-native	uncommon
<i>Xanthium strumarium</i> L.	cocklebur	non-native	uncommon
<i>Zinnia peruviana</i> (L.) L.	zinnia	non-native	rare
BRASSICACEAE (Mustard Family)			
<i>Lepidium africanum</i> (Burm.f.) DC.	African pepperwort	non-native	uncommon
<i>Lepidium virginicum</i> L.	pepperwort	non-native	uncommon
<i>Sisymbrium altissimum</i> L.	tumble mustard	non-native	common
<i>Sisymbrium officinale</i> (L.) Scop.	hedge mustard	non-native	common
CACTACEAE (Cactus Family)			
<i>Opuntia ficus-indica</i> (L.) Mill.	panini	non-native	rare

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
CARYOPHYLLACEAE (Pink Family)			
<i>Polycarpon tetraphyllum</i> (L.) L.	four-leaved allseed	non-native	rare
CONVOLVULACEAE (Morning Glory Family)			
<i>Ipomoea indica</i> (J.Burm.) Merr.	koali awahia	indigenous	rare
EUPHORBIACEAE (Spurge Family)			
<i>Euphorbia hirta</i> L.	hairy spurge	non-native	rare
<i>Euphorbia prostrata</i> Aiton	prostrate spurge	non-native	rare
FABACEAE (Pea Family)			
<i>Acacia farnesiana</i> (L.) Willd.	klu	non-native	uncommon
<i>Acacia mearnsii</i> De Willd.	black wattle	non-native	rare
<i>Chamaecrista nictitans</i> (L.) Moench	partridge pea	non-native	uncommon
<i>Crotalaria incana</i> L.	fuzzy rattlepod	non-native	uncommon
<i>Crotalaria pallida</i> Aiton	smooth rattlepod	non-native	rare
<i>Desmodium intortum</i> (Mill.) Urb.	Spanish clover	non-native	uncommon
<i>Desmodium sandwicense</i> E. Meyen	beggarweed	non-native	rare
<i>Indigofera hendecaphylla</i> Jacq.	creeping indigo	non-native	rare
<i>Indigofera suffruticosa</i> Mill.	inikō	non-native	uncommon
<i>Leucaena leucocephala</i> (Lam.) de Wit	koa haole	non-native	rare
<i>Macroptilium atropurpureum</i> (DC.) Urb.	siratro	non-native	uncommon
<i>Macroptilium lathyroides</i> (L.) Urb.	wild bean	non-native	uncommon
<i>Medicago lupulina</i> L.	black medick	non-native	uncommon
<i>Melilotus indica</i> (L.) All.	yellow sweet clover	non-native	uncommon
<i>Neonotonia wightii</i> (Wight & Arnott) Lackey	glycine	non-native	common
<i>Trifolium arvense</i> L.	rabbit's foot clover	non-native	rare
LAMIACEAE (Mint Family)			
<i>Leonotis nepetifolia</i> (L.) R. Br.	lion's ear	non-native	uncommon
<i>Stachys arvensis</i> L.	staggerweed	non-native	rare
MALVACEAE (Mallow Family)			
<i>Abutilon grandifolium</i> (Willd.) Sweet	hairy abutilon	non-native	uncommon
<i>Malva parviflora</i> L.	cheese weed	non-native	uncommon
<i>Sida fallax</i> Walp.	'ilima	indigenous	rare
<i>Sida rhombifolia</i> L.	Cuban jute	non-native	rare
<i>Triumfetta semitriloba</i> Jacq.	Sacramento bur	non-native	rare
<i>Waltheria indica</i> L.	'uhaloa	indigenous	rare
PLANTAGINACEAE (Plantain Family)			
<i>Misopates orontium</i> (L.) Raf.	lesser snapdragon	non-native	common
<i>Plantago lanceolata</i> L.	narrow-leaved plantain	non-native	uncommon
PROTEACEAE (Protea Family)			
<i>Grevillea robusta</i> A. Cunn. ex R. Br.	silk oak	non-native	uncommon
SOLANACEAE (Nightshade Family)			
<i>Nicandra physalodes</i> (L.) Gaertner	apple-of-Peru	non-native	uncommon
<i>Solanum linnaeanum</i> Hepper & P. Jaeger	apple of Sodom	non-native	rare

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
VERBENACEAE (Verbena Family)			
<i>Lantana camara</i> L.	lantana	non-native	rare
<i>Verbena litoralis</i> Kunth	ha'u ōwī	non-native	rare

FAUNA SURVEY REPORT

SURVEY METHODS

A walk-through fauna survey method was conducted in conjunction with the botanical survey. All parts of the project area were covered. Field observations were made with the aid of binoculars and by listening to vocalizations. Notes were made on species, abundance, activities and location as well as observations of trails, tracks, scat and signs of feeding. In addition an evening visit was made to the area to record crepuscular activities and vocalizations and to see if there was any evidence of occurrence of the Hawaiian hoary bat (*Lasiurus cinereus semotus*) in the area.

RESULTS

MAMMALS

Only sign of two species of mammals was seen during three site visits on the property. Taxonomy and nomenclature follow Tomich (1986).

Axis deer (*Axis axis*) - There was abundant recent sign of axis deer throughout the property. Trails were crisscrossing the grass areas and brush lands. Tracks and droppings were everywhere. The grass was cropped low and antler rubbings were visible on saplings. Although none were seen, it is obvious that a substantial herd uses this area regularly. These deer usually bed down in protected locations during the day and become active in the evening when they move about and feed under cover of darkness.

Domestic dog (*Canis familiaris*) - Tracks and droppings were seen along the edges of the property where owners bring them for exercise.

While not seen during the survey rats (*Rattus* spp.) and mice (*Mus domesticus*) feed on seeds, fruits and herbaceous vegetation while mongoose (*Herpestes auropunctatus*) and cats (*Felis catus*) would hunt for these rodents

A special effort was made to look for any occurrence of the native Hawaiian hoary bat by making an evening survey on the property. When present in an area these bats can be easily identified as they forage for insects, their distinctive flight patterns clearly visible in the glow of twilight. No evidence of such activity was observed though visibility was excellent. In addition a bat detecting device (Batbox IIID) was utilized, set to the frequency of 27,000 Hertz that these bats are known to use for echolocation. No bats were detected using this device.

BIRDS

Birdlife was somewhat sparse on this suburban property. Seven species of non-native birds were seen during three site visits. All of these were common species that are widespread in Hawaii. Most common were: house finch (*Carpodacus mexicanus*), common myna (*Acridotheres tristis*) and zebra dove (*Geopelia striata*). Taxonomy and nomenclature follow American Ornithologists' Union (2011). Other non-native species may occur on the property from time to time such as cattle egret (*Bubulcus ibis*), house sparrow (*Passer domesticus*) and Japanese white-eye (*Zosterops japonicus*). The habitat, however, is not suitable for Hawaii's native forest birds because of the presence of mosquitoes and the avian diseases they carry and transmit as well as a number of serious predators.

INSECTS

A modest diversity of non-native insect species were recorded on the property during three site visits. Taxonomy and nomenclature follow Nishida et al (1992). Most common were the cabbage butterfly (*Pieris rapae*), the long tail blue butterfly (*Lampides boeticus*) and the monarch butterfly (*Danaus plexippus*).

One native Sphingid moth, Blackburn's sphinx moth (*Manduca blackburni*) has been put on the Federal Endangered species list and this designation requires special focus (USFWS 2000). Blackburn's sphinx moth is known to occur in parts of East Maui and Central Maui but its feeding requirements are very specialized. It requires host plants in the nightshade family that are toxic such as native species of 'aiea (*Nothoecstrum spp.*) and such non-native alternative hosts as tobacco (*Nicotiana tabacum*) and tree tobacco (*Nicotiana glauca*). None of these plants were found on the property, and no Blackburn's sphinx moth or their larvae were seen.

CONCLUSIONS AND RECOMMENDATIONS

All of the fauna observed are common and widespread non-native species. None of these are of any particular environmental interest or concern. No Federally listed Threatened or Endangered mammal, bird or insect species were recorded during the course of the survey and no special fauna habitats were identified. As a result of the above findings, the proposed changes in land use are not expected to have a significant negative impact on the fauna resources in this part of Maui.

No special recommendations are deemed necessary or appropriate with regard to the fauna resources on this property.

ANIMAL SPECIES LIST

Following is a checklist of the animal species inventoried during the field work. Animal species are arranged in descending abundance within three groups: Mammals, Birds and Insects. For each species the following information is provided:

1. Common name
2. Scientific name
3. Bio-geographical status. The following symbols are used:

endemic = native only to Hawaii; not naturally occurring anywhere else in the world.

indigenous = native to the Hawaiian Islands and also to one or more other geographic area(s).

non-native = all those animals brought to Hawaii intentionally or accidentally after western contact.

migratory = spending a portion of the year in Hawaii and a portion elsewhere. In Hawaii the migratory birds are usually in the overwintering/non-breeding phase of their life cycle.

4. Abundance of each species within the project area:

abundant = many flocks or individuals seen throughout the area at all times of day.

common = a few flocks or well scattered individuals throughout the area.

uncommon = only one flock or several individuals seen within the project area.

rare = only one or two seen within the project area.

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
MAMMALS			
<i>Axis axis</i> Erxleben	axis deer	non-native	uncommon
<i>Canis familiaris</i> L.	domestic dog	non-native	rare
BIRDS			
<i>Carpodacus mexicanus</i> Muller	house finch	non-native	common
<i>Acridotheres tristis</i> L.	common myna	non-native	common
<i>Geopelia striata</i> L.	zebra dove	non-native	common
<i>Francolinus pondicerianus</i> Gmelin	gray francolin	non-native	uncommon
<i>Streptopelia chinensis</i> Scopoli	spotted dove	non-native	uncommon
<i>Lonchura punctulata</i> L.	nutmeg mannikin	non-native	uncommon
<i>Cardinalis cardinalis</i> L.	northern cardinal	non-native	rare

SCIENTIFIC NAME	COMMON NAME	STATUS	ABUNDANCE
INSECTS			
Order DIPTERA - flies			
CALLIPHORIDAE (Blow Fly Family)			
<i>Calliphora vomitoria</i> L.	blow fly	non-native	uncommon
MUSCIDAE (Housefly Family)			
<i>Musca sorbens</i> Wiedemann	dung fly	non-native	uncommon
TACHINIDAE (Tachinid Fly Family)			
<i>Lespesia archippivora</i> Riley	caterpillar parasitic fly	non-native	uncommon
Order HYMENOPTERA - bees, wasps & ants			
APIDAE (Honey Bee Family)			
<i>Apis mellifera</i> L.	honey bee	non-native	uncommon
<i>Xylocopa sonorina</i> Smith	Sonoran carpenter bee	non-native	uncommon
VESPIDAE (Vespid Wasp Family)			
<i>Pachodynerus nasidens</i> Latreille	keyhole wasp	non-native	rare
Order LEPIDOPTERA - butterflies & moths			
LYCAENIDAE (Gossamer-winged Butterfly Family)			
<i>Lampides boeticus</i> L.	Long-tail blue butterfly	non-native	common
NYMPHALIDAE (Brush-footed Butterfly Family)			
<i>Danaus plexippus</i> L.	monarch butterfly	non-native	common
<i>Vanessa cardui</i> L.	painted lady	non-native	rare
PIERIDAE (White and Sulphur Butterfly Family)			
<i>Pieris rapae</i> L.	cabbage butterfly	non-native	abundant

APPENDIX H.
Cultural Interviews

HALE MAHAOLU EWALU SENIOR RESIDENTIAL HOUSING

Cultural Interview

Interview with: Louis George Cambra, Jr.

Interview date: August 21, 2013

Interviewed by: Colleen Suyama, Senior Associate, Munekiyo & Hiraga, Inc.

The interview with Louis George Cambra, Jr. took place at Mr. Cambra's residence on Makaena Place, Pukalani on August 21, 2013. Louis Cambra currently resides in Pukalani on the Pukalani side of Kaluapulani Gulch and the Kulamalu commercial subdivision where CVS Longs is located. He was born in Puunene at Spanish B Camp to Louis DeCambra, Sr. and Margaret Mohica DeCambra and is of Portuguese and Puerto Rican descent. He spells his surname differently from his parents. Besides himself he has two (2) sisters. Louis Cambra has four adult children, two (2) girls and two (2) boys. He is a retired police officer and retired fireman.

Before moving to Pukalani, Mr. Cambra resided in Kahului and used his property as pasture for his cattle until he built his residence. He also currently leases land from the State of Hawaii to use a portion of Kaluapulani Gulch for cattle grazing. He recounted that he hunted deer in the gulches for many years and currently holds an eradication permit. Unlike the old days, today you need to obtain permission to access the gulch for hunting. He is unaware of any traditional access in the area and did not think that doubts any existed since the properties along the gulch extend to the center of the gulch and permission is needed from the landowner.

He recalled that originally, the land below his property was owned by Manuel Phillips who subdivided the property to give to his family members such as the Boteilho families. Since then, more subdivisions have occurred and houses, were built in the area.

In the gulches, especially the larger Kaluapulani Gulch between his property and the Kulamalu project, he was advised by Charlie Maxwell that there are many cultural sites. He recalled that near the large boulders in the Kaluapulani Gulch there are a number of petroglyphs that still exist. He took some friends into the gulch and was able to locate the petroglyphs. He was also told by Mr. Maxwell that there are cultural sites located in the smaller gulch next to the Kula-side of the Kulamalu project. It is Mr. Cambra's understanding that additional petroglyphs are located in this gulch.

During the time the State was considering the Kihei to Upcountry Road, the vacant property on the Pukalani side of his property was being considered for an alternate route. He contacted Dana Hall to come and see the area. The roadway would have affected the cultural sites in the gulch, as well as a heiau on the adjacent property. Dana and Isaac Hall opposed the alternative route which was eventually dropped by the State.

He also recounted that when Mr. Maxwell was alive, he wanted to create a cultural area in the Kulamalu project with the cooperation of the project developer, Everett Dowling. Unfortunately, he passed away before it could be accomplished.

Mr. Cambra noted that the gulch is overgrown with Christmas berries and shrubs and there were a lot of bees during his last visit into the gulch. Regarding native plants, he recalled being told that there were trees used for medicinal purpose in the gulch. He was unsure the name of these trees and doubted if they still existed since the deer frequent the gulches and will eat everything.

He does not oppose the proposed project since it is for the elderly and not for out-of-state buyers. However, he felt it was important to ensure that the elderly are able to rent these units. He would have concerns if this was housing for mainland buyers. Mr. Cambra felt that there are too many houses being bought by mainlanders and local people are unable to buy a house.

HALE MAHAOLU EWALU SENIOR RESIDENTIAL HOUSING

Cultural Interview

Interview with: Aric Nakashima

Interview date: August 19, 2013

Interviewed by: Colleen Suyama, Senior Associate, Munekiyo & Hiraga, Inc.

The interview with Aric Nakashima took place at the offices of Munekiyo & Hiraga, Inc. on August 19, 2013. Aric Nakashima is a long-time resident of the Pukalani area and operates the Pukalani Superette with his brother Miles Nakashima. Pukalani Superette is a local landmark in the area. The store was founded by Mr. Nakashima's grandparents, Takeo and Kome Tanizaki, and was originally named Tanizaki Store. Mr. Nakashima's mother Sumiko Tanizaki Nakashima worked in the store after she returned from Japan after World War II. The present store was built circa 1955 and the name of the store was changed to Pukalani Superette on December 13, 1955. Prior to the area around Pukalani Superette being developed, Mr. Nakashima remembers seeing old photographs of the area where there were numerous pig farms near the Pukalani Superette across where the Pukalani Baptist Church is currently located.

Mr. Nakashima's father is Moriaki Nakashima who retired from Kahului Railroad Company. Mr. Nakashima currently lives at the family home on Ikea Place in Pukalani which was one of the first half-acre lots created prior to development of Pukalani Terrace. He also lived in the Kula 200 project across of Kulamalu in the late 1990s when the area below the highway was still in pasture. Today, the area is developed with a lot of houses.

As a child growing up in the area, he remembers playing in the pineapple fields and the plantation ditch between the pineapple fields and sugarcane fields below Pukalani since there were no parks in Pukalani. He and his friends also used to play within the gulches below Kula Highway surrounding the project area. They would leave their bikes at the top or the foot of the gulch and walk down the foot trails into the gulches. He remembers there were kiawe trees growing in the gulches and a lot of weeds but was unaware of any native plants in the area. As a child, they did not worry about getting permission to travel on private land. Today, you need to get permission from the landowner. He remembers having to get the landowner's permission to walk in the gulches with his brother's Cub Scout pack.

Years later he remembers Uncle Charlie Maxwell explaining that the gulch area contained historic and cultural sites that should be protected. He was shown

petroglyphs within the gulches and he was told the caves in the walls of the gulches were used for Hawaiian burials and not to enter the caves. To this day, Mr. Nakashima practices respect for burials and makes sure he does not walk over someone's grave. He was also told the fill used at the Kulamalu project came from the Piko (Red 'Cinder Cone), which was a concern of Uncle Charlie. Other than what was told to him by Uncle Charlie, he is not aware of any other cultural practices in the area.

He also recounted that there were ledges along the cliff walls of the gulches that cattle would lie under when the area was used for pasture.

Mr. Nakashima did not voice any concerns regarding the proposed project.

APPENDIX I.
Traffic Assessment

Julian Ng Incorporated

Transportation Engineering Consultant

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Kaneohe, Hawaii 96744-0816

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July 31, 2013

Ms. Colleen Suyama
Munekiyo & Hiraga, Inc.
305 High Street, Suite 104
Wailuku, Hawaii 96793

Subject: Traffic Assessment of Hale Mahaolu Ewalu Senior Housing Project
TMK (2)2-3-066:019 and 020
Kula, Maui, Hawaii

Dear Ms. Suyama:

This traffic assessment has been prepared for the subject project to identify the potential impact of development of two parcels in the Kulamalu Town Center in support of an Environmental Assessment being prepared as part of an application for Chapter 201H-38 exemptions from the County Council. Due to the project schedule, traffic counts in the field were not done because school traffic could not be captured. Traffic data that have been published by the State of Hawaii Department of Transportation were used in this assessment.

This assessment concludes that the traffic impact of the proposed project is less than 100 vehicles in the peak hours, or less than a threshold suggested for the preparation of a traffic impact study report. Project traffic impact was also found to be less than the traffic impact if other uses already permitted by the existing P-1 zoning were to be developed.

Existing Traffic Conditions in the Vicinity of the Proposed Project

The proposed project is located within the Kulamalu Town Center, which is accessed via a signalized intersection at A'apueo Parkway and Kula Highway. A'apueo Parkway is a two-lane roadway within an 80-foot right-of-way that also provides access the campus of Kamehameha School Maui, two residential projects, a CVS/Longs Drugs store, several office buildings, a park, and several other vacant parcels. Kula Highway, along with a portion of Haleakala Highway, is part of State Route 37, which originates near Kahului and proceeds in a generally southbound direction.

The project site has frontage on Ohi'a Ku Street, which intersects with A'apueo Parkway. Traffic on Ohi'a Ku Street can also access A'apueo Parkway via a roundabout and Kupaoa Street; both streets are in 60-foot wide rights-of-ways.

Julian Ng Incorporated

Ms. Colleen Suyama
 July 31, 2013
 Page 2 of 4

While no traffic counts have been taken of existing traffic, typical weekday (with school is session) traffic on A'apueo Parkway is estimated to be 2,700 vehicles per day (1,350 entering, 1,350 exiting), with morning peak hour volumes being 400 vehicles per hour from the highway and 250 vehicles per hour from A'apueo Parkway onto the highway.

Published traffic data from the State of Hawaii Department of Transportation include two-day counts taken in April 2009 on Route 37. At each of the two nearest locations, daily two-way volume on the highway were recorded at nearly 13,000 vehicles per day, with peak hourly volumes 1,150 vehicles per hour or more. Table 1 summarizes the count data.

Table 1 – Traffic Data on State Route 37

	Haleakala Highway (milepost 6.86)			Kula Highway (milepost 9.11)		
	24- Hour Total	AM Peak Hour	PM Peak Hour	24- Hour Total	AM Peak Hour	PM Peak Hour
Counts taken Tuesday, April 28, 2009 (northbound) *	5,186	835	434	6431	721	509
Counts taken Tuesday, April 28, 2009 (southbound) *	6,608	483	703	6449	447	602
Counts taken Wednesday, April 29, 2009 (northbound) *	6,647	790	473	6414	747	529
Counts taken Wednesday, April 29, 2009 (southbound) *	7,362	478	704	6344	432	660
Average of northbound counts	5,917	813	454	6423	734	519
Average of southbound counts	6,985	481	704	6397	440	631
Two-way totals (of count averages)	14,902	1,294	1,158	12,820	1,174	1,150

* Source: State of Hawaii Department of Transportation, Highways Division. *Traffic Survey Data, 2009.*

Traffic Impacts of the Proposed Project

The proposed project is not expected to have a significant impact to traffic conditions. Factors from the latest edition of the widely-used *Trip Generation Manual (9th Edition)* were applied to estimate the project's contribution to peak hour traffic volumes, and to compare those estimates with other traffic using A'apueo Parkway.

Table 2 summarizes the traffic estimate computations. While the factors in *Trip Generation Manual* for "Day Care Center" are based on data collected by child care centers, traffic patterns are thought to be similar for the two uses; for the proposed project, however, the rates were reduced by 1/3 to account for the expected use of bus transportation for half of the adult day care clients who arrive from off site.

Julian Ng Incorporated

Ms. Colleen Suyama
 July 31, 2013
 Page 2 of 4

Table 2 – Traffic Estimates for Hale Mahaolu Ewalu

Trip rates (per parameter) *	Average Weekday (rate)	AM Peak Hour		PM Peak Hour	
		rate	% enter	rate	% enter
Senior Center (1000 SF building area)	33.82	2.05	66%	2.74	49%
Day Care Facility (1000 SF building area)	74.06	12.15	53%	12.34	47%
Senior Adult Housing (dwelling unit)	3.44	0.20	34%	0.25	54%
Traffic Estimate		AM Peak Hour		PM Peak Hour	
		enter	exit	enter	exit
7,531 SF Senior Center	255	10	5	10	11
4,565 SF Adult Day Care Facility	225	20	18	18	20
61 Apartments, Elderly Housing	210	4	8	8	7
Total project	690	34	31	36	38
Total two-way project volume	690	65		74	

* Source: Institute of Transportation Engineers, *Trip Generation Manual, 9th Edition, 2012.*

Significance of Project Traffic Impacts

Three checks were done to determine if the project impact is significant. First, when compared with two other development projects which could occur on the project site (zoned P-1, Public/Quasi-Public, building with 60,000 square feet floor area), the proposed project was found to have generally less traffic impact, as shown in Table 3.

Table 3 – Traffic Estimates for Alternative Development of Property

Trip rates (per parameter) *	Average Weekday (rate)	AM Peak Hour		PM Peak Hour	
		rate	% enter	rate	% enter
Elementary School (1000 SF floor area)	15.43	5.20	56%	1.21	45%
Office building (1000 SF floor area)	11.03	1.56	88%	1.49	17%
Traffic Estimates (60,000 SF)		AM Peak Hour		PM Peak Hour	
		enter	exit	enter	exit
Elementary school	930	175	137	33	40
Total two-way project volume	930	312		73	
Offices for charitable organizations	660	82	11	15	74
Total two-way project volume	660	93		89	

* Source: Institute of Transportation Engineers, *Trip Generation Manual, 9th Edition, 2012.*

Julian Ng Incorporated

Ms. Colleen Suyama
July 31, 2013
Page 2 of 4

Secondly, the Institute of Transportation Engineers has adopted a recommended guideline (*Transportation Impact Analyses for Site Development*, 2005) that a traffic study be conducted when “development generation of 100 added vehicle trips during the adjacent roadway’s peak traffic hour” – as shown in Table 2 above, the project impacts are each less than this threshold.

Finally, the project traffic estimates were distributed onto the highway 55% to and from the north and 45% to and from the south, based on the existing highway volumes and the functions of the project. In comparison to highway volumes counted at the two nearest stations in 2009, the project would add less than 3% of the existing traffic in the peak direction, as shown in Table 4. Traffic impacts of 3% or less are commonly considered to not be significant.

Table 4 – Comparison of Project Traffic with Counted Volumes

	Haleakala Highway (milepost 6.86)			Kula Highway (milepost 9.11)		
	2009 count	Project impact	%	2009 count	Project impact	%
AM Peak Hour, Route 31 northbound	813	17	2.1%	734	16	2.2%
PM Peak Hour, Route 31 southbound	704	20	2.8%	631	17	2.7%

At full development of the Kulamalu Town Center, the traffic generated by the Hale Mahaolu Ewalu project is estimated to be less than 6% of the total traffic on A‘apueo Parkway during the AM Peak Hour, and about 10% of the total traffic in the PM Peak Hour.

Should you have any questions, please contact me.

Sincerely,

JULIAN NG INCORPORATED



Julian Ng, P.E., P.T.O.E.
President