





## FIGURE 2

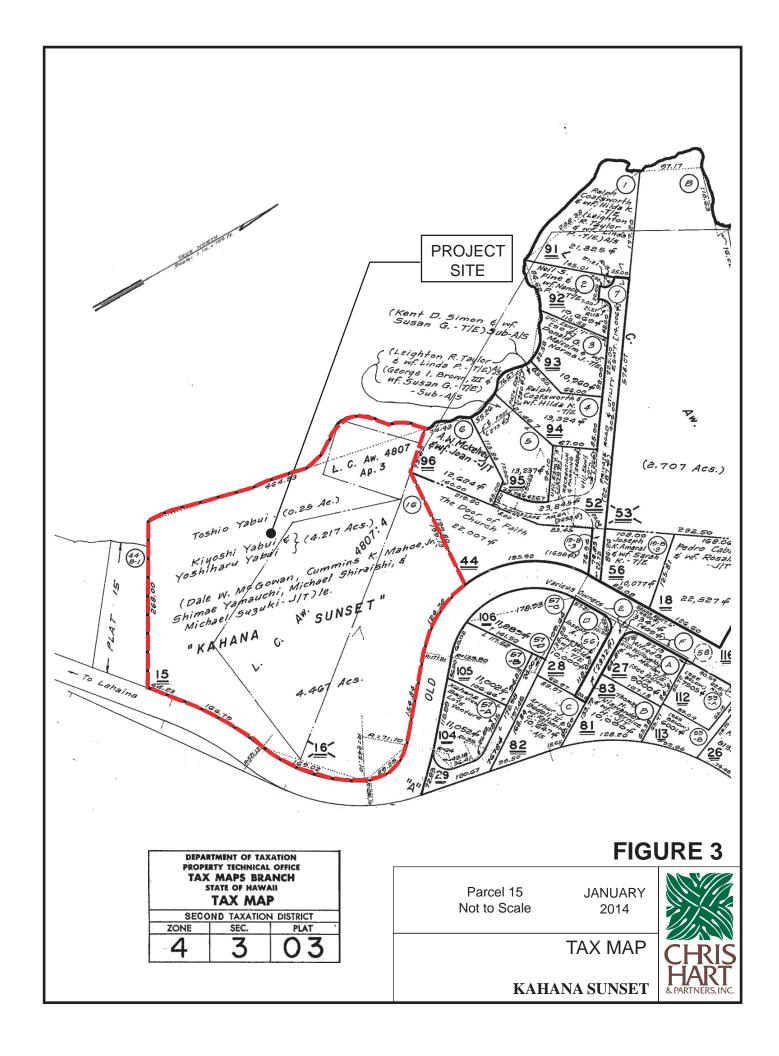
JANUARY 2014

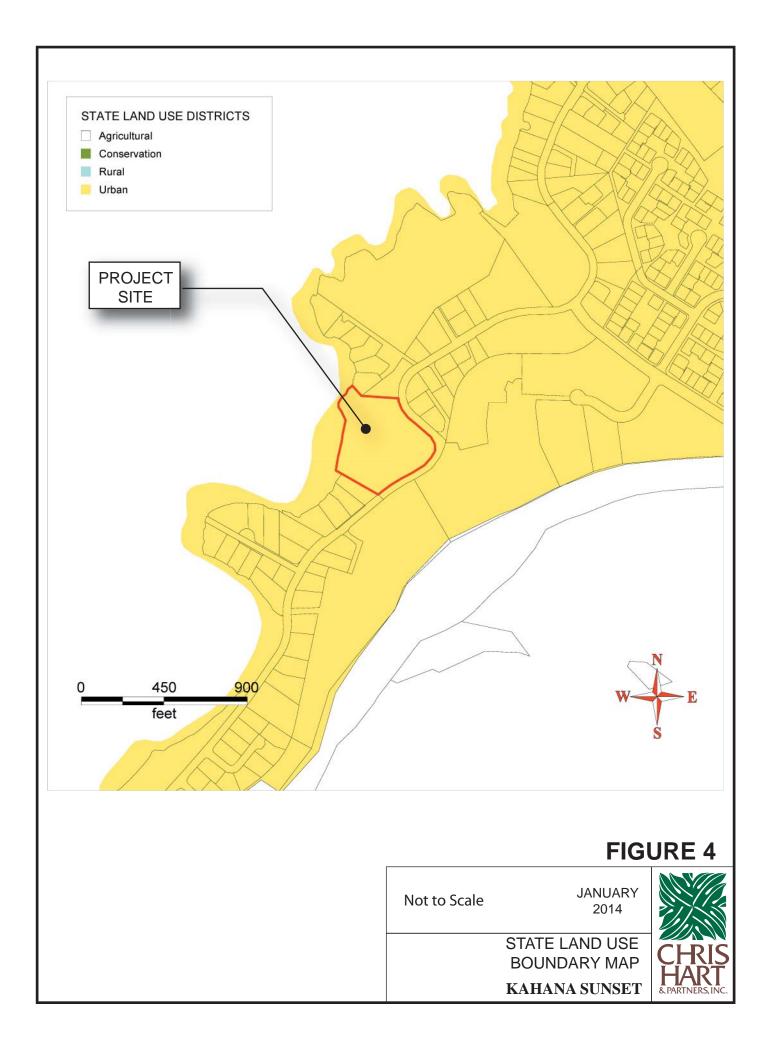
AERIAL MAP

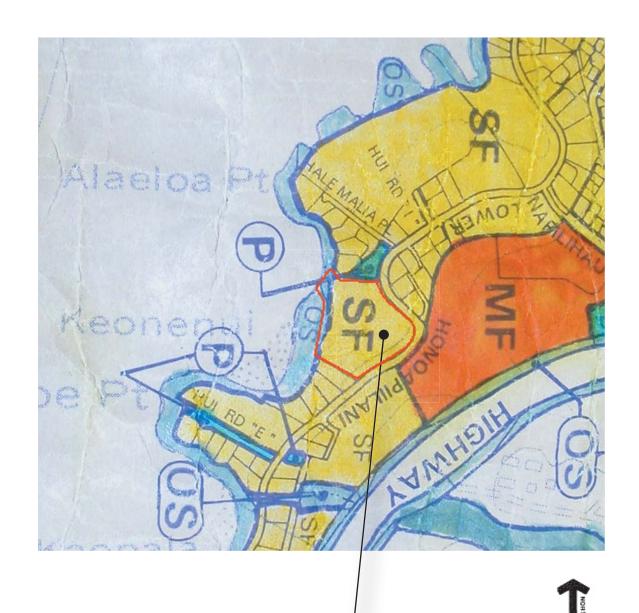
KAHANA SUNSET



Source: Google Earth, February 2012







### **LEGEND**

Single Family Residential SF MF B Multi-Family Residential

Business/Commercial Service Business/Residential SBR

BMF Business/Multi-Family

Heavy Industrial Light Industrial Ш

Hotel

Public/Quasi-Public PK OS Park (GC) Golf Course

Open Space PD **Project District** 

Airport Agricultural

AG R Rural C Conservation

——60 — Airport Special Control District
NOTE: Rural minimum list size one acre for parcets , 4 3 4 11.17.19.20.21.27.76

**PROJECT** SITE

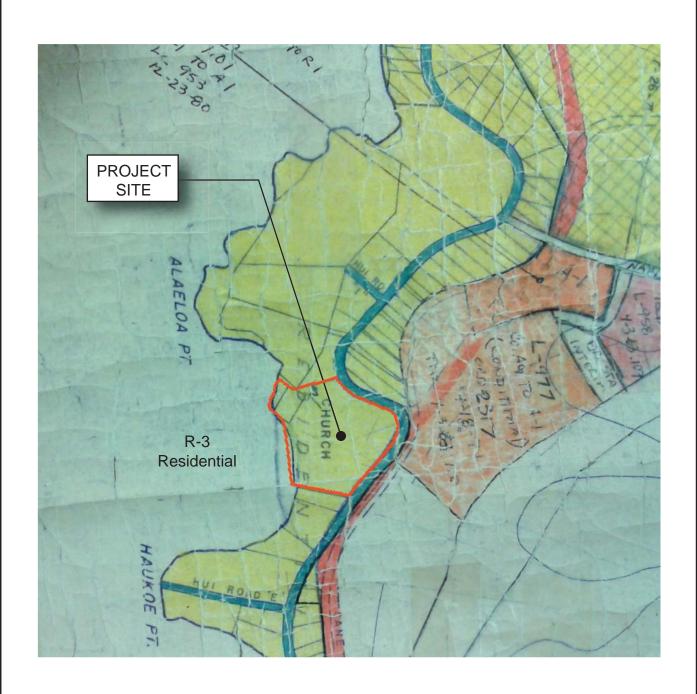
## FIGURE 5

Not to Scale

**JANUARY** 2014

**WEST MAUI COMMUNITY PLAN** KAHANA SUNSET





# FIGURE 6

Not to Scale

JANUARY 2014

COUNTY ZONING MAP

KAHANA SUNSET





#### FLOOD ZONE DEFINITIONS

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

Zone A: No BFE determined

Zone AE: BFE determined.

Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.

**Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.

Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined. Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.

Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

#### PROPERTY INFORMATION

COUNTY: MAUI TMK NO: (2) 4-3-003-015

PARCEL ADDRESS: 4909 LOWER HONOAPIILANI RD

LAHAINA, HI 96761 SEPTEMBER 25, 2009

FIRM INDEX DATE: SEPTEMBER 25, 2009
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S): 1500030264E
PANEL EFFECTIVE DATE: SEPTEMBER 25, 2009

PARCEL DATA FROM: MAY 2012 IMAGERY DATA FROM: MAY 2005

### IMPORTANT PHONE NUMBERS

County NFIP Coordinator
County of Maui

Francis Cerizo, CFM (808) 270-7771

State NFIP Coordinator

Carol Tyau-Beam, P.E., CFM (808) 587-0267

Disclaimer: The Department of Land and Natural Resources assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the Department of Land and Natural Resources from any liability, which may arise from its use.

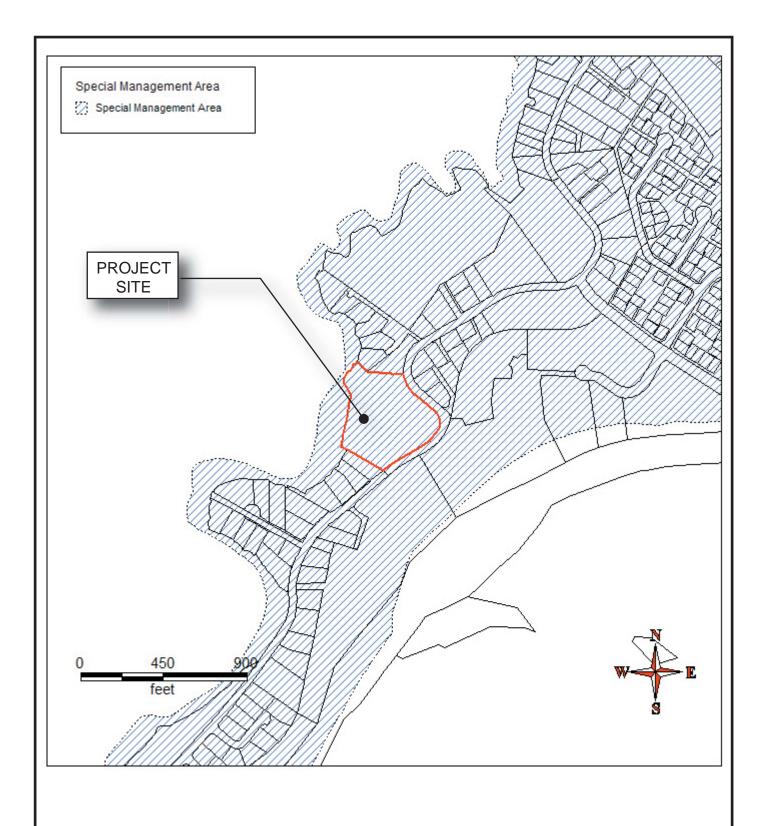
Preliminary DFIRM Disclaimer: If this map has been identified as "PRELIMINARY", please note that it is being provided for commenting purposes only and is not to be use for official/legal decisions or regulatory compliance.

### FIGURE 7

Not to Scale JANUARY FEMA Flood Insurance Map 2014

FLOOD INSURANCE RATE MAP KAHANA SUNSET





# FIGURE 8

Not to Scale

JANUARY 2014

SPECIAL MANAGEMENT AREA (SMA) MAP KAHANA SUNSET





Photo 1: View from Lower Honoapiilani Road looking makai across the Kahana Sunset property..

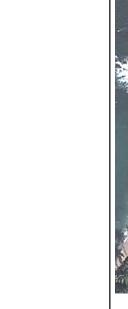


PHOTO KEY



Photo 2 Approach to Kahana Sunset traveling north along Lower Honoapiilani Road.



Photo 3: South entrance to Kahana Sunset..



Photo 4: Lower Honoapiilani Road with Kahana Sunset on the lleft and Kahana Villas structures in the distance.



Photo 5: Approach to the north entrance of Kahana Sunset along Lower Honoapiilani Road.



Photo 6: North entrance to Kahana Sunset.



Photo 7: Kahana Sunset north parking lot, looking *makai*.

Taken on June 27, 2012 unless otherwise noted

JANUARY 2014





Photo 8: Office, resident manager's unit, and laundry room.



Photo 9: Building A, 10 units.



Photo 10: Building B, 16 units.



PHOTO KEY



Photo 11: Building C, 11 units.



Photo 12: Building D, 14 units.



Photo 13: Building E, 16 units.



Photo 14: Building F, 12 units.



Photo 15: Pool and pool cabana.



Photo 16: Pool, spa, and barbeque gazebo.



Photo 17: Gazebo (left) and covered barbeque area (right). Gazebo will be relocated.

Taken on June 27, 2012 unless otherwise noted

JANUARY 2014





Photo 18: Looking north along sandy beach from lanal of Building F (12/21/2011).



Photo 20: Looking south along sandy beach fronting Building F.



Photo 23: Looking north along concrete stairway leading to lanai area of Building A (12/21/2011).



Photo 19: Looking north at area where the existing seawall will be removed and reconstructed further inland. The sandy beach will be widened in this area.



Photo 21: Looking north along seawall at the drainage outfall and the Keonenui Room adjacent to Building A.



Photo 22: Exisitng stairway to beach that is proposed to be demolished and rebuilt approximately 30 feet inland.



Photo 24: Looking down same stairway leading to Keonenui Room. Sandy beach visible in the distance.

Taken on June 27, 2012 unless otherwise noted

JANUARY 2014





Photo 25: Looking north along 20-foot high bank fronting Building A (2/16/2013).



Photo 26: Looking souh along 20-foot high bank fronting Building A.



Photo 27: Looking souh from property corner along rock & concrete wall *makai* of Building A.



PHOTO KEY



Photo 28: Existing seawall at 36-inch drainage outfall. Outfall wil be relocated approximately 3-feet inland. Green plywood covers sink holes behind seawall.



Photo 29: Sink holes behind seawall (10/10/2011).



Photo 30: Typical sink hole behind seawall (1/10/2011).



Photo 31: Top of 15-foot deep drywell (12/21/2011). 36-inch drain line from drywell to outfall at seawaill will be replaced.

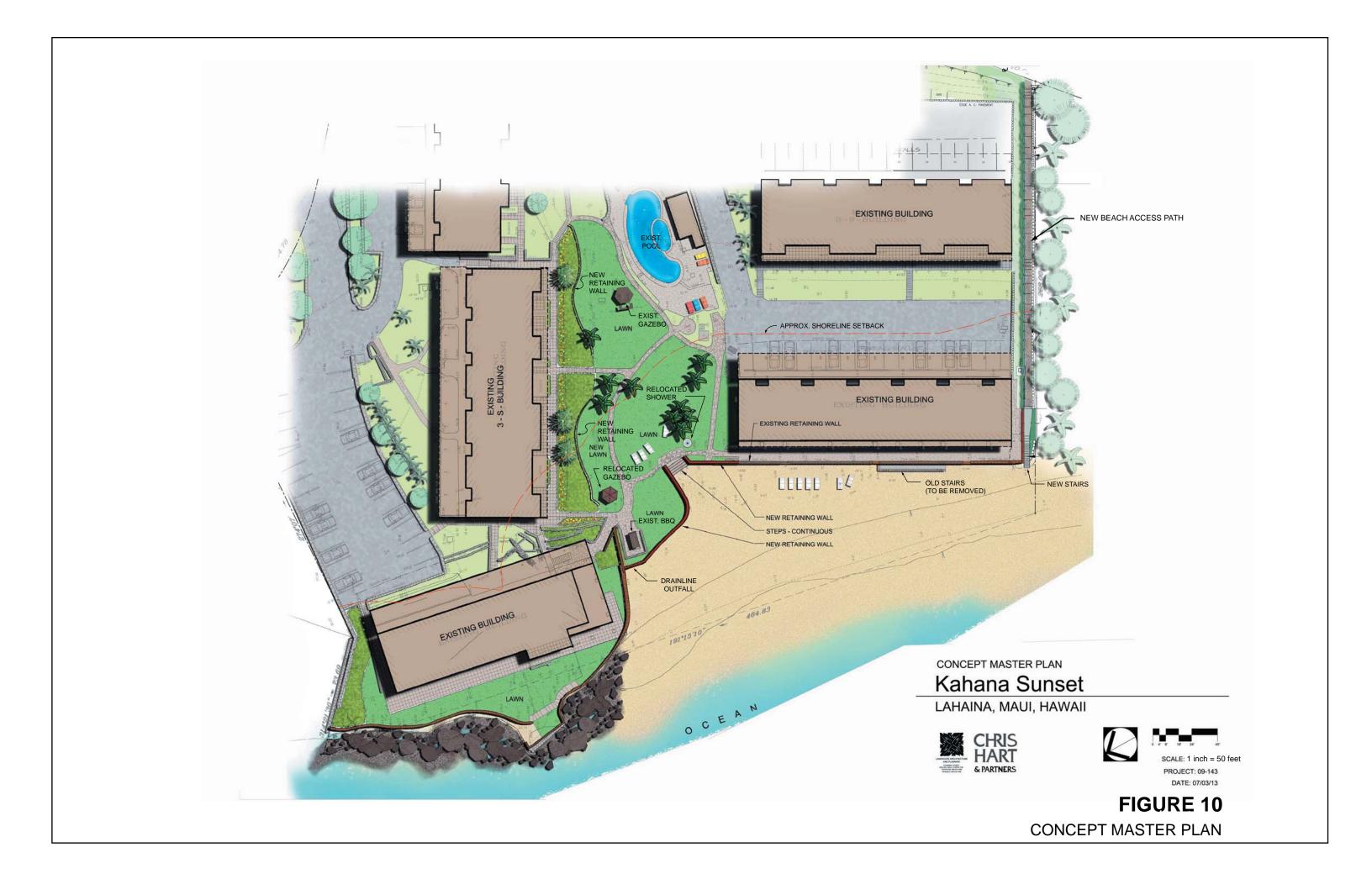


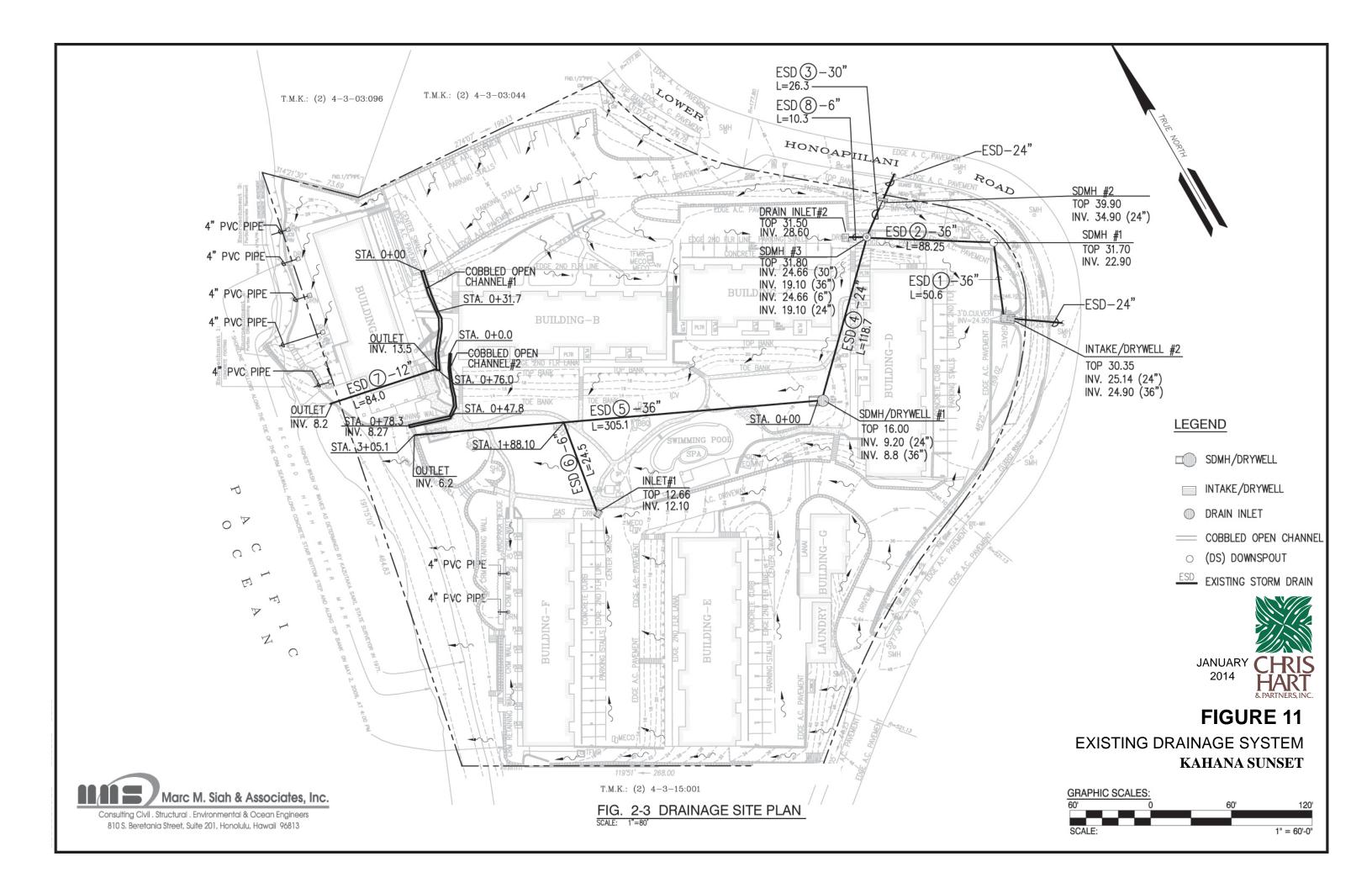
Photo 32: View of central courtyard looking makai from Building D. Hedge at left foreground screens the existing 15-foot deep drywell.

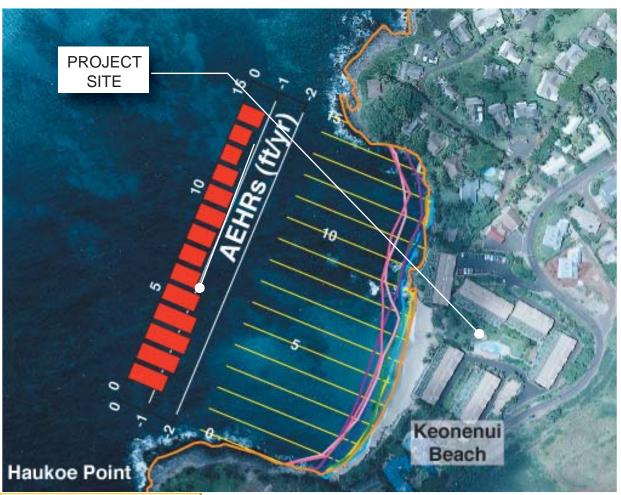
Taken on June 27, 2012 unless otherwise noted

JANUARY 2014









### HISTORICAL SHORELINES

1912 Nov 1949

> ── 1960 **──** Mar 1975

> > Aug 1987

Mar 1988

Nov 1992

May 1997

Erosion rate measurement locations (shore normal transects)

Historical beach positions, color coded by year, are determined using ortho-rectified and georeferenced aerial photographs and National Ocean Survey (NOS) topographic survey charts. The low water mark is used as the historical shoreline, or shoreline change reference feature (SCRF).

For situations in which there is coastal armoring or rocky shoreline seaward of any vegetation, the vegetation line is drawn along the seaward side of the rock or armoring. If there is no sandy beach in these areas, both the vegetation line and the SCRF are delineated along the mean high water line.

Movement of the SCRF is used to calculate erosion rates along shorenormal transects spaced every 20 m (66 ft) along the shoreline. The 1987 SCRF is not used in the calculation of the AEHR, however it provides a gauge of seasonal uncertainty.

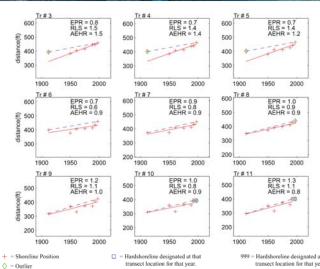


FIGURE 12

Not to Scale

JANUARY 2014

ANNUAL EROSION HAZARD RATE MAP KAHANA SUNSET



Alaeloa, Maui, Hawaii Smoothed Erosion Rates Coastal Geology Group, University of Hawaii



N						
Ň	0	50	100	200	Meters 300	Feet
$\wedge$	0	2	50	500	1,000	1,500

Map Unit Symbol	Map Unit Name
BS	Beaches
KbB	Kahana silty clay, 3 to 7 percent slopes
KbC	Kahana silty clay, 7 to 15 percent slopes
rRS	Rough broken and stony land



Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 4N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Island of Maui, Hawaii Survey Area Data: Version 7, Dec 31, 2006

## FIGURE 13

Scale as shown

**JANUARY** 2014

**SOILS MAP** 

KAHANA SUNSET



