

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

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2014/ED-3 (NA)

July 9, 2014

Ms. Jessica Wooley
Director
Office of Environmental Quality Control
Department of Health, State of Hawaii
235 South Beretania Street, Room 702
Honolulu, Hawaii 96813

FILE COPY

JUL 23 2014

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL
14 JUL 10 P 2:49
DPP/ENV

Dear Ms. Wooley:

**SUBJECT: Chapter 343, Hawaii Revised Statutes
Draft Environmental Assessment**

**Applicant/
Landowner:** Herb Fuller
Agent: R.M. Towill Corporation (Chester Koga)
Location: 45-038 Ka Hanahou Place – Kaneohe
Tax Map Key: 4-5-47: 116
Zoning: R-10 Residential District
Request: Shoreline Setback Variance
Proposal: Construction of a single-family dwelling that encroaches 15 feet into the 40-foot shoreline setback area.

We respectfully request publication of the project summary of the Draft Environmental Assessment (DEA) in the next edition of The Environmental Notice on July 23, 2014. Enclosed are one hard copy and one electronic copy of the DEA and the Publication Form. The Publication Form, including project summary, was also sent via electronic mail to your office.

Under Chapter 343, Hawaii Revised Statutes, the DPP must determine whether the impacts of the project are significant enough to warrant preparation of an Environmental Impact Statement (EIS). Based on the information currently available, the DPP anticipates issuing a "Finding of No Significant Impact" for this project (i.e., no EIS required). Following completion of the environmental assessment phase, the DPP will process a Shoreline Setback Variance application for the project, including a public hearing.

Ms. Jessica Wooley
Page 2

If you have any questions, please contact Nelson Armitage of our staff at 768-8016.

Very truly yours,


for George I. Atta, FAICP
Director

Enclosure: DEA, one hard copy and one disk
One copy of OEQC Publication Form

cc: R.M. Towill (Chester Koga)
Herb Fuller

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

Project Name: Draft Environmental Assessment for the proposed construction of a single-family dwelling that encroaches 15 feet into the 40-foot shoreline setback area.
Island: Oahu
District: Kaneohe
TMK: (1) 4-5-47: 116
Permits: Shoreline Setback Variance, building permits.

Determination Agency: City and County of Honolulu, Department of Planning and Permitting
Address: 650 South King Street, 7th Floor
City, State, Zip: Honolulu, Hawaii 96813
Contact and Phone: Nelson Armitage, (808) 768-8016

Applicant: Herb Fuller
Address: 45-038 Ka Hanahou Place
City, State, Zip: Kaneohe, Hawaii 96744
Contact and Phone: Herb Fuller, Phone (808) 542-1079

Consultant: R.M. Towill Corporation
Address: 2024 North King Street, Suite 200
City, State, Zip: Honolulu, Hawaii 96819
Contact and Phone: Chester Koga (808) 842-1133

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.

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

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___ 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 Applicant proposes to complete the construction of an existing and partially built two-story, single-family dwelling, attached garage, and pool. Work on the dwelling was halted in March 2014 because it was built without a permit in the 40-foot Shoreline Setback Area. The subject parcel consists of 9,679 square feet, or 0.222 acres, and is in the R-10 Residential District. The triangular lot is bounded by single-family dwellings to the southwest, Ka Hanahou Place to the west, and a seawall to the northeast, where the site fronts Kaneohe Bay.

The proposed action involves the construction of a two-story, single-family dwelling of approximately 4,007 square feet, including a first floor of 2,611 square feet (including garage and concrete deck), and a second floor of 1,396 square feet (excluding a proposed 300-square-foot pool). The proposed dwelling will encroach 15 feet into the 40-foot Shoreline Setback Area. The Applicant will apply to the Department of Planning and Permitting of the City and County of Honolulu for an-after-the-fact Shoreline Setback Variance if a Finding of No Significant Impact is issued for the proposal.

The Proposed Action is not anticipated to result in significant impacts to environmental resource areas. The implementation of standard Best Management Practices will ensure no significant impacts occur.

The Proposed Action would have no indirect, secondary, or cumulative impacts to any environmental resource areas.

*Draft Environmental Assessment per Hawai'i Revised Statutes (HRS),
Chapter 343*

Fuller Residence

Kaneohe, O'ahu, Hawai'i

TMK: (1) 4-5-47-116

May 2014

Applicant:
Herb Fuller
1029 Maunawili Road
Kailua, Hawai'i 96734

Draft Environmental Assessment
per Hawai‘i Revised Statutes (HRS), Chapter 343

Fuller Residence
Kāne‘ohe, O‘ahu, Hawai‘i
TMK: (1) 4-5-47-116

May 2014

Prepared For:

Herb Fuller
1029 Maunawili Road
Kailua, Hawai‘i 96734

Prepared By:

R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawai‘i 96819-3494
1-21871-00

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ACRONYMS AND ABBREVIATIONS

BMPs	Best Management Practices
BWS	Board of Water Supply
CCH	City and County of Honolulu
CFR	Code of Federal Regulations
CZM	Coastal Zone Management
DEA	Draft Environmental Assessment
DLNR	Department of Land and Natural Resources
DPP	Department of Planning & Permitting
EA	Environmental Assessment
ENV	Department of Environmental Services
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HAR	Hawai‘i Administrative Rules
HECO	Hawaiian Electric Company, Inc.
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HRS	Hawai‘i Revised Statutes
IBC	International Building Code
IRC	International Residential Code
LUC	Land Use Commission
LUO	Land Use Ordinance
MCBH	Marine Corps Base Hawai‘i
NCZMA	National Coastal Zone Management Act
NHC	National Hurricane Center
NFIP	National Flood Insurance Program
NOAA	National Oceanographic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System

NWI	National Wetlands Inventory
PTWC	Pacific Tsunami Warning Center
ROH	Revised Ordinances of Honolulu
DOH	Department of Health
SCP	Sustainable Communities Plan
SDC	Seismic Design Categories
SHPD	State Historic Preservation Division
SLH	Session Laws of Hawai'i
SMA	Special Management Area
TMK	Tax Map Key
UCB	Urban Community Boundary
UFC	Uniform Fire Code
WWTP	Wastewater Treatment Plant

Project Summary

Project:	Fuller Residence
Applicant:	Herb Fuller 45-038 Ka Hanahou Place Kāneʻohe, Hawaiʻi 96744 P: (808) 542-1079
Owner:	Herb and Cynthia Fuller 1029 Maunawili Road Kailua, Hawaiʻi 96734 P: (808) 542-1079
Accepting Agency:	City and County of Honolulu Department of Planning and Permitting (Chapter 343, HRS)
Agent:	R. M. Towill Corporation (RMTC) 2024 North King Street, Suite 200 Honolulu, Hawaiʻi 96819 P: (808) 842-1133
Location:	Kāneʻohe, Island of Oʻahu, Hawaiʻi
Tax Map Key:	[1] 4-5-047: 116
Proposed Action:	Construction of a two-story, one-family residence of approximately 4,007 sf. (including a first floor of 2,611 sf. (including garage and concrete deck) and a second floor of 1,396 sf., excluding the proposed pool of 300 sf.) on the subject parcel. Construction of the one-family residence requires the modification of the Shoreline Setback Line from 40 ft. to 25 ft. The modification is deemed reasonable in consideration of the hardship that is imposed where the shoreline setback is measured from the shoreline which is at the widest portion of the triangular shaped lot. If summarily applied, the area within the Certified Shoreline Setback Line is approximately 54.4% of the parcel, or 5,266.1 sf.
Land Area:	9,679 sf.
Present Use:	One-family residential
State Land Use District:	Urban
Zoning	R-10 Residential
Special Management Area	Site is within the SMA.
Permits Required:	City and County of Honolulu <ul style="list-style-type: none"> • Shoreline Setback Variance • Building Permits (building, plumbing, electrical)
Determination:	Finding of No Significant Impact (FONSI)

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1.0 Introduction

1.1 Project Overview

The Applicant proposes to complete the construction of an existing, half-constructed, two-story, one-family dwelling and attached garage, a permitted use in the R-10 zoning district. The subject property is located at 45-038 Ka Hanahou Place in Kāneʻohe, Hawaiʻi near the southwest edge of Kāneʻohe Bay, identified by Tax Map Key (TMK) (1) 4-5-047-116. The subject parcel is 9,679 square feet (sf.) or 0.222 acres in size. The parcel is triangular in configuration, and is bound by one-family dwellings on the southwest side of the property, Ka Hanahou Place on the west side, and a seawall on the northeast side, fronting Kāneʻohe Bay. See **Figure 1, Project Location**.

The Applicant purchased the subject property on August 29, 2013. Upon purchase, the subject parcel included two existing residential structures (originally built in 1952). This included a one-story, one-family dwelling, with an attached garage and a concrete deck and a maid's quarters (total living area of \approx 4,253 sf.). See **Figure 2, Aerial Photograph of Subject Property**. The Applicant proceeded to have plans prepared for the renovation and building of a new residence. On October 11, 2013, building permits (#734739 and #734740) for the demolition of the existing maid's quarters and garage were approved by the Department of Planning and Permitting (DPP). Then on November 13, 2013, the DPP approved building permits (#737145 and #737145A) for the alteration/addition to the existing one-family dwelling. This involved the construction of a new garage, a new second floor, and additions/alterations to the first floor. The building plans as approved by DPP (total living area of 3,725 sf.) are shown in **Figure 3, Fuller Residence Site Plan, 1st Floor (Approved)** and **Figure 4, Fuller Residence Site Plan, 2nd Floor (Approved)**.

On December 24, 2013, DPP staff issued the Applicant a violation (NOV No. 2013/NOV-12-146) for knocking down all the walls of the existing one-family dwelling; shortly thereafter, an inspector from DPP's enforcement section noted that construction was taking place in the shoreline setback and required work to cease. In order to clear-up the apparent misunderstanding, a meeting was held at DPP with the Deputy Director, head of the Planning Branch, and Inspection Branch; it was agreed that in order for work to continue, a Shoreline Setback Variance (SSV) was required. In further communications with the Director, it was agreed that the Applicant would be allowed to protect the areas that were built until the SSV was obtained.

As a result, there is currently an exposed, unfinished, two-story, one-family dwelling on the subject property. Approximately 1,754.1 sf. of the one-family dwelling has already been built, and is unprotected from the elements. See **Figure 3, Fuller Residence Site Plan, 1st Floor (Approved)** hatched area denotes area that has already been built. **Photo 1, East View of Existing Site Conditions (April 2014)** and **Photo 2, West View of Existing Site Conditions (April 2014)**, show existing conditions. Thus, the Applicant is proposing to complete the reconstruction of the existing one-family dwelling at a reasonable size for their lot, inasmuch as the Applicant is able to retain the portion that has already been built, and close off the portion of his house that is presently wide-open.

Figure 1. Project Location

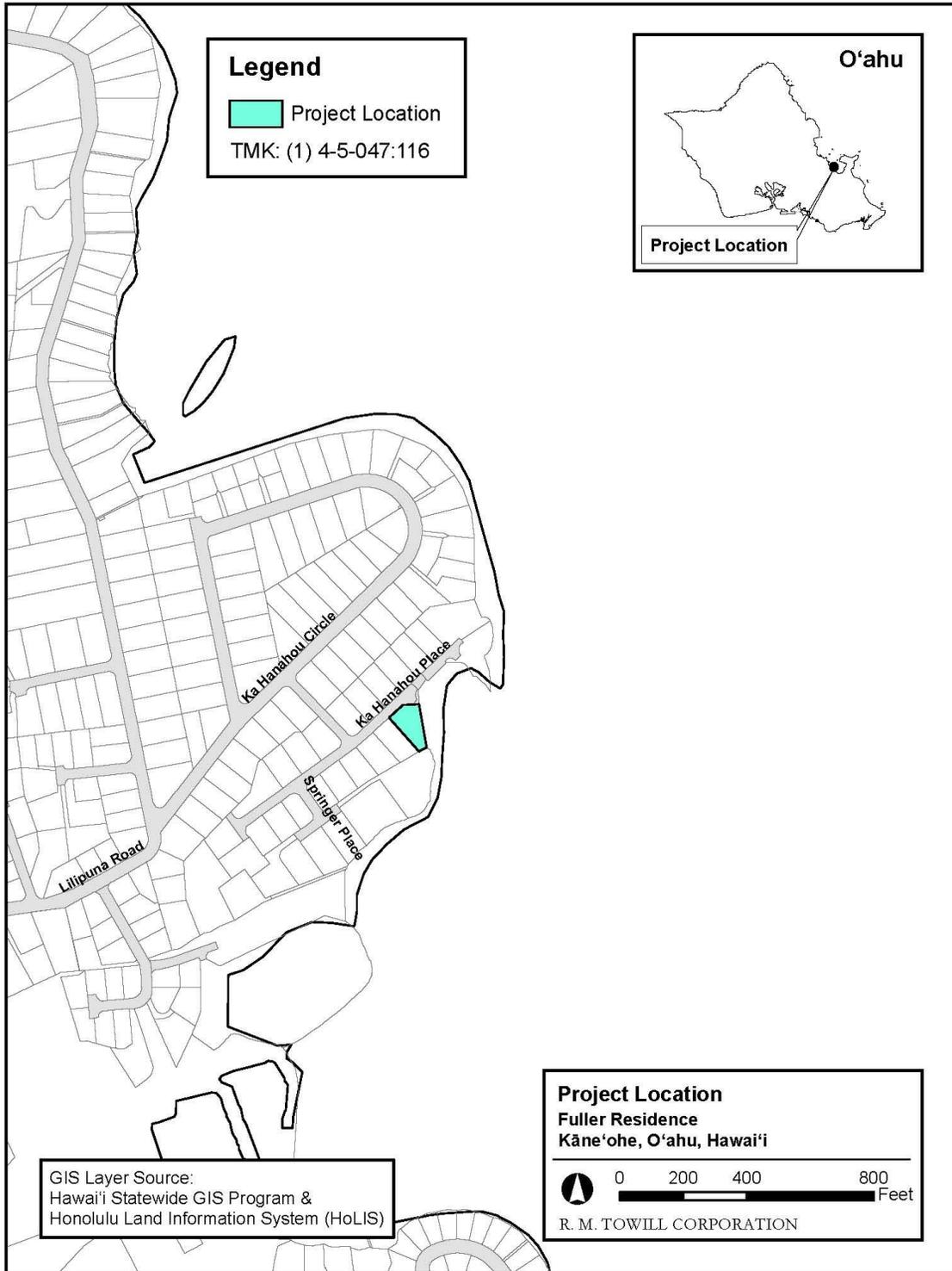


Figure 2. Aerial Photograph of Subject Property



Figure 3. Fuller Residence Site Plan, 1st Floor (Approved)

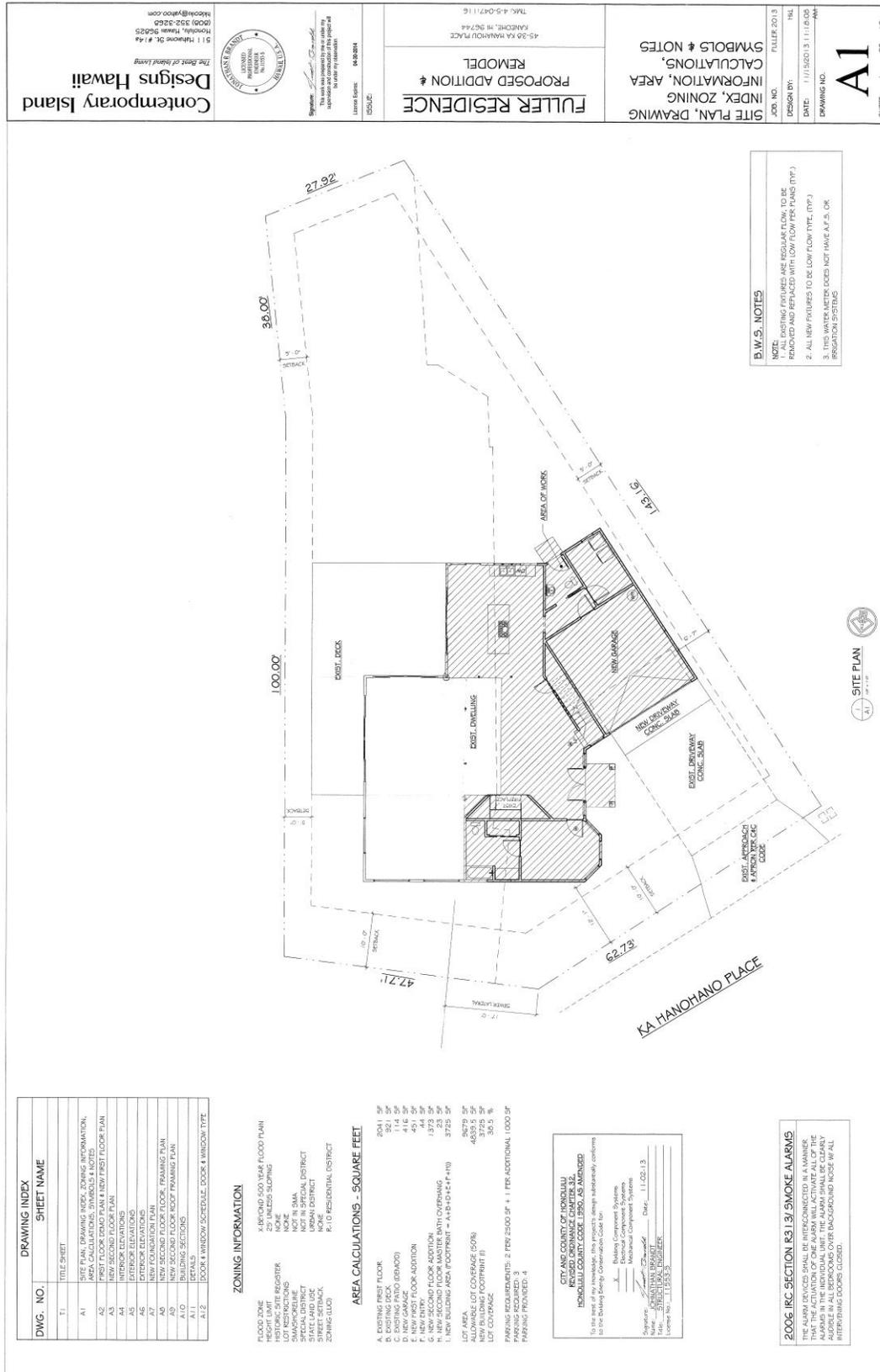


Figure 4. Fuller Residence Site Plan, 2nd Floor (Approved)

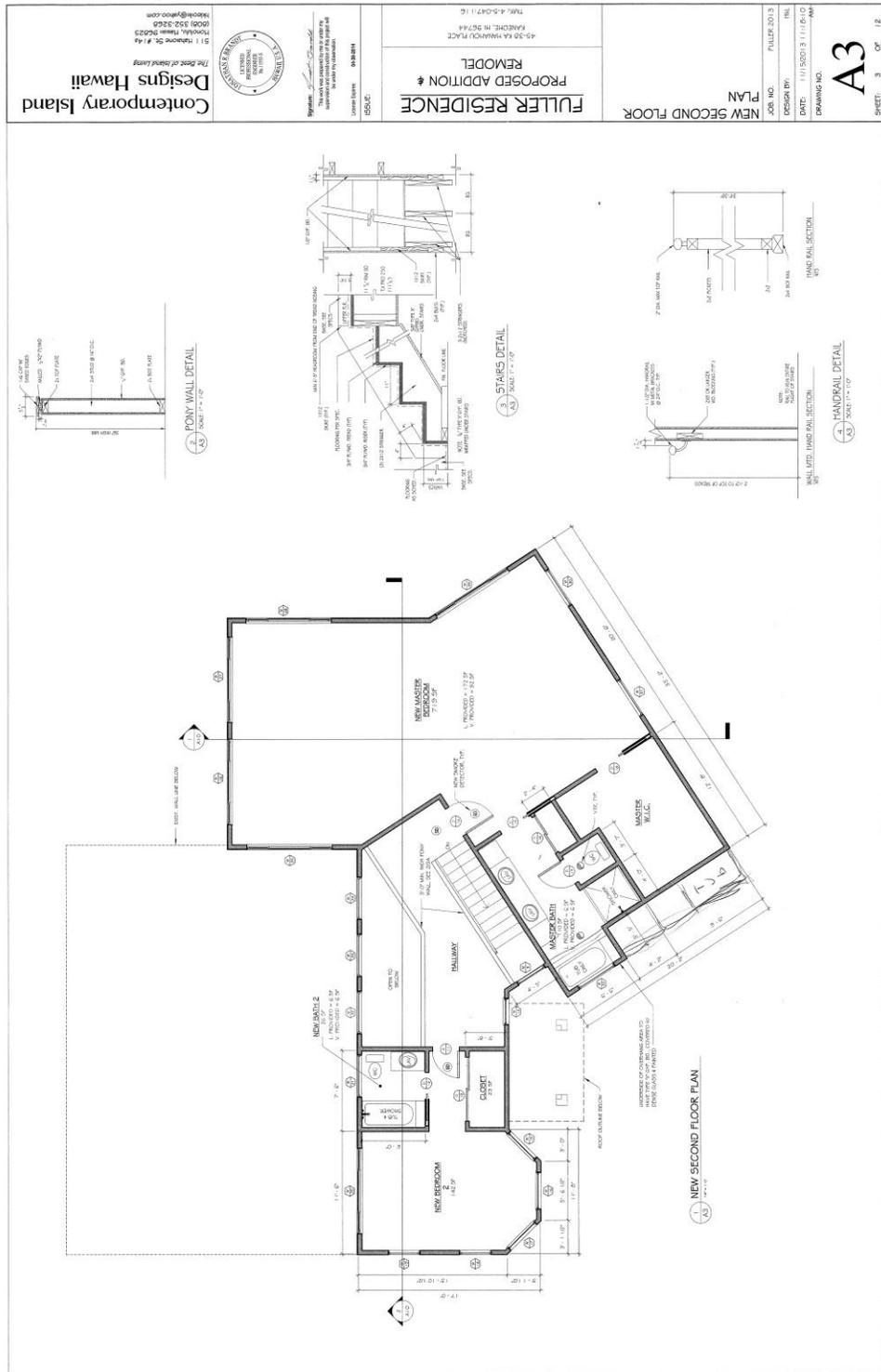


Photo 1. East View of Existing Site Conditions (April 2014)



Photo 2. West View of Existing Site Conditions (April 2014)



1.2 Purpose and Need

The proposed Project will provide the Fuller family an opportunity to complete the construction of their one-family dwelling and attached garage - a permitted use in the R-10 district, at a reasonable size for their lot. Infrastructure improvements are also proposed to meet the utility requirements for the dwelling.

1.3 Purpose of the Environmental Assessment

A portion of the subject property is within the shoreline setback, and the Applicant is requesting a shoreline setback variance (SSV) to develop a one-family dwelling and attached garage, a portion of the house will be within the shoreline setback. Therefore, the Project is subject to the preparation of an environmental assessment (EA) pursuant to with Hawai'i Revised Statutes (HRS), Chapter 343-5(3), which states that an EA shall be required for actions that, "Propose any use within a shoreline area as defined in section 205A-41". This document also complies and Hawai'i Administrative Rules (HAR), Department of Health (DOH) Title 11, Chapter 200.

A secondary purpose for the preparation of this Draft Environmental Assessment (DEA) is to inform interested parties of the proposed Project and to seek public comment on subject areas that should be addressed prior to the acceptance of a Finding of No Significant Impact (FONSI) and preparation of a Final Environmental Assessment (FEA). This DEA describes existing conditions at the location of the proposed Project site, addresses the potential for adverse environmental effects as a result of the proposed action, and provides for the consideration of alternatives to the proposed action.

1.4 Project Schedule and Cost

The environmental assessment process will be followed by the processing of a SSV permit application. Construction is anticipated to commence in the Spring 2014 with construction lasting approximately 6 months. Site development cost is estimated at approximately \$325,000.

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2.0 Project Description

2.1 Existing Land Use

The subject parcel is in the R-10, Residential district. Development standards in the R-10 district are set forth in the Land Use Ordinance (LUO), ROH, Table 21-3.2, *Residential District Development Standards*. A summary of these standards in relation to the Project is in **Table 1, R-10 Development Standards**.

The subject property is bound by one-family dwellings on the southwest side of the property, Ka Hanahou Place on the west side, and a seawall on the northeast side, fronting Kāneʻohe Bay. Other land uses in the area include the Kāneʻohe Marine Corps Base Hawaiʻi (MCBH) which is located approximately 4.22 miles northeast of the subject property. The H-3 Freeway is located approximately 2.48 miles southeast of the subject property. The town of Kailua is located approximately 3.72 miles east of the subject property. The Kāneʻohe business district is located approximately 1.17 miles southwest of the subject property.

As previously mentioned, there is currently an exposed, unfinished, one-family dwelling on the subject property, of approximately 1,754.1 sf. The one-family dwelling is constructed on an existing concrete slab. There is a concrete rock masonry (CRM) seawall on the east side of the property line; no construction or improvements to the existing seawall is being proposed.

Table 1: R-10 Development Standards (Table 21-3.2)

Development Standards		R-10	Project
Minimum Lot Area (square feet) (One-family dwelling, detached and other uses)		10,000	9,679
Minimum Lot Width and Depth (feet)		65 for dwellings	
Yards (feet)	Front	10 for dwellings	10
	Side and Rear	5 for dwellings	5
Maximum Building Area		50% of the zoning lot	N/A
Maximum Height (feet)*		25-30	25
Height Setbacks		Per ROH, Sec. 21-3.70-1(c)*	Per Sec. 21-3.70

*Any portion of a structure exceeding 15 feet shall be set back from every side and rear buildable area boundary line one foot for each two feet of additional height over 15 feet. Any portion of a structure exceeding 20 feet shall be set back from the front buildable area boundary line one foot for every two feet of additional height over 20 feet.

2.2 Proposed Improvements

The intent of the Applicant is to complete the construction of an existing one-family dwelling and attached garage, at a reasonable size for their lot, inasmuch as the Applicant is able to retain the portion that has already been built, and close off the portion of his house that is presently wide-open. The subject parcel is triangular in configuration, and the shoreline runs straight across the widest portion of the property along the waterfront.

The shoreline was certified by the Department of Land and Natural Resources (DLNR) on Jan. 21, 2014. See **Figure 5, Certified Shoreline Map**. Development is not allowed in the shoreline setback without a shoreline setback variance. The Applicant believes that strict compliance with the shoreline rules would limit the use of the subject parcel, and as a result would not be able to construct a one-family dwelling at a reasonable size. Therefore, the Applicant is requesting a variance from ROH, Chapter 23, *Shoreline Setbacks*.

The following discussion demonstrates the hardship created by complying with shoreline setback rules:

1. The subject parcel is 9,679 sf., and is thus short of the required minimum lot area of 10,000 sf., by 321 sf.
2. Approximately 5,266.1 sf. ($\approx 54.4\%$ of the lot) of the subject parcel is located within the shoreline setback, leaving a remaining area of 4,412.9 sf. for development. See **Figure 6, Site Analysis**.
3. After the application of required yard setbacks, the net buildable area is reduced to 3,016.9 sf. ($\approx 31\%$).
4. This net buildable area does not account for the area needed for parking. In accordance with ROH, Chapter 21, a one-family residence is required two (2) parking spaces for the first 2,500 sf. of dwelling area and one additional parking space for each 1,000 sf. beyond the 2,500 sf. Parking spaces, are typically 200 sf. each.
5. Finally, while the actual net building area of the subject parcel is 3,016.9 sf., in reality, only $\approx 85\%$ of the 3,016.9 sf. (2,564.4) is developable, due to its exaggerated triangular shape. Therefore, with the inclusion of 2 parking spaces, the net buildable area is further reduced to approximately 2,164.4 sf. Thus, the developable area for potential living space is significantly less than 4,839.5 sf., the maximum building area (50% of lot) of the subject parcel at the original 9,679 sf.

As a result of the abovementioned hardship, the Applicant is requesting a shoreline setback variance, and additionally, is requesting that the shoreline setback line be reduced from the standard 40 feet to 25 feet from the Certified Shoreline. This would allow the Applicant to complete the construction of their existing half-constructed, two-story, one-family dwelling and attached garage as originally permitted by retain the following portions of the residence that has already been built, and close off what is presently wide-open.

Area within Certified Shoreline Setback = 5,266.1 sf

Property Line
Lot Size = 9,697 sf.

Proposed Shoreline Setback Line

Certified Shoreline Setback Line

Proposed Shoreline Setback Line

Certified Shoreline Setback Line

Net Buildable Boundary and Area
Outside of Certified Shoreline Setback
Line = 3,016.9 sf.

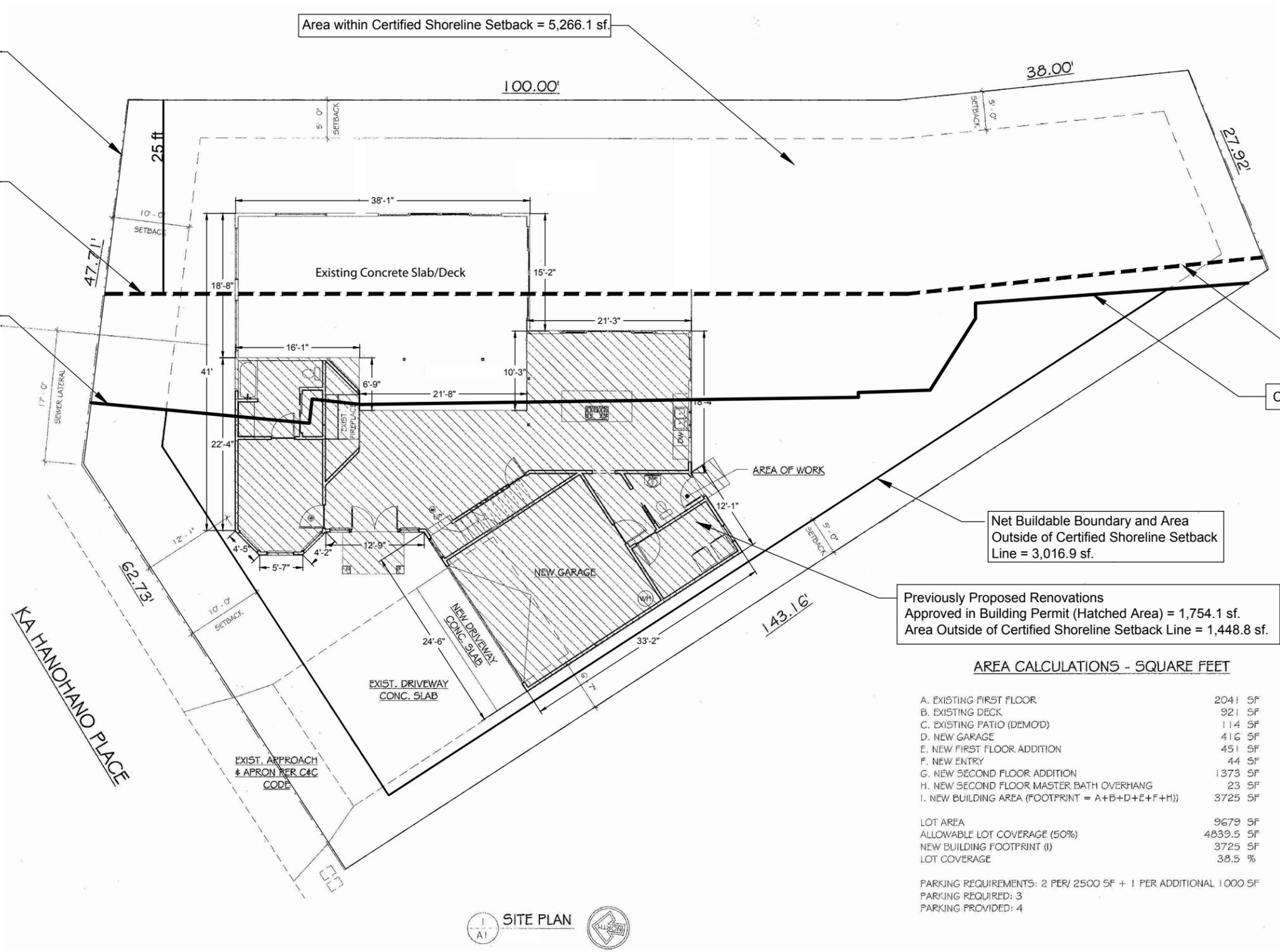
Previously Proposed Renovations
Approved in Building Permit (Hatched Area) = 1,754.1 sf.
Area Outside of Certified Shoreline Setback Line = 1,448.8 sf.

AREA CALCULATIONS - SQUARE FEET

A. EXISTING FIRST FLOOR	2041	SF
B. EXISTING DECK	921	SF
C. EXISTING PATIO (DEM'D)	114	SF
D. NEW GARAGE	416	SF
E. NEW FIRST FLOOR ADDITION	451	SF
F. NEW ENTRY	44	SF
G. NEW SECOND FLOOR ADDITION	1373	SF
H. NEW SECOND FLOOR MASTER BATH OVERHANG	23	SF
I. NEW BUILDING AREA (FOOTPRINT = A+B+D+E+F+H))	3725	SF

LOT AREA	9679	SF
ALLOWABLE LOT COVERAGE (50%)	4839.5	SF
NEW BUILDING FOOTPRINT (I)	3725	SF
LOT COVERAGE	38.5	%

PARKING REQUIREMENTS: 2 PER/ 2500 SF + 1 PER ADDITIONAL 1000 SF
PARKING REQUIRED: 3
PARKING PROVIDED: 4



KA HANOHANO PLACE



Fuller Residence - First Floor Plan
Figure 6. Site Analysis

0' 15' 30'

3.0 Alternatives Considered and Preferred Plan

3.1 Introduction

An analysis of alternatives is being considered as part of the environmental assessment in order to evaluate reasonable alternatives to the proposed Project. Three alternatives were considered and are discussed as follows:

3.2 Alternative 1 – No Action

The No Action Alternative involves a continuation of the status quo. Currently, there is an exposed, unfinished, two-story, one-family dwelling on the subject property, of approximately 1,754.1 sf. (hatched area denotes area that is already built). See **Figure 6, Site Analysis**. If left untouched, the dwelling would continue to be uncovered and vulnerable to the surrounding elements of wind and rain. The No Action Alternative does not meet the purpose of the Project, which is to complete the reconstruction of a one-family dwelling for the Fuller family. For this reason, the No Action Alternative is rejected from consideration.

3.3 Alternative 2 – Preferred Alternative

Alternative 2 is the preferred alternative, in which the Applicant is proposing to complete the reconstruction of the existing half-constructed, two-story, one-family dwelling, inasmuch as the Applicant is able to retain the portion that has already been built. See **Figure 7, Preferred Alternative**.

The proposed action involves the following:

1. Modification of the Shoreline Setback Line from 40 feet to 25 feet (from the Certified Shoreline).
2. Retention of the existing concrete slab/concrete deck (579.5 sf.).
3. Retention and completion of a half-constructed dwelling (1,754.1 sf.), including a kitchen and dining area (252 sf.), bathroom and fireplace (48 sf.).
4. Construction of an east facing wall, which would close off the exposed one-family dwelling, and include an additional living space of approximately 277.4 sf., which would be outside of the proposed Shoreline Setback Line. The one-family dwelling would be approximately 4 ft. and 10 inches setback from the proposed Shoreline Setback Line.
5. Construction of pool on the south side of the property (approximately 300 sf.). The area of the proposed pool that would be within the proposed Shoreline Setback Line is approximately 44.9 sf.
6. Construction of a second floor with a living area of approximately 1,396 sf., which would not extend past the exterior walls of the first floor. The roof ridge would be a height of approximately 22 feet, and the roof eaves on east side of the house would extend approximately 2 feet past the exterior wall.

Construction activities will *not* include clearing, grubbing, grading, or filling. The concrete slab from the original house will be utilized. Ground elevation of the site is 6'- 4" above sea level. The finished floor elevation is 8'- 6".

The proposed two-story, one-family dwelling would be approximately 4,007 sf. (including a first floor of 2,611 sf. (including garage and concrete deck) and a second floor of 1,396 sf., excluding the proposed pool of 300 sf.) on the subject parcel. The first floor living area would be 1,603.4 sf. (excluding the garage of 428.1 sf. and the existing concrete slab/deck of 579.5), and the second floor living area would be 1,396 sf.; the total living area would be 2,999.4 sf. Based on the total living area of 2,999.4 sf., three parking spaces would need to be provided; two of the parking spaces would be provided within the attached garage, and an existing concrete apron adjoining the garage would provide the third. While the proposed one-family dwelling would be a smaller house than the previously proposed renovations permitted via a DPP building permit, the proposed action would allow the Applicant to complete the construction of their existing half-constructed, two-story, one-family dwelling and attached garage, at a reasonable size for their lot. For the abovementioned reasons, Alternative 2 is the preferred alternative.

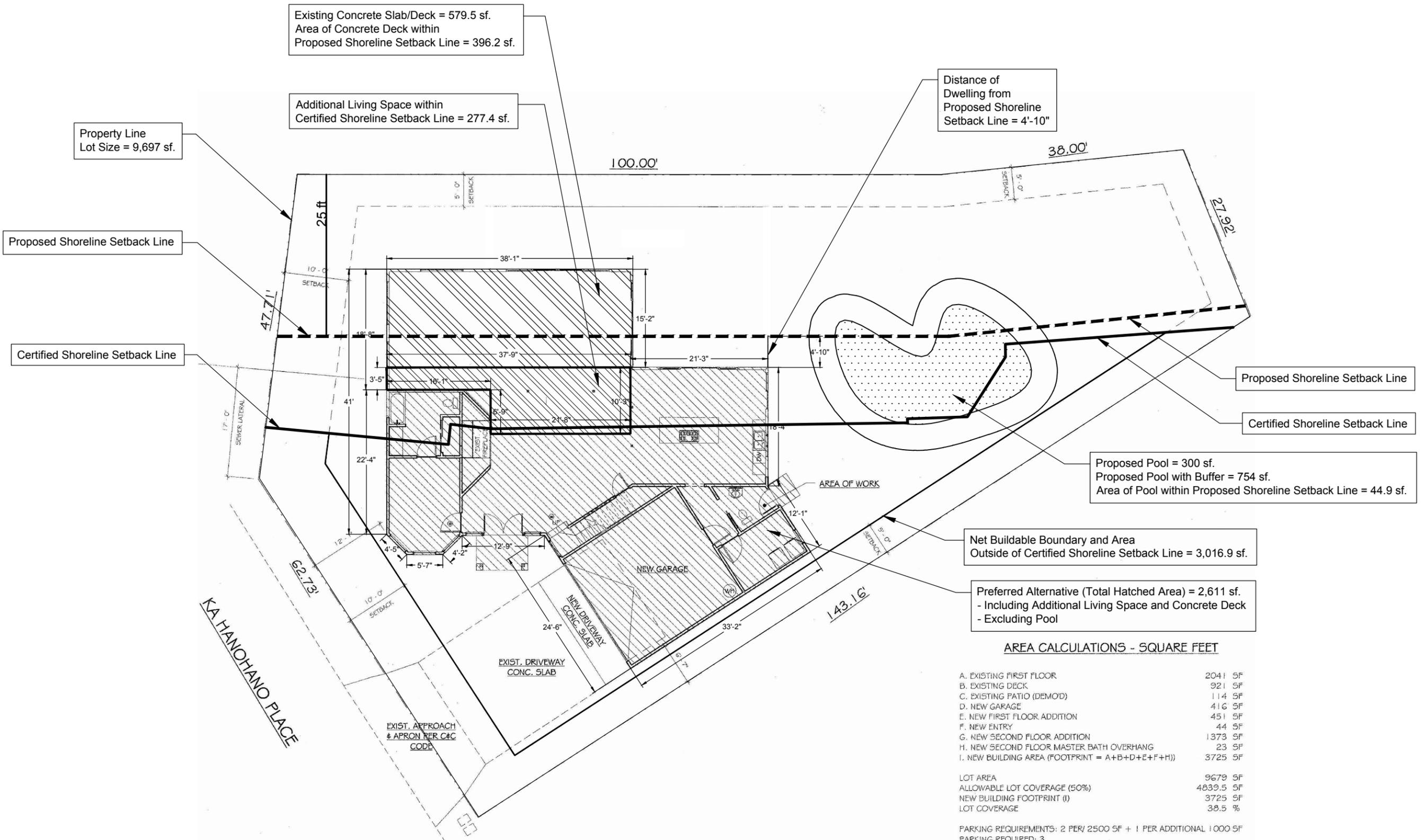
3.4 Alternative 3 – Currently Allowed

Alternative 3 involves building two-story, one-family dwelling within the limits of the buildable area of 3,016.9 sf, which is currently allowed by the LUO. See **Figure 8, Alternative 3**.

Alternative 3 involves the following:

1. Modification of the Shoreline Setback Line from 40 feet to 25 feet (from the Certified Shoreline).
2. Retention of the existing concrete slab/concrete deck (857.1 sf.). The area of the existing concrete deck that would be within the proposed Shoreline Setback Line is 396.2 sf.
3. Retention and completion of a half-constructed dwelling (1,754.1 sf.). The one-family dwelling would be approximately 4 ft. and 10 inches outside of the proposed Shoreline Setback Line.
4. Addition of approximately 614.2 sf. on the northwest portion of the lot (as previously mentioned, due to the exaggerated triangular shape of the lot, development is only practicable in the northwest portion of the lot).
5. Construction of a second floor with a living area of approximately 1,396 sf., which would not extend pass the exterior walls of the first floor. The roof ridge would be a height of approximately 22 feet, and the roof eaves on east side of the house would extend approximately 2 feet past the exterior wall.

The two-story, one-family dwelling under Alternative 3 would consist of a first floor with an living area of 1,940.2 sf. (excluding the garage of 428.1 sf. and the existing concrete slab/deck of 857.1 sf.), and a second floor with a living area of 1,396 sf. The total living area would be 3,336.2 sf. Based on the total living area of 3,336.2 sf., four parking spaces would need to be provided; two of the parking spaces would be provided within the attached garage, and an existing concrete apron adjoining the garage would provide the remaining two. Alternative 3 was not considered as viable as the preferred plan, because the half-constructed kitchen-dining area, bathroom, fireplace, and support wall would need to be demolished and the building frame re-structured. Further, the parking area for the parcel would be severely limited. For these reasons, this alternative was rejected from further consideration.



Existing Concrete Slab/Deck = 579.5 sf.
 Area of Concrete Deck within
 Proposed Shoreline Setback Line = 396.2 sf.

Additional Living Space within
 Certified Shoreline Setback Line = 277.4 sf.

Distance of
 Dwelling from
 Proposed Shoreline
 Setback Line = 4'-10"

Property Line
 Lot Size = 9,697 sf.

Proposed Shoreline Setback Line

Certified Shoreline Setback Line

Proposed Shoreline Setback Line

Certified Shoreline Setback Line

Proposed Pool = 300 sf.
 Proposed Pool with Buffer = 754 sf.
 Area of Pool within Proposed Shoreline Setback Line = 44.9 sf.

Net Buildable Boundary and Area
 Outside of Certified Shoreline Setback Line = 3,016.9 sf.

Preferred Alternative (Total Hatched Area) = 2,611 sf.
 - Including Additional Living Space and Concrete Deck
 - Excluding Pool

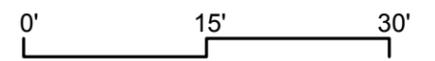
AREA CALCULATIONS - SQUARE FEET

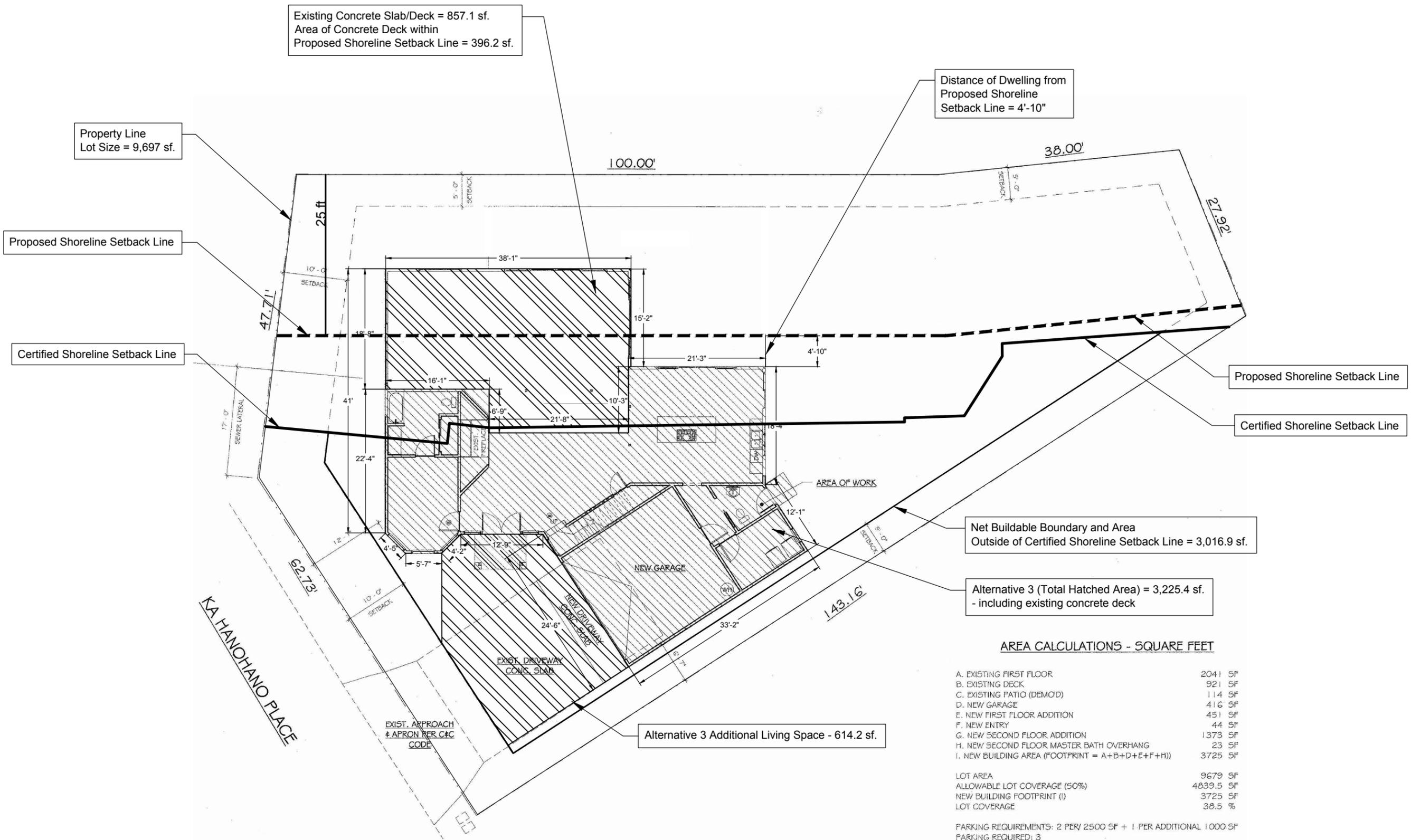
A. EXISTING FIRST FLOOR	2041	SF
B. EXISTING DECK	921	SF
C. EXISTING PATIO (DEM'D)	114	SF
D. NEW GARAGE	416	SF
E. NEW FIRST FLOOR ADDITION	451	SF
F. NEW ENTRY	44	SF
G. NEW SECOND FLOOR ADDITION	1373	SF
H. NEW SECOND FLOOR MASTER BATH OVERHANG	23	SF
I. NEW BUILDING AREA (FOOTPRINT = A+B+D+E+F+H))	3725	SF
LOT AREA	9679	SF
ALLOWABLE LOT COVERAGE (50%)	4839.5	SF
NEW BUILDING FOOTPRINT (I)	3725	SF
LOT COVERAGE	38.5	%

PARKING REQUIREMENTS: 2 PER/ 2500 SF + 1 PER ADDITIONAL 1000 SF
 PARKING REQUIRED: 3
 PARKING PROVIDED: 4

SITE PLAN

**Fuller Residence - First Floor Plan
 Figure 7. Preferred Alternative**





Net Buildable Boundary and Area Outside of Certified Shoreline Setback Line = 3,016.9 sf.

Alternative 3 (Total Hatched Area) = 3,225.4 sf. - including existing concrete deck

AREA CALCULATIONS - SQUARE FEET

A. EXISTING FIRST FLOOR	2041 SF
B. EXISTING DECK	921 SF
C. EXISTING PATIO (DEM'D)	114 SF
D. NEW GARAGE	416 SF
E. NEW FIRST FLOOR ADDITION	451 SF
F. NEW ENTRY	44 SF
G. NEW SECOND FLOOR ADDITION	1373 SF
H. NEW SECOND FLOOR MASTER BATH OVERHANG	23 SF
I. NEW BUILDING AREA (FOOTPRINT = A+B+D+E+F+H)	3725 SF
LOT AREA	9679 SF
ALLOWABLE LOT COVERAGE (50%)	4839.5 SF
NEW BUILDING FOOTPRINT (I)	3725 SF
LOT COVERAGE	38.5 %

PARKING REQUIREMENTS: 2 PER/ 2500 SF + 1 PER ADDITIONAL 1000 SF
 PARKING REQUIRED: 3
 PARKING PROVIDED: 4

Alternative 3 Additional Living Space - 614.2 sf.



**Fuller Residence - First Floor Plan
 Figure 8. Alternative 3**

4.0 Natural Environment, Potential Impacts and Proposed Mitigation Measures

4.1 Climate and Rainfall

Kāneʻohe is located on the windward coast of Oʻahu. The climate of the Kāneʻohe area is characterized by abundant sunshine, persistent northeasterly trade winds, relatively constant temperatures, moderate humidity, and infrequent severe storms. Average wind velocity in the area varies from 10 to 15 mph. Monthly temperatures in the Project area are within the range of 76 degrees Fahrenheit (F) mean temperature in August and 70 degrees F mean temperature in December. However, temperatures of 80 degrees or higher are not uncommon throughout the year. Average annual rainfall recorded in Kāneʻohe is about 60 inches, with increased rainfall during the fall and winter months (Juvik and Juvik, 1998).

Potential Effects and Proposed Mitigation

The proposed Project will have no effect on the climate or rainfall of the region. No mitigation measures are proposed.

4.2 Shorelines, Beaches and Dunes, Estuary, and Wetlands

The Project site abuts the shoreline of Kāneʻohe Bay. The location of the shoreline was certified by the DLNR on January 21, 2014. See **Figure 5, Certified Shoreline Map**. It is noted that the location of the shoreline is placed at the seaward face of the seawall.

HAR, Section 13-222- 16(b)(13), notes that:

When a shoreline has been permanently altered by the development of a harbor, lagoon, marina, or other water facility, the shoreline shall be at the mouth of the harbor, lagoon, marina, or water facility; provided, however, that this provision shall not apply where the harbor, lagoon, marina or water facility consists of both natural as well as artificial shorelines.

The present shoreline is the result of man-made alterations and dredging that was conducted during the 1940's and 1950's. There are numerous small inlets, seawalls, small piers for moorings and a boat channel which still exist. There are no beaches or dunes in the vicinity of the Project site. Further, there are also no estuaries or wetlands on the subject property. However, Kāneʻohe Bay is listed in the National Wetlands Inventory (NWI). Most of Kāneʻohe Bay fronting the subject property is classified as Marine, Subtidal, Reef, Coral, Saltwater Subtidal (M1RF1L).

Potential Effects and Proposed Mitigation

No adverse effects to shorelines, beaches, dunes, estuaries, wetlands and surface waters are expected to result from the Project as most of the proposed improvements will be made on fast land and is landward of the existing CRM seawall. Appropriate Best

Management Practices (BMPs), soil erosion, and sediment controls will be employed and maintained during the construction of the proposed residence and other associated improvements.

4.3 Flora and Fauna

The property has been in residential use for at least 5 decades, and has been landscaped and maintained on a regular basis as a residential use. There are no unique, rare, threatened or endangered floras or fauna within the Project site.

Potential Effects and Proposed Mitigation

The proposed Project involves the reconstruction of an existing one-family dwelling. The Project is not anticipated to result in adverse effects to any protected species, due to the existing land use and the location of the Project site within an urbanized context. No negative affect on plant or animal habitats is expected; therefore, no mitigation measures are proposed.

4.4 Scenic and Visual Resources

Existing views, makai of the proposed Project site, primarily consists of Kāneʻohe Bay. The City and County of Honolulu (CCH) Koʻolaupoko Sustainable Communities Plan (SCP) recognizes Kāneʻohe Bay as a significant view resource. The subject property is recognized as having “continuous panoramic views” of Kāneʻohe Bay (CCH, 2000). There are no significant views mauka of the proposed Project site. See **Figure 9, Scenic Features and Viewplanes**.

Potential Effects and Proposed Mitigation

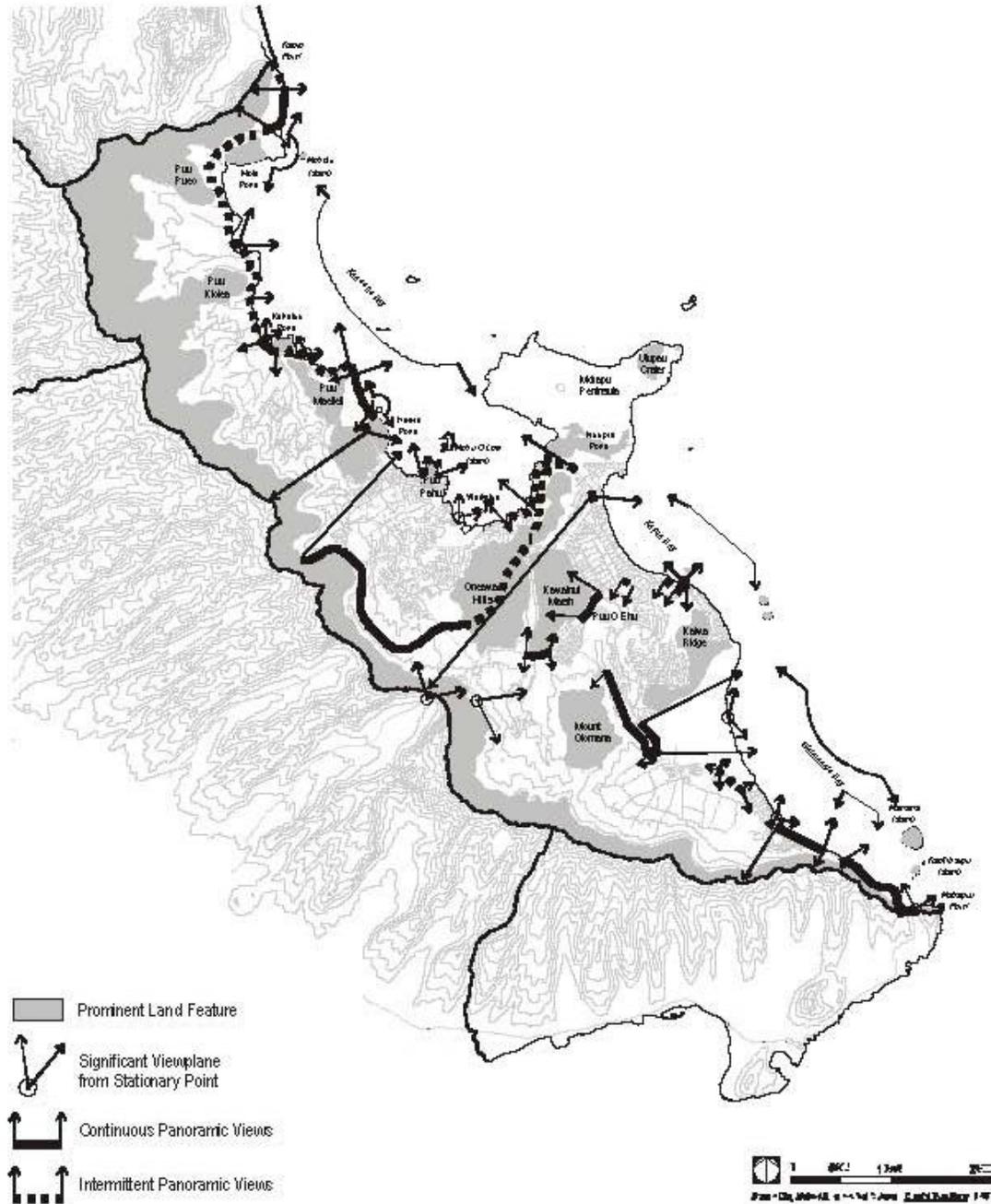
The Project site involves the reconstruction of an existing one-family dwelling. The Project will involve the same permitted land use as currently exists, and will conform to all applicable CCH zoning development standards regarding height. Therefore, the Project will not adversely affect scenic and visual resources in the area. No mitigation measures are proposed.

4.5 Air Quality

Hawaiʻi lies within the Northern Hemisphere Hadley Cell, which is responsible for persistent northeast trade winds. Consequently, air quality in the Kāneʻohe area is generally good, as it is throughout the entire State. The DOH has noted that, “Criteria pollutant levels remain below state and federal ambient air quality standards at all State and Local Air Monitoring Stations” (DOH, 2010). Air quality in the area can be affected by natural and/or human pollutant sources. Natural sources primarily include wind-blown dust, wild fires and occasional volcanic pollution (vog) from eruptions on the island of Hawaiʻi. Human sources primarily include vehicular emissions from motorists traveling on nearby roads, burning of refuse and BBQs.

Figure 9. Scenic Features and Viewplanes

Figure 2-4
Significant Scenic Features and Viewplanes in Koolaupoko



Potential Effects and Proposed Mitigation

Short Term

Short-term effects on air quality will occur either directly or indirectly because of Project construction activities. The operation of vehicles and heavy equipment will generate some fugitive dust and pollution emissions; however, these effects will be temporary and will cease when construction is completed.

State air pollution regulations require that there be no visible fugitive dust emissions at the construction site boundary. Therefore, the Project contractor will ensure compliance with HAR, Chapter 11-59 and 60, *Air Pollution Control*. Fugitive dust emissions can be controlled largely by watering active work areas, using wind screens, keeping adjacent paved roads clean, and covering open-bodied trucks.

Proposed dust control mitigation measures will include, but not be limited to, the following:

- Planning phases of construction to minimize dust generating activities;
- Minimizing the use of dust generating materials and centralizing material transfer points and on-site vehicle travel ways;
- Locating dusty equipment in areas of least effect;
- Providing an adequate water source at the site prior to start-up of construction activities;
- Providing lasting dust control measures during weekends, after hours, and prior to daily start-up of construction; and
- Ensuring that Project contractors properly maintain their internal combustion engines and comply with HAR, Chapters 11-59 and 11-60, *Air Pollution Control*.

Long Term

No long-term negative consequences related to air quality are expected as a result of the Project. The reconstruction of an existing one-family dwelling will not significantly affect air quality in the vicinity.

4.6 Noise

Regulation of noise in residential areas of O‘ahu is governed by the State Department of Health, HAR, Title 11, Chapter 46, *Community Noise Control*. Allowable day and nighttime noise standards for sensitive receptors have been established for conservation, residential, apartment, hotel, business, agricultural and industrial districts. The Project site is in a residential area, zoned by the CCH as R-10, which falls under Class A in the noise control zoning district. The maximum allowable day and night noise levels at the Project site are as follows:

<u>Time</u>	<u>Allowable Noise Levels</u>
7:00 am to 10:00 pm	55 dbA
10:00 pm to 7:00 am	45 dbA

Existing ambient noise at and around the Project site is generally low-level, varying slightly spatially (i.e. from place to place) and temporally (i.e. from one time to another), and is generated from natural (e.g. wind) and man-made sources. Neighboring residents and traffic from nearby roadways such as Kāneʻohe Bay Drive and the H-3 Freeway contribute to background noise in the area.

Potential Effects and Proposed Mitigation

Short Term

The potential for short-term adverse effects to existing noise conditions are expected to result from construction activities, particularly noise generated during mobilization activities, and operation of heavy construction equipment and pneumatic hand tools. Construction equipment is expected to include, but not be limited to, a front loader, a crane, concrete delivery trucks, and other powered hand tools. Construction equipment typically generates noise in the range of 55 to 90 decibels adjusted (dBA) in close proximity. The actual noise levels produced are dependent on the construction methods employed during the construction process. Noise generated as a result of construction is expected to be temporary, of limited duration, and restricted to daytime hours. Upon completion of work, noise will return to pre-existing background levels. Adverse effects from construction noise are not expected to pose a hazard to public health and welfare due to the temporary nature of the work and the application of mitigation measures that will be employed to minimize noise effects.

The following mitigation measures are proposed to address the potential short-term noise pollution for animals and staff at the HHS, as wells as residents, businesses and schoolchildren near the proposed Project site:

- Work will be limited to weekdays during daylight hours between 8:30 am and 3:30 pm. No work will be scheduled on federal or state holidays. If work during the nighttime hours is required, a variance from the existing state noise regulations will be requested from the DOH. Construction activities will be suspended on Sundays and during holidays.
- Construction vehicles and internal-combustion powered machinery will be muffled with noise attenuation equipment in good operating condition.
- Faulty equipment will be repaired or replaced.
- The General Contractor will ensure that Project activities are in compliance with the provisions of HAR, Chapter 11-46, *Community Noise Control*. Excessive noise levels generated by construction activities will require that a noise permit be filed with the DOH, Noise, Radiation and Indoor Air Quality Branch.

Long Term

Long-term adverse effects to existing noise conditions are not expected, as the proposed Project will involve the same permitted land use and activities as currently exists. No mitigation measures are proposed.

4.7 Natural Hazards

4.7.1 Flood Hazards

The entire Project area (and surrounding area) is characterized by the Federal Emergency Management Agency (FEMA), Digital Flood Insurance Rate Map (FEMA-FIRM) as Zone “X”. The definition of the FEMA flood Zone X is described as follows: “Moderate risk area within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones” (FEMA, 2014a). See **Figure 10, Flood Zones**.

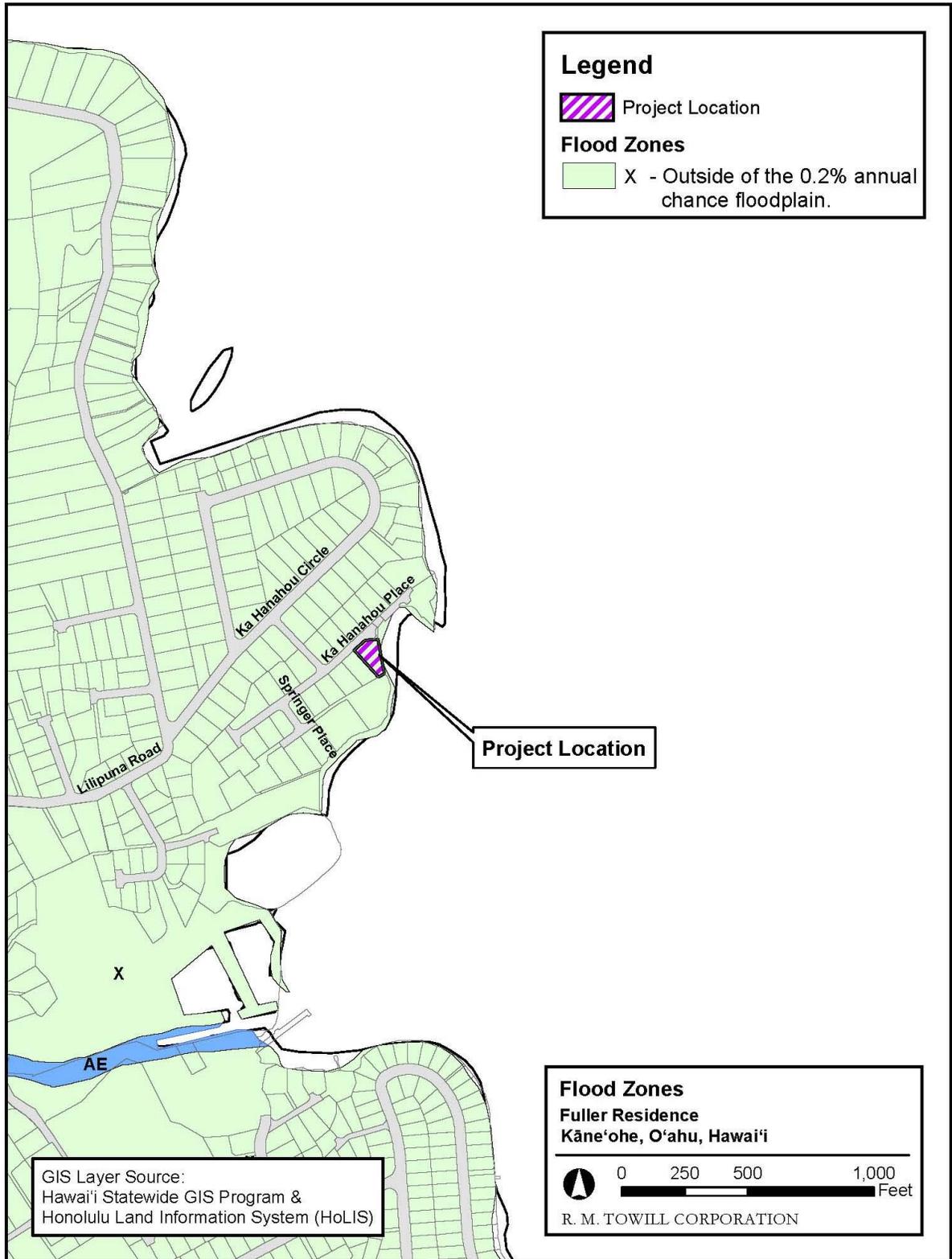
Potential Effects and Proposed Mitigation

The Project is not expected to exacerbate flood conditions or be adversely affected by flooding. However, mitigation measures are proposed to ensure against potential adverse effects from flooding. The proposed Project will comply with flood hazard requirements. The Project will comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (CFR), as well as applicable CCH Flood Ordinances set forth in ROH, Section 21-9.10.

4.7.2 Tsunamis

A tsunami involves the generation of a series of destructive ocean waves that can affect all shorelines. The generation of these waves can occur at any time with limited or no warning. Tsunami sea waves are most commonly caused by an earthquake (magnitude 7.0 or greater), adjacent to or under the ocean. Most tsunamis in Hawai‘i originate from the tectonically active areas located around the Pacific Rim (e.g., Alaska and Chile). Waves originating with earthquakes in these take hours to reach Hawai‘i, and the network of sensors that is part of the Pacific Tsunami Warning Center (PTWC)’s system are able to give Hawai‘i several hours advance warning of tsunami from these locations. Less commonly, tsunamis originate from seismic activity in the Hawaiian Islands, and there is much less advance warning for these. Since 1946, there have been four significant tsunami events (1946, 1957, 1960, and 1964); these tsunami waves rose to heights, from 1- 14 feet above sea level. While these events are rare, it is prudent to assume that future events will occur.

Figure 10. Flood Zones



Potential Effects and Proposed Mitigation

A portion of the subject property is located in the Tsunami Evacuation Zone; however, the proposed Project's habitable structures will be located outside of the tsunami evacuation zone. See **Figure 11, Tsunami Evacuation Zone**. The property has not historically experienced significant tsunami damage and is not expected to be more or less vulnerable than development in other coastal areas. In fact, there are no recorded wave heights near the vicinity of Project site from any of the most recent Hawai'i tsunamis (1946, 1952, 1957, 1960 and 1964) (Loomis, 1976).

Additionally, the Project is located in a sheltered portion of Kāne'ōhe Bay fronted by a 1,700 foot wide shallow reef flat. Waves produced by tsunami events are not anticipated to cause substantial damage to the surrounding shoreline area or the Project site.

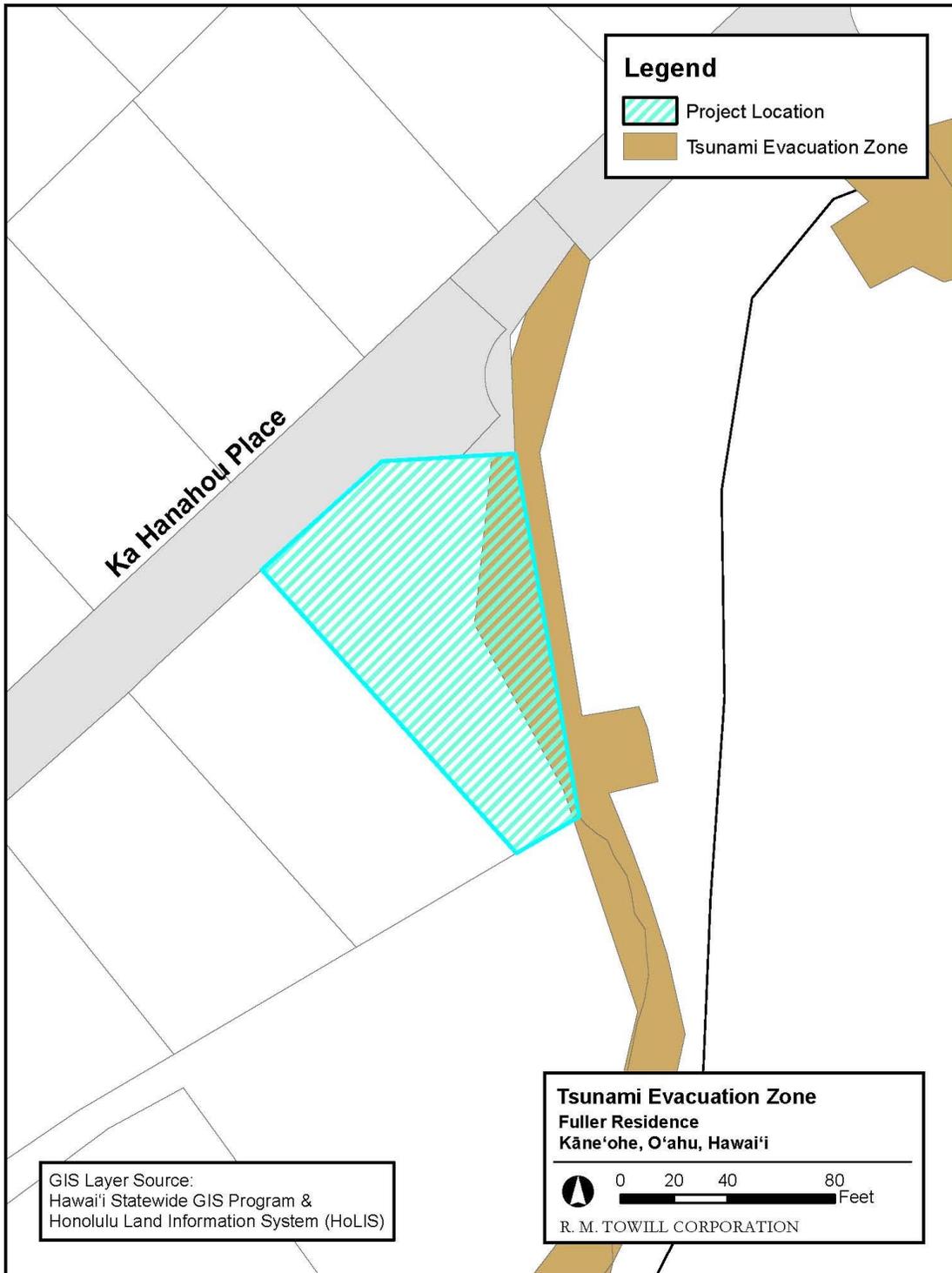
In the event of a tsunami, the PTWC of the National Oceanic and Atmospheric Administration (NOAA) will issue a tsunami warning and Civil Defense agencies, including the Honolulu police and fire departments will oversee the evacuation of areas at risk for tsunami inundation.

4.7.3 Seismic Hazards

The Hawaiian Islands experience thousands of earthquakes each year but most are so small that instruments can only detect them. Some are strong enough to be felt and a few cause minor to moderate damage. Most of Hawai'i's earthquakes are directly related to volcanic activity and are caused by magma moving beneath the earth's surface (Juvik and Juvik, 1998). The vast majority of recent (1990- 2006) earthquakes have occurred on or near the island of Hawai'i; the most recent large (magnitude 6.7) earthquake on Hawai'i island was in October 2006. Therefore, while earthquakes pose a threat throughout Hawai'i, disruptive seismic events are relatively uncommon in this region and near the Project site.

According to FEMA's Seismic Design Category (SDC) map, the Project site is located in SDC "D₀". This is an earthquake hazard area that "Could experience very strong shaking (the darker the color, the stronger the shaking)- Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures" (FEMA, 2014b).

Figure 11. Tsunami Evacuation Zone



Potential Effects and Proposed Mitigation

There is the possibility of damage to the Project from earthquakes. However, the Project is no more or less vulnerable than the rest of the island. The proposed Project is not anticipated to be adversely affected by seismic activity, nor will it exacerbate seismic activity conditions. However, mitigation measures are proposed to ensure against potential adverse effects.

According to FEMA: "... the most important factor in saving lives and reducing losses from an earthquake: the adoption and enforcement of up-to-date building codes." The CCH has adopted the International Building Code (IBC). FEMA states: "Some provisions within the IBC, IRC, and IEBC are intended to ensure that structures can adequately resist seismic forces during earthquakes. These seismic provisions represent the best available guidance on how structures should be designed and constructed to limit seismic risk." Designing and building the proposed Project according to the provisions of the IBC will help to mitigate damage from major seismic events.

New buildings and structures on the proposed Project site will be designed and constructed in accordance with the CCH Land Use Ordinance (LUO), Chapter 16, Article 1, Adoption of the International Building Code (IBC) and International Residential Code (IRC) or One- and Two-Family Dwellings. The IBC provides minimum design criteria to address the potential for seismic damage.

4.7.4 Hurricanes and High Winds

The Hawaiian Islands are seasonally affected by Pacific hurricanes from the late summer to early winter months. The State has been affected twice since 1982 by significant hurricanes, 'Iwa in 1982 and 'Iniki in 1992. During hurricanes and storm conditions, high winds cause strong uplifting forces on structures, particularly on roofs. Wind-driven materials and debris can attain high velocity, cause devastating property damage.

Potential Effects and Proposed Mitigation

The potential for hurricanes is present. It is difficult to predict these natural occurrences, but it is reasonable to assume that future events will occur. The Project area is, however, no more or less vulnerable than the rest of the island to the destructive winds and torrential rains associated with hurricanes.

The proposed Project site has the potential to be adversely affected by hurricanes and high winds during construction of the Project. Therefore, mitigation measures are proposed to ensure against potential adverse effects.

The potential for adverse effects during construction will be addressed by protecting and securing construction equipment upon the notification of an impending hurricane event. The National Hurricane Center (NHC) issues a "Hurricane Watch" within 48 hours of a potential hurricane event, and issues a "Hurricane Warning" when sustained winds of at least 74 mph are expected within 36 hours of a potential hurricane event. Upon issuance

of a “Hurricane Watch” notice, work crews will begin securing the construction site as follows:

- Remove or secure equipment, machinery, construction materials, and portable toilets.
- Clean up all construction debris.
- Stop scheduled deliveries of building materials.
- Remove jobsite signage, dust screens, silt screens, and other temporary installations.
- Locate and turn off jobsite utilities, including electricity and water connections.
- In severe situations all work crews will evacuate to the nearest hurricane shelter, Benjamin Parker Elementary School, located approximately 0.79 miles from the Project site.

To safeguard against hurricane damage, the Project will be designed in compliance with IBC standards for wind exposure, and will carry a minimum design wind load of 105 mph to withstand hurricane force winds (ROH, Chapter 16). Once construction is completed, the proposed Project site is not anticipated to exacerbate hurricanes and high wind conditions; therefore, no other mitigation measures are recommended or required.

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5.0 Public Services, Potential Impact and Proposed Mitigation Measures

5.1 Traffic and Roadways

The subject property is located on Ka Hanahou Place which is a 2-way local roadway in Kāneʻohe Bay. The roadway terminates at the subject property. The posted speed limit along this segment of Ka Hanahou Place is 25 miles per hour. Entrance and exit roadways via the State of Hawaiʻi's H-3 Freeway or Likelike Highway can be accessed through Kamehameha Highway near the Project. Ka Hanahou Place connects to Ka Hanahou Circle, which turns into Lilipuna Road, and eventually joins Kamehameha Highway.

Potential Effects and Proposed Mitigation

Potential short-term effects associated with the proposed Project involve the temporary use and movement of construction vehicles, required for hauling equipment and materials to and from the Project site. This will be most noticeable on the roadway during construction, mobilization, staging and demobilization of equipment from the work site. There may also be a noticeable increase in vehicular traffic from construction workers commuting to and from the Project site.

Proposed mitigation measures to address the potential for any short-term effects will comprise the following:

- Construction personnel will use flags or other appropriate signaling devices along Ka Hanahou Place to maintain safety when construction vehicles enter and leave the Project site, as needed.

The Project involves the reconstruction of an existing one-family dwelling. According to the Trip Generation prepared by the Institute of Transportation Engineers (2012, 9th edition), a one-family dwelling is anticipated to generate 2-4 trips per household per day (assuming a 4-person household) for work, shopping and recreation trips. With an anticipated increase of 2-4 vehicular trips per day resulting from the Project, an increase in traffic volume associated with the proposed Project after its completion is not anticipated. Therefore, no long-term adverse effects to traffic conditions and surrounding roadways are anticipated. No other mitigation measures are required or recommended.

5.2 Wastewater

The CCH's Department of Environmental Services (ENV) manages the municipal wastewater collection, treatment, and disposal system on Oʻahu. The CCH ENV manages nine wastewater treatment plants and associated pump stations and outfalls. Wastewater treatment for the Project area is provided by the CCH via the Kailua Regional Wastewater Treatment Plant (WWTP). The nearest CCH sanitary sewer line is located along Ka Hanahou Place adjacent to the subject property.

Potential Effects and Proposed Mitigation

The Project will have no adverse effects on wastewater facilities. The Project involves the reconstruction of an existing one-family dwelling, permitted by zoning. Therefore, it is anticipated that the proposed development can be accommodated by the existing wastewater collection and treatment system. No mitigation measures are required or recommended.

5.3 Portable Water

The Board of Water Supply (BWS) is responsible for the management, control and operation of Oahu's municipal water system. The BWS is an integrated, island-wide system with interconnections between water sources and service areas. Potable water is supplied to the Project site by a BWS lateral located along Ka Hanahou Place adjacent to the subject property.

Potential Effects and Proposed Mitigation

The Project involves the reconstruction of an existing one-family dwelling, and is not anticipated to affect the BWS's water source and distribution system.

Potential short-term effects to potable water resources will involve the use of water during construction activities. Water will be used for dust control, cement/concrete mixing, cleaning, and other related construction activities. The existing piping facilities will provide water for these uses. Water trucks or water tanks may be brought to the site to supplement this water source. Conservation practices will be employed by the General Contractor to minimize the use of water. These practices may include, but are not limited, to the following:

- Water used for dust control will be applied in amounts sufficient to wet soils without causing runoff.
- All on-site BWS-sourced water pipes supplying water for construction activities shall be inspected daily to ensure against leaks. Any leaking pipes or valves shall be repaired or replaced as soon as possible, during the workday.

The Project will involve the same permitted land use as currently exists; therefore, long-term adverse effects to potable water resources are not anticipated. No other mitigation measures are required or recommended.

5.4 Solid Waste

Solid waste collection and disposal service is currently being provided by the CCH ENV, Refuse Division and private waste collection haulers.

Potential Effects and Proposed Mitigation

During construction, there will be generation of solid waste in the form of construction and demolition debris from expended materials. Construction and demolition debris waste will be handled by the construction contractor in accordance with State and CCH

regulations governing the safe disposal of such materials at an acceptable facility such as the PVT Land Company Landfill located at 87-2020 Farrington Highway, Waianae. Soils that cannot be reused for fill or cover material would also need to be disposed of in accordance with State and CCH regulations governing construction waste. No further mitigation beyond the contractor's responsibility for the disposal of construction related solid waste is expected to be required.

The Project involves the reconstruction of an existing one-family dwelling; therefore, the Project will involve the same permitted land use as currently exists. No long-term effects to solid waste collection and disposal services are anticipated; therefore, no mitigation measures are proposed other than reusing or recycling any applicable materials.

5.5 Drainage

The CCH ENV manages the storm drain system on O'ahu, which is regulated under a NPDES Municipal Separate Sewer System (MS4) permit administered by the SDOH from the EPA.

Storm water runoff from the property currently either percolates into the ground, or enters the Kāne'ōhe Bay via surface flow following the existing topography.

Potential Effects and Proposed Mitigation

During construction activities, there is the potential for pollutants to discharge from the proposed project site in storm water runoff. However, the proposed Project will result in less than one acre of ground disturbance during construction; thus, a National Pollutant Discharge Elimination System (NPDES) permit relating to discharges of storm water associated with construction activity is not required. Nevertheless, a Site-specific BMP plan will be implemented, to ensure against the discharge of untreated storm water and non-storm water pollutants and ensure that the Project complies with State Department of Health (SDOH) regulations as set forth in HAR, Title 11, Chapter 54, *Water Quality Standards*, and Chapter 55, *Water Pollution Controls*.

The Project involves the reconstruction of an existing one-family dwelling. The Project will not require grading or excavation, will not lead to an increase in impervious surfaces, and overall drainage patterns will remain as close to the existing condition as possible. No long-term adverse effects on regional and local drainage are expected from the Project. The final drainage will be coordinated with the Department of Planning and Permitting (DPP). No other mitigation measures are required or recommended.

5.6 Power and Communications (Cable, Internet, Telephone)

Hawaiian Electric Company (HECO) provides electrical service to the Project and surrounding area. Oceanic Time-Warner Cable and Hawaiian Telcom provide cable, while Verizon, T-Mobile, AT&T, Sprint, and Nextel, provide cellular phone service in a majority of the Project area.

Potential Effects and Proposed Mitigation

An increase in the use of electrical power will occur during construction activities, which will be provided by means of portable generators. It is expected that some relocation of power and communication lines will be required. The proposed Project will be coordinated with HECO to minimize service disruptions, and other utility service providers will be contacted and arrangements made for review and approval of work that may require relocation or extension of facilities.

The Project involves the reconstruction of an existing one-family dwelling; therefore, no major new demands for electrical services or adverse effects on power or communication facilities are expected, as the proposed Project will involve the same permitted land use as currently exists. No other mitigation measures are required or recommended.

5.7 Fire, Police and Medical Services

The Honolulu Fire Department (HFD) provides firefighting services for O‘ahu. The HFD responds to emergencies including, but not limited to fires, emergency medical calls, hazardous materials incidents, motor vehicle accidents, natural disasters and technical rescues. The island of O‘ahu is divided into five battalions containing 45 fire stations. Fire stations in close proximity to the proposed Project site include Fire Station 17 (Kāne‘ohe), Fire Station 18 (Kailua), and Fire Station 19 (‘Aikahi). Fire Station 17 is approximately 0.94 miles from the Project site, Fire Station 18 is approximately 4.6 miles from the Project site, and Fire Station 19 is approximately 3.71 miles from the Project site.

Police protection services on O‘ahu are provided by the Honolulu Police Department (HPD). The HPD is comprised of 29 divisions. As of May 2012, the department has 1,933 sworn officers and 463 civilian personnel. The Police Headquarters is located on 801 South Beretania Street in Honolulu. The Project site is located within Patrol District 4, “Sector 3”, which includes the Kāne‘ohe and Kahalu‘u area. The Kāne‘ohe Police Station is nearest to the Project site, and is approximately 0.88 miles away.

The Castle Medical Center, located in Kāne‘ohe, is a full service medical center which offers a range of inpatient, outpatient and home-based services, which is approximately 3.71 miles from the Project site.

Potential Effects and Proposed Mitigation

The Project is not expected to have adverse effects on fire, police or emergency services. The Project will be designed to meet the Uniform Fire Code (UFC) to ensure adequate access and water availability. Construction drawings will be submitted to the HFD for review. No other mitigation measures are required or recommended.

5.8 Parks and Recreational Resources

The closest park facility is Kāne‘ohe Community Park and Keahala Playground which is located approximately 0.98 mile to the south of the Project site. Kāne‘ohe Beach Park is located approximately 0.77 mile to the east of the Project site. Kāne‘ohe District Park is located

approximately 1.44 miles to the south of the Project site. A private pier adjoins the subject property and shoreline access is provided at the end of Ka Hanahou Place.

Potential Effects and Proposed Mitigation

The reconstruction of an existing one-family dwelling is not anticipated to adversely affect access to nearby parks and recreation facilities in the area. No mitigation measures are required or recommended.

5.9 Schools and Library Facilities

The nearest elementary school to the Project site is Benjamin Parker Elementary, located approximately 0.79 miles away. The nearest intermediate and high school, James B. castle High School, is approximately 1.27 miles from the Project site. Windward Community College is approximately 1.74 miles from the Project site.

The nearest public library is Kāne‘ohe public library, located approximately 0.86 miles from the Project site.

Potential Effects and Proposed Mitigation

The proposed Project is not anticipated to have adverse effects on any educational or library facilities. Therefore, no mitigation measures are required or recommended.

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6.0 Socio-Economic and Cultural Environment, Potential Impacts and Proposed Mitigation Measures

6.1 Socio-Economic Characteristics

The City's Ko'olaupoko Sustainable Communities Plan (SCP) did not project a significant amount of population growth taking place within the region. The geographic scope of the plan extends from Makapu'u Point at the region's eastern boundary to Ka'o'io Point at the northernmost end of Kāne'ohe Bay. The Plan noted that Ko'olaupoko's population might be expected to increase from 117,700 in 1995 to approximately 122,100 by 2020, less than one-half of one percent per year. It is noted that the Plan was adopted in August 2000 and is currently in the process of being revised (CCH, 2000). Interestingly, from the year 2000 to 2010, the resident population of Kāne'ohe declined slightly by approximately 3.0 percent, from 34,829 to 33,788. Similarly, the resident population of Kailua also declined by about 4.0 percent, from 45,718 to 43,876 (DBEDT, 2010).

According to the U.S. Census (2013), the general characteristics of the population in the City and County of Honolulu from 2007 through 2011 were as indicated below:

- 31.2% of the population aged 25 years or older have a Bachelor's or higher education degree;
- 56.9% of the median household income was \$71,263; and
- 9.3% of the population was below the poverty level.

Potential Effects and Proposed Mitigation

Short-term economic benefits include the expenditure of funds and creation of jobs during construction. Long-term, the proposed Project is not expected to materially affect the population growth or socio-economic characteristics of the Kāne'ohe/Kailua region or its immediate vicinity. No adverse effects are anticipated; therefore, no mitigation measures are required or recommended.

6.2 Archaeological and Historical Resources

The Project site has been developed and previously altered through development of the one-family dwelling, boathouse and a seawall. No archaeological or historical resources are known on the Project site.

Potential Effects and Proposed Mitigation

No adverse effects to archaeological or historical resources are expected from the Project. However, should any archaeologically or historically significant artifacts, or other indicators of previous on-site activity be uncovered during the construction phase, their treatment will be conducted in strict compliance with the requirements of the DLNR, State Historic Preservation Division (SHPD).

6.3 Cultural Resources and Practices

The subject property and the immediate vicinity along the shoreline have been in residential use for at least five decades. The shoreline along this portion of Kāneʻohe Bay consists generally of a silty substrate. Public lateral shoreline access, therefore, is very limited.

The Koʻolaupoko SCP identifies significant cultural and historic sites in the Kāneʻohe region, however, there are no significant cultural or historic sites on the subject property, or within the immediate vicinity. See **Figure 12, Significant Cultural and Historic Sites**. Additionally, there are no known traditional or contemporary cultural sites, practices or plants in use that are of significant importance.

Potential Effects and Proposed Mitigation

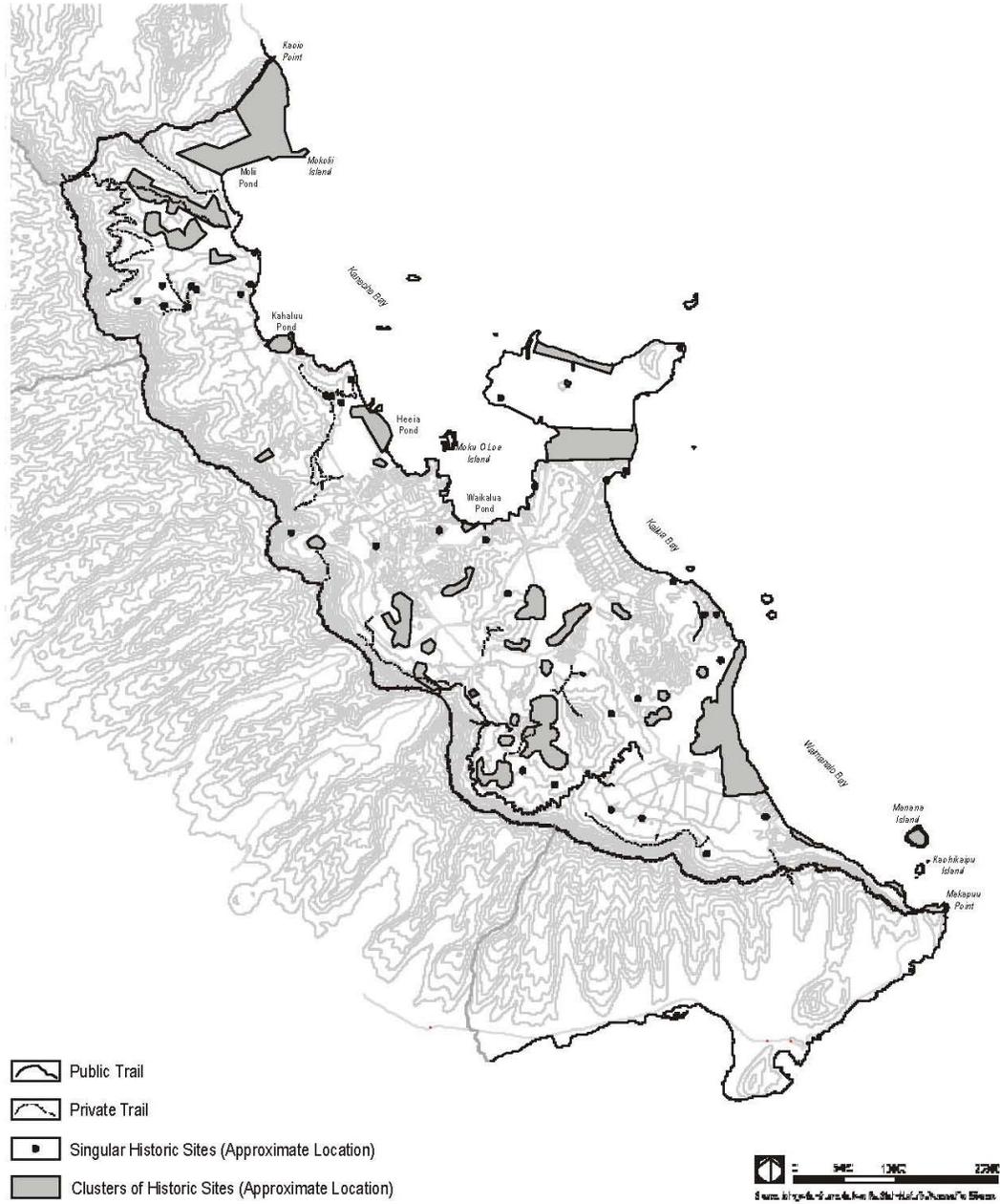
The proposed Project will not change shoreline access. Adverse effects to significant traditional or contemporary cultural and historical resources or practices at the Project site are not anticipated. No mitigation measures are required or recommended.

In the event that historic sites, including human burials, are uncovered during construction activities, all work in the vicinity will stop and SHPD will be contacted at (808) 692-8015 for further instructions. Work within the Project site may only resume upon approval by the SHPD.

Figure 12. Significant Cultural and Historic Sites

Figure 2-5

Significant Cultural and Historic Sites and Proposed Trails in Koolaupoko



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7.0 Relationship to County and State Land Use Plans, Policies and Controls

7.1 State of Hawai‘i

7.1.1 Hawai‘i State Plan

The Hawai‘i State Plan, HRS, Chapter 226, was adopted in 1978 and revised in 1988. The Plan serves as a guide for the future long range development of the State by identifying goals, objectives, policies, and priorities. The purpose of the Hawai‘i state planning process, as defined in HRS, Chapter 226, is to:

- *Guide the future long-range development of the State;*
- *Identify the goals, objectives, policies, and priorities for the State;*
- *Provide a basis for determining priorities and allocating limited resources;*
- *Improve coordination of federal, state, and county plans, policies, programs, Projects, and regulatory activities; and*
- *Establish a system for plan formulation and program coordination to integrate major state, and county activities.*

The Hawai‘i State Plan provide the following legislative intent:

§226-4 State Goals.

1. *A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations.*
2. *A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.*
3. *Physical, social, and economic well-being, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.*

§226-13 Objectives and policies for Land, air and Water Quality.

- Objective (a)(1) Maintenance and pursuit of improved quality in Hawai‘i’s land, air, and water resources.*
- Policy (b)(7) Encourage urban developments in close proximity to existing services and facilities.*

§226-19 Objectives and policies for Housing.

- Objective (a)(2) The orderly development of residential areas sensitive to community needs and other land uses.*
- Policy (b)(6) Facilitate use of vacant, developable, and underutilized urban lands for housing.*

Discussion

In conformance with Hawai‘i State Plan policies, the proposed Project involves the reconstruction of an existing one-family dwelling, which is a permitted land use. The Project is in close proximity to existing services provided within the Kāne‘ohe and Kailua urban area, and will not adversely affect surrounding land uses.

The owner of the proposed residence will be required to implement BMPs and erosion control measures during construction to mitigate possible adverse effects to the waters of Kāne‘ohe Bay. These may include structural (e.g., silt fences, berms, barriers, filter fabric), vegetative (e.g., grass, mulch, ground cover, soil stabilization), and management measures (e.g., Project scheduling and phasing, material storage and equipment maintenance procedures, continuous BMP monitoring and repair).

7.1.2 State Land Use District Classification

State-level land use control is enabled by Chapter 205, HRS, Land Use Commission (LUC), adopted in 1961. Also known as the “State Land Use Law,” Chapter 205 is meant to preserve and protect Hawai‘i lands and encourage the uses to which the lands are best suited. All lands in Hawai‘i are classified as Urban, Rural, Agriculture or Conservation. The subject property is within the Urban District.

§206-2 Districting and Classification of Lands

- (b) *Urban districts shall include activities or uses as provided by ordinances or regulations of the county within which the Urban District is situated.*

Discussion

The proposed Project is within the State Urban District. The use and intensity of the Project are consistent with State Urban District provisions.

7.1.3 Coastal Zone Management Program Assessment and Federal Consistency Determination

The Coastal Zone Management (CZM) program assessment and federal consistency determination is regulated under Section 307 – Coordination and Cooperation of the National Coastal Zone Management Act (NCZMA) of 1972, as amended (16 USC 1451, et seq). HRS Section 205A-3(3), “the lead agency shall review federal programs, federal permits, federal licenses and federal development proposals for consistency with the coastal zone management program;” and CFR, Title 15, Part 930-Federal Consistency with Approved Coastal Zone Management Programs, U.S. Department of Commerce, NOAA.

Discussion

The proposed Project does not trigger any federal permits or involve the use of federal funds; therefore, a CZM Federal Consistency review will not be required. Pursuant to HRS, Chapter 205A, the proposed action is a permitted use in the coastal zone.

7.1.4 Shoreline Certification

Pursuant to HAR, Title 13, Chapter 222, the DLNR has standardized the application procedure for shoreline certifications for purposes of implementing the shoreline setback law (HRS, Chapter 205A) and other related laws. The term “shoreline” means:

The upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limit of debris left by the wash of the waves.

In making the determination to locate and mark the shoreline, Section 13-222-16(b)(13) is pertinent:

When a shoreline has been permanently altered by the development of a harbor, lagoon, marina, or other water facility, the shoreline shall be at the mouth of the harbor, lagoon, marina, or water facility; provided, however, that this provision shall not apply where the harbor, lagoon, marina or water facility consists of both natural as well as artificial shorelines (i.e., Pearl Harbor).

Discussion

The shoreline has been certified by the DLNR dated January 21, 2014. See **Figure 5, Certified Shoreline Map**. The shoreline at the Project site is defined by the seaward face of the existing seawall. Certification of the shoreline is valid for a period of one year from the date of certification.

7.2 City and County of Honolulu

7.2.1 General Plan

The General Plan of the CCH “is a comprehensive statement of objectives and policies which sets forth the long-range aspirations of O‘ahu residents and the strategies of actions to achieve them. It is the focal point of a comprehensive planning process...” (CCH, 2006). The current plan, dated 1992 with amendment to the population distribution policies in 2002 under Resolution 02-205, CD1, is a statement of long-range social, economic, environmental, and design objectives and a statement of broad policies which facilitate the attainment of the objectives of the General Plan.

The most relevant portions of the General Plan is as follows:

Section IV, Housing, Objective C

To provide the people of O‘ahu with a choice of living environments which are reasonably close to employment, recreation and commercial centers and which are adequately served by public utilities.

Section IV, Housing, Objective A, Policy 4

Encourage residential development in areas where existing roads, utilities and other community facilities which are not being used to capacity.

Discussion

The Project does not provide an addition to the housing stock in the Kāneʻohe-Kailua urban region, rather it involves the reconstruction of an existing one-family dwelling. The property is reasonably close to employment, recreation, and commercial centers, and is adequately served by public utilities.

7.2.2 Koʻolaupoko Sustainable Communities Plan

The purpose of the sustainable community plans prepared by the CCH, DPP, is to implement the General Plan in specific geographic areas. The Koʻolaupoko Sustainable Communities Plan (SCP) area encompasses the Windward portion of Oʻahu from Makapuʻu Point at the region's eastern boundary to Kaʻoʻio Point at the northernmost end of Kāneʻohe Bay (CCH, 2000). The provisions of the Koʻolaupoko SCP are not regulatory but are meant to provide a coherent vision to guide resource protection and land use in the Koʻolaupoko region. However, the plan does provide guidance for development in Koʻolaupoko, public investment in infrastructure, zoning and other regulatory procedures, and the preparation of the CCH's annual capital improvement program budget.

The most recently-approved Koʻolaupoko SCP is contained in ROH, Chapter 24, Article 6 and became effective in August 5, 2000. It is the intent of the plan to:

... provide a guide for orderly and coordinated public and private sector development in a manner that is consistent with applicable general plan provisions, recognizing the region's urban fringe and rural areas as areas where growth will be managed so that "an undesirable spreading of development is prevented." (ROH, Section 24-6.2(b).

With regard to residential uses in the Koʻolaupoko SCP region, the Plan seeks to:

- Maintain the predominantly low-rise, low density, one-family character of the region.
- Protect the integrity of existing residential neighborhoods.

Discussion

The proposed Project retains the low-rise, low density, one-family residential character of the region, as the Project involves the reconstruction of an existing one-family dwelling. The Project complies with the provisions of the Koʻolaupoko SCP.

7.2.3 County Zoning

Land uses within the CCH jurisdiction are regulated under ROH, Chapter 21, *Land Use Ordinance (LUO)*. The purpose of the LUO, as stated in section 21.1.20, is to:

... regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the Oʻahu general plan and development plans, and to promote and protect the public health, safety and welfare."

The zoning of the subject property is R-10 residential district. See **Figure 13, City and County of Honolulu Zoning Districts**. The primary use in the residential zoning district is detached residences. The R-10 residential district requires a minimum lot size of 10,000 feet per one-family dwelling.

Discussion

The subject property totals 9,679 sf. in size. Due to the triangular lot configuration, the development of a one-family dwelling is difficult to develop under conventional subdivision standards. The shoreline setback occupies a significant portion of the parcel which adds to the difficulty in the conventional development of a one-family dwelling. Thus, a Shoreline Setback Variance (SSV) application is being filed to allow a more flexible development approach, while not exceeding the maximum allowable zoning height and density. The Project complies with zoning height and density provisions of the LUO.

7.2.4 Special Management Area

Lands within the Special Management Area (SMA) extend inland from the shoreline, as established in ROH, Chapter 25, *Special Management Area*, and delineated on SMA maps adopted by the CCH, City Council. The SMA Permit covers any uses, activities or operations that are defined as being part of “development” within the SMA. Uses, activities and operations not considered a “development” are exempt from SMA requirements. Any “development” related uses, activities or operations within the SMA requires either an SMA Minor Permit or an SMA Use Permit, depending on the total cost and environmental impact of the Project. See **Figure 14, Special Management Area**.

Pursuant to Act 153, Session Laws of Hawai‘i (SLH) 2011, “development” does not include construction or reconstruction of a one-family residence that is less than 7,500 sf. of floor area and is not part of a larger development.

Figure 13. City and County of Honolulu Zoning Districts

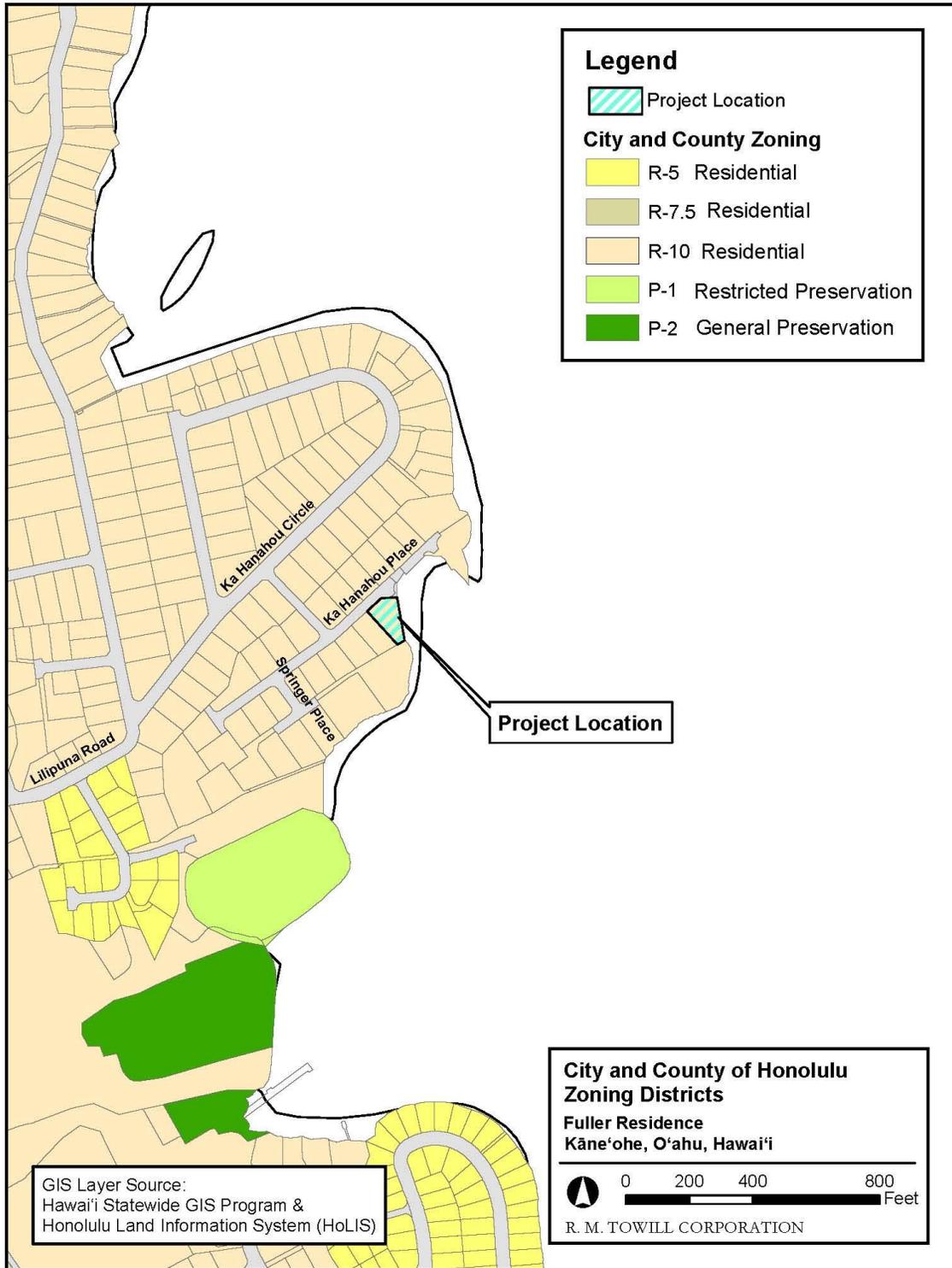
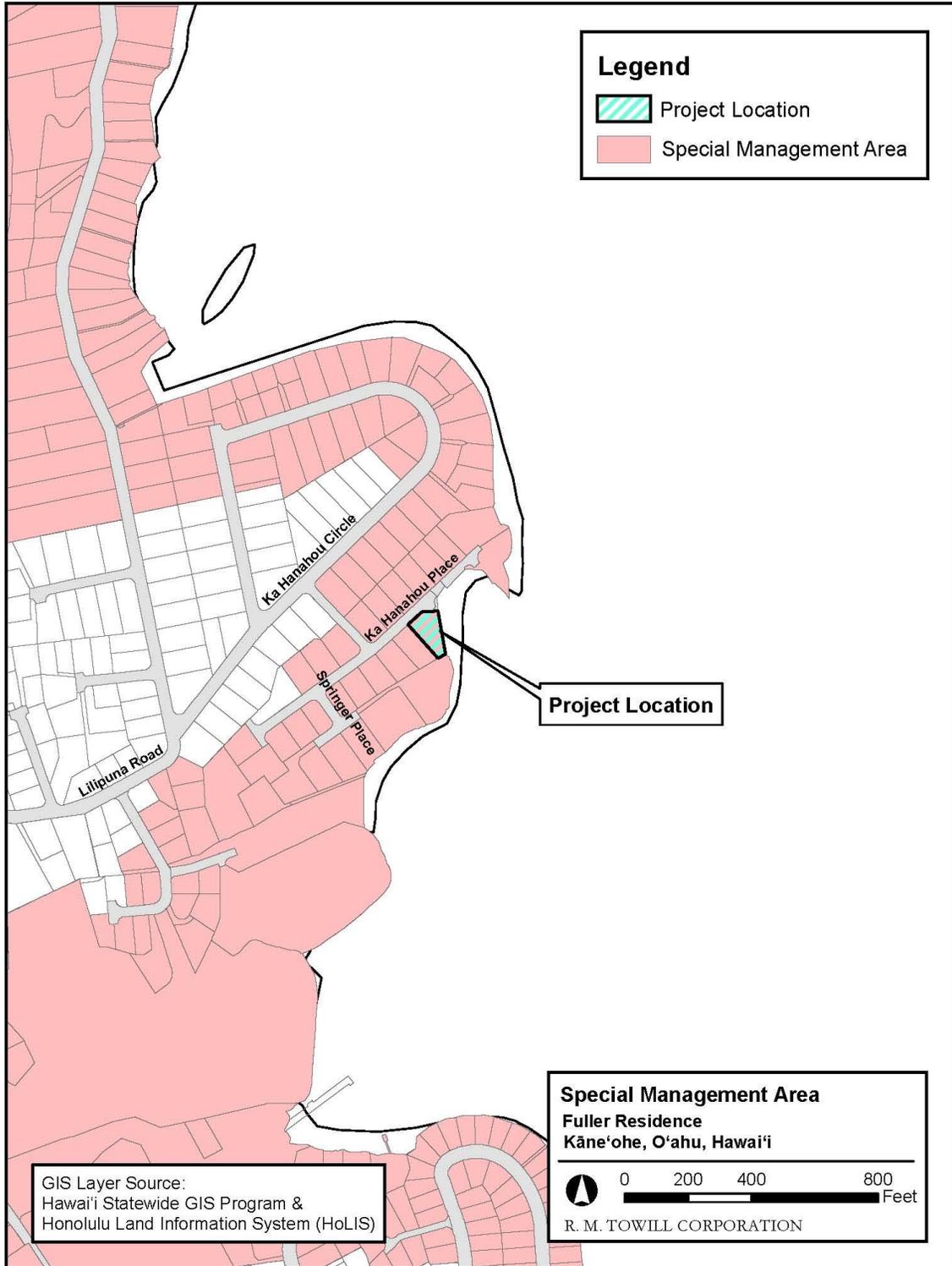


Figure 14. Special Management Area



Discussion

The subject property is located within the SMA. See **Figure 16 Special Management Area**. The Project the reconstruction of an existing one-family dwelling that is less than 7,500 sf. of floor area. In addition, a one-family dwelling by itself would not be considered a “development” and thus would be considered exempt, from filing a SMA Minor Permit and a SMA Use Permit.

7.2.5 Shoreline Setback Variance

Shoreline setback provisions are found in ROH, Chapter 23, *Shoreline Setbacks*. The primary purpose of the ordinance is to protect and preserve the natural shoreline, especially sandy beaches; to protect and preserve public pedestrian access laterally along the shoreline and to the sea; and to protect and preserve open space along the shoreline. Secondly, the intent is to reduce hazards to property from coastal floods.

According to ROH, Section 23-1.4, *Shoreline Setbacks*, the shoreline setback is generally established 40 feet inland from the Certified Shoreline.

The subject parcel is triangular in configuration, and the shoreline runs straight across the widest portion of the property along the waterfront. The shoreline was certified by the Department of Land and Natural Resources (DLNR) on Jan. 21, 2014. See **Figure 5, Certified Shoreline Map**. Development is not allowed in the shoreline setback without a shoreline setback variance. The Applicant believes that strict compliance with the shoreline rules would limit the full use of the subject parcel, and as a result would not be able to construct a one-family dwelling at a reasonable size. Therefore, the Applicant is requesting a variance from ROH, Chapter 23, *Shoreline Setbacks*.

Discussion

The Applicant is requesting a shoreline setback variance, and additionally is requesting that the shoreline setback be reduced from the standard 40 feet to 25 feet from the Certified Shoreline. See **Figure 7, Preferred Alternative**. This would allow the Applicant to complete the construction of their existing one-family dwelling and attached garage, at a *reasonable* size for their lot, retain the following portions of the residence that has already been built, and close off what is presently wide-open.

8.0 Necessary Permits and Approvals

8.1 Federal

No federal permits are anticipated.

8.2 State of Hawai‘i

No state permits are anticipated.

8.3 City and County of Honolulu

8.3.1 Special Management Area

No permit will be required for the proposed development.

8.3.2 Shoreline Setback Variance

A Shoreline Setback Variance will be required for portions of the proposed residential development which is located within the 40 foot shoreline setback. Coordination with the City and County of Honolulu’s Department of Planning and Permitting will be done to ensure compliance with the Shoreline Setback regulations.

8.3.3 Building, Electrical, Plumbing Permits

Ministerial permits such as building, electrical and plumbing permits will be required.

8.4 Utility Companies

Plan review by local utility companies will be undertaken as required and appropriate.

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9.0 Agencies, Organizations and Individuals Consulted or to be Consulted During the Preparation of this EA

A total of five public agencies and organizations were provided a copy of the preliminary DEA on April 17, 2014 (identified as ‘consulted’ below). The Board of Water Supply (BWS) sent a comment letter on May 8, 2014, and the Department of Design and Construction (DDC) sent a comment letter on May 14, 2014. No other comment letters were received. Copies of the transmittal letters sent and comment letter received can be found in **Section 12, Preliminary Consultation Letters**.

9.1 State of Hawai‘i

Department of Health – Clean Water Branch (To be Consulted)

Department of Land and Natural Resources (Consulted)

9.2 City and County of Honolulu

Board of Water Supply (Consulted)

Department of Design and Construction (Consulted)

Department of Environmental Services (Consulted)

Department of Facility Management (To be Consulted)

Department of Planning and Permitting

Honolulu Fire Department (To be Consulted)

Honolulu Police Department (To be Consulted)

9.3 Elected Officials, Organizations and Individuals

Councilmember Ikaika Anderson, District 3 – Kāne‘ohe, Kailua and Waimānalo (To be Consulted)

Hawaiian Electric Company, Inc. (To be Consulted)

Hawaiian Telcom (To be Consulted)

Kāne‘ohe Neighborhood Board No. 30 (Consulted)

Oceanic Time Warner Cable (To be Consulted)

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10.0 Significance Determination

According to the Department of Health's HAR, 11-200-12) (Rules), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the Project, its expected consequences, both primary and secondary, its cumulative impact with other projects, and its short and long term effects. In making the determination, the Rules establish "Significance Criteria" to be applied as a basis for identifying whether significant impact environmental impact will occur. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the following criteria.

The proposed Project:

1. Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

The proposed Project will not cause any irrevocable loss of natural or cultural resources. The Project site has been in residential use for decades. The subject property and abutting properties have been altered through past and current urban development. No negative effects on plant and animal habitats are expected. The Project will not adversely affect view corridors or open space parameters.

No adverse effects to archaeological or historical sites are anticipated from planned improvements. Should any archaeologically or historically significant artifacts, or other indicators of previous on-site activity be uncovered during the construction phase, their treatment will be conducted in strict compliance with the requirements of the State Historic Preservation Division.

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

The proposed Project will not result in the curtailment of the range of beneficial uses of the environment. The proposed action will be implemented on lands dedicated for residential use. The Project will replace existing residential use with new construction of a one-family residence.

3. Conflicts with the State's long term environmental policies and guidelines as expressed in Chapter 344 HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed Project is consistent with the environmental policies, goals and guidelines as delineated in HRS, Chapter 344, and as documented in this Environmental Assessment.

4. Substantially affects the economic or social welfare of the community or state;

The proposed Project has been assessed for potential social, visual, and environmental impacts in accordance with the requirements of HRS, Chapter 343, and HAR, Chapter 11-200. With implementation of the mitigation measures as identified in this document, no substantial impacts to the economic welfare, social welfare, and cultural practices are expected to result. The

proposed Project will provide short term employment opportunities during construction. In the long term, the Project provides an incremental increase in the housing stock which will provide housing opportunities for O‘ahu residents.

5. Substantially affects public health;

The proposed Project will be developed in accordance with Federal, State, and City & County of Honolulu, rules and regulations governing public safety and health. Potential sources of adverse impacts have been identified and appropriate mitigative measures developed. The primary public health concerns are anticipated to involve air, water, and noise impacts. However, it is expected that these impacts will be either minimized or brought to negligible levels by the appropriate use of the mitigation measures described in this document.

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

No adverse impacts to the domestic water, electrical and wastewater capacities and facilities are anticipated. The Project is not expected to significantly impact other public services such as fire, health care, and emergency medical services. No adverse impacts upon educational or recreational services are anticipated. The net addition of two dwelling units in the Kāne‘ohe area is not expected to significantly change the area’s population or demographic make-up.

7. Involves a substantial degradation of environmental quality;

The proposed Project is not expected to result in substantial degradation of the environment either by its construction or by its long-term use.

8. Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger action;

The proposed Project does not commit resources or energy for a larger action. There are no future phases of development for the subject property. There are no other effects on ecosystem resources and human communities from a cumulative effects perspective.

9. Substantially effects any rare, threatened or endangered species or its habitat;

No rare, threatened or endangered plant or animal species or their habitat is expected to be affected by this Project.

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

Construction activities will result in short-term air quality and noise impacts. Dust control measures, such as regular watering and sprinkling of exposed areas, will be implemented to minimize wind-blown emissions. Noise impacts will occur primarily from construction-related activities, however this will be temporary and once the Project is completed, noise levels will

return to existing levels. Water quality is not expected to be affected. In the long term, the proposed Project is not anticipated to have a significant impact on air and water quality.

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 areas, geologically hazardous land, estuary, freshwater or coastal areas;

The Project is not in an environmentally sensitive area such as a flood plain, beach or erosion-prone area, geologically hazardous land, estuary, freshwater or coastal area. Aside from new residential construction, all proposed development will be located mauka of the proposed Shoreline Setback Line. Potential effects related to erosion will be mitigated by the implementation of construction best management practices.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies;

The views to and from the Project area will not be adversely affected. The new residential structure will not substantially impact views.

13. Requires substantial energy consumption;

The construction of the proposed Project will not result in substantial consumption of energy or resources.

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11.0 Findings

In accordance with the provisions set forth in HRS, Chapter 343, and the significance criteria in HAR, 11-200-12, this assessment has preliminarily determined that the Project will have no significant adverse impact to water quality, air quality, existing utilities, noise levels, social welfare, archaeological sites, or wildlife habitat. Anticipated effects will be temporary and will not adversely impact the environmental quality of the area. Impacts that have been identified will be mitigated.

Based on analysis and review of the above factors, it has been determined that an Environmental Impact Statement (EIS) will not be required, and that a Finding of No Significant Impact (FONSI) will be issued for this Project.

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12.0 Preliminary Consultation Letters

No.	Consulter/Recipient	Date Sent	Date Received
1	Board of Water Supply	4/17/14	5/8/14
2	Department of Design and Construction	4/17/14	5/14/14
3	Department of Environmental Services	4/17/14	N/A
4	Department of Land and Natural Resources	4/17/14	N/A
5	Kaneohe Neighborhood Board	4/17/14	N/A



R. M. TOWILL CORPORATION

SINCE 1930

2024 N. King Street, Suite 200 Honolulu, HI 96819-3494

April 17, 2014

RMTC Ref. No.: 1-22224-00

Mr. Ernest Y. W. Lau, P. E., Manager and Chief Engineer
Board of Water Supply
630 South Beretania Street
Honolulu, Hawai'i 96843

Dear Mr. Lau:

Fuller Residence
Preliminary Draft Environmental Assessment
45-038 Ka Hanahou Place
Ko'olaupoko, Oahu, Hawai'i
Tax Map Key: (1) 4-5-47: 116

On behalf of the Applicant, Mr. Herb Fuller, we would like to give you advance notice of a preliminary Draft Environmental Assessment (DEA) that has been prepared for the subject Project.

The Applicant proposes to complete the construction of an existing one-family dwelling and attached garage, a permitted use in the R-10 district. The subject property is located at 45-038 Ka Hanahou Place in Kāne'ōhe, Hawai'i near the southwest edge of Kāne'ōhe Bay, identified by Tax Map Key (TMK) (1) 4-5-047-116. The subject property is 9,679 square feet (s.f.), is triangular in configuration, and is bound by one-family dwellings on the southwest side of the property, Ka Hanahou Place on the west side, and a seawall on the northeast side, fronting Kāne'ōhe Bay. A portion of the subject property is within the shoreline setback; the Applicant is requesting a shoreline setback variance (SSV) to construct a one-family dwelling and attached garage, a portion of which will be within the shoreline setback. Therefore, the Project is subject to the preparation of an environmental assessment (EA) pursuant to the Hawai'i Revised Statutes (HRS), Chapter 343-5(3), which states that an EA shall be required for actions that, "Propose any use within a shoreline area as defined in section 205A-41".

Enclosed with this transmittal is a CDROM containing a PDF copy of the preliminary DEA. We would appreciate your review of the Project. Please send any written comments to the Consultant, R. M. Towill Corporation, by May 2, 2014. Should you have any questions or need additional information, please contact the undersigned at (808) 842-1133.

Sincerely,

Chester Koga, AICP
Project Coordinator

cc: Mr. George I. Atta, FAICP, Director, Department of Planning and Permitting
Mr. Herb Fuller

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



May 8, 2014

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Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer 

Mr. Chester Koga, AICP
R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawaii 96819-3494

Dear Mr. Koga:

Subject: Your Letter Dated April 17, 2014 on the Preliminary Draft
Environmental Assessment for the Fuller Residence on
Ka Hanahou Place - Tax Map Key: 4-5-047: 116

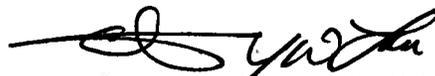
Thank you for the opportunity to comment on the completion of the dwelling on Ka Hanahou Place.

The existing water system is adequate to accommodate the proposed dwelling. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,



ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer



R. M. TOWILL CORPORATION

SINCE 1930

2024 N. King Street, Suite 200 Honolulu, HI 96819-3494

April 17, 2014

RMTC Ref. No.: 1-22224-00

Mr. Chris T. Takashige, P.E., CCM, Director
Department of Design and Construction
650 South King Street, 11th Floor
Honolulu, Hawai'i 96813

Dear Mr. Takashige:

**Fuller Residence
Preliminary Draft Environmental Assessment
45-038 Ka Hanahou Place
Ko'olaupoko, Oahu, Hawai'i
Tax Map Key: (1) 4-5-47: 116**

On behalf of the Applicant, Mr. Herb Fuller, we would like to give you advance notice of a preliminary Draft Environmental Assessment (DEA) that has been prepared for the subject Project.

The Applicant proposes to complete the construction of an existing one-family dwelling and attached garage, a permitted use in the R-10 district. The subject property is located at 45-038 Ka Hanahou Place in Kāne'ōhe, Hawai'i near the southwest edge of Kāne'ōhe Bay, identified by Tax Map Key (TMK) (1) 4-5-047-116. The subject property is 9,679 square feet (s.f.), is triangular in configuration, and is bound by one-family dwellings on the southwest side of the property, Ka Hanahou Place on the west side, and a seawall on the northeast side, fronting Kāne'ōhe Bay. A portion of the subject property is within the shoreline setback; the Applicant is requesting a shoreline setback variance (SSV) to construct a one-family dwelling and attached garage, a portion of which will be within the shoreline setback. Therefore, the Project is subject to the preparation of an environmental assessment (EA) pursuant to the Hawai'i Revised Statutes (HRS), Chapter 343-5(3), which states that an EA shall be required for actions that, "Propose any use within a shoreline area as defined in section 205A-41".

Enclosed with this transmittal is a CDROM containing a PDF copy of the preliminary DEA. We would appreciate your review of the Project. Please send any written comments to the Consultant, R. M. Towill Corporation, by May 2, 2014. Should you have any questions or need additional information, please contact the undersigned at (808) 842-1133.

Sincerely,

Chester Koga, AICP
Project Coordinator

cc: Mr. George I. Atta, FAICP, Director, Department of Planning and Permitting
Mr. Herb Fuller

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8480 • Fax: (808) 768-4567
Web site: www.honolulu.gov

KIRK CALDWELL
MAYOR



CHRIS T. TAKASHIGE, P.E., CCM
DIRECTOR

MARK YONAMINE, P.E.
DEPUTY DIRECTOR

May 14, 2014

R. M. Towill Corporation
2024 North King Street, Suite 200
Honolulu, Hawaii 96819

Attn: Chester Koga, AICP

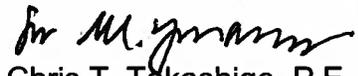
Dear Mr. Koga:

Subject: Fuller Residence Preliminary Draft Environmental Assessment
45-038 Ka Hanahou Place, Koolaupoko, Oahu, Hawaii

The Department of Design and Construction does not have comments to offer on the preliminary draft environmental assessment.

Thank you for the opportunity to review and comment. Should there be any questions, please contact me at 768-8480.

Sincerely,


Chris T. Takashige, P.E., CCM
Director

CTT: cf (559177)



R. M. TOWILL CORPORATION

SINCE 1930

2024 N. King Street, Suite 200 Honolulu, HI 96819-3494

April 17, 2014

RMTC Ref. No.: 1-22224-00

Ms. Lori Kahikina, Director
Department of Environmental Services
1000 Uluohia St # 308
Kapolei, Hawai'i 96707

Dear Ms. Lori Kahikina:

Fuller Residence
Preliminary Draft Environmental Assessment
45-038 Ka Hanahou Place
Ko'olaupoko, Oahu, Hawai'i
Tax Map Key: (1) 4-5-47: 116

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Enclosed with this transmittal is a CDROM containing a PDF copy of the preliminary DEA. We would appreciate your review of the Project. Please send any written comments to the Consultant, R. M. Towill Corporation, by May 2, 2014. Should you have any questions or need additional information, please contact the undersigned at (808) 842-1133.

Sincerely,

Chester Koga, AICP
Project Coordinator

cc: Mr. George I. Atta, FAICP, Director, Department of Planning and Permitting
Mr. Herb Fuller



R. M. TOWILL CORPORATION

SINCE 1930

2024 N. King Street, Suite 200 Honolulu, HI 96819-3494

April 17, 2014

RMTC Ref. No.: 1-22224-00

Mr. William J. Aila Jr., Chairperson
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809

Dear Mr. Aila:

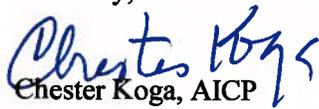
**Fuller Residence
Preliminary Draft Environmental Assessment
45-038 Ka Hanahou Place
Ko'olaupoko, Oahu, Hawai'i
Tax Map Key: (1) 4-5-47: 116**

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Sincerely,


Chester Koga, AICP
Project Coordinator

cc: Mr. George I. Atta, FAICP, Director, Department of Planning and Permitting
Mr. Herb Fuller



R. M. TOWILL CORPORATION

SINCE 1930

2024 N. King Street, Suite 200 Honolulu, HI 96819-3494

April 17, 2014

RMTC Ref. No.: 1-22224-00

Attn: Mr. Roy Yanagihara, Chair
Kāneʻohe Neighborhood Board No. 30
c/o Neighborhood Commission
530 South King Street Room 406
Honolulu, Hawaiʻi, 96813

Dear Mr. Yanagihara:

**Fuller Residence
Preliminary Draft Environmental Assessment
45-038 Ka Hanahou Place
Koʻolaupoko, Oahu, Hawaiʻi
Tax Map Key: (1) 4-5-47: 116**

On behalf of the Applicant, Mr. Herb Fuller, we would like to give you advance notice of a preliminary Draft Environmental Assessment (DEA) that has been prepared for the subject Project.

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Sincerely,

Chester Koga, AICP
Project Coordinator

cc: Mr. George I. Atta, FAICP, Director, Department of Planning and Permitting
Mr. Herb Fuller

13.0 References

(CCH, 2000). *Ko‘olaupoko Sustainable Communities Plan*. Prepared by the City and County of Honolulu, Department of Planning and Permitting. August 2000.

(CCH, 2006). *General Plan for the City and County of Honolulu*. Prepared by the City and County of Honolulu, Department of Planning and Permitting. 2006.

(DBEDT, 2010), *2009 State of Hawai‘i Data Book*, Prepared by State of Hawai‘i Department of Business, Economic Development & Tourism, 2010.

(DLNR, 2006). *Hawai‘i – National Flood Insurance Program*, Department of Land and Natural Resources, Engineering Division, 2006.

(DOH, 2010), *State of Hawai‘i Annual Summary 2009 Air Quality Data*, Prepared by State of Hawai‘i Department of Health, September 2010.

(FEMA, 2014a), FEMA website. Accessed on: 3/11/14. Retrieved from: <https://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%2520Flood%2520Zone%2520Designations>

(FEMA, 2014b), FEMA website. Accessed on: 3/11/14. Retrieved from: <http://www.fema.gov/earthquake/earthquake-hazard-maps>

(Juvik and Juvik, 1998). *Atlas of Hawai‘i, 3rd Edition*. Prepared by Sonia and James Juvik. University of Hawai‘i Press, Honolulu. 1998.

(Loomis, 1976), Loomis, Harold G. *Tsunami Wave Run-up Heights in Hawaii*, May, 1976.

(U.S. Census, 2013), *State and County QuickFacts*. U.S. Census Bureau U.S. Census, 2013. Accessed on: 3/11/14. Retrieved from: <http://quickfacts.census.gov/qfd/states/15/15003.html>