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DEPARTMENT OF WATER SUPPLY
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OFC. OF ENVIRONMENTAL QUALITY CONTROL

February 14, 2011

Mr. Gary Hooser, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Hooser:

Subject: Draft Environmental Assessment
Mahinahina Exploratory Well
Lahaina, Maui, Hawaii

The County of Maui Department of Water Supply has reviewed the Draft Environmental Assessment for the subject project, and anticipates a Finding of No Significant Impact. Please publish notice in the next available OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form and one (1) copy of the document in pdf format on a CD; and one (1) hardcopy of the Draft EA.

Should you have any questions, please contact Alan Murata of our Engineering Division at (808) 270-7835 or email at Alan.Murata@co.maui.hi.us.

Sincerely,

for David Taylor, P.E.
Director

Enclosures

"By Water All Things Find Life"

Printed on recycled paper

DRAFT
ENVIRONMENTAL ASSESSMENT

MAHINAHINA EXPLORATORY WELL

Prepared for:

County of Maui
Department of Water Supply

February 2011

Fukunaga & Associates, Inc.
Consulting Engineers
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814
(808) 944-1821

Project Summary

Project:	Mahinahina Exploratory Well
Proposing Agency:	County of Maui, Department of Water Supply
Purpose:	The Maui Department of Water Supply (MDWS) relies on surface water for 60% of the public water supply in West Maui. The MDWS proposes to drill and test an exploratory well in Mahinahina, within the Honokowai Aquifer System, Lahaina Aquifer Sector, to investigate the viability of backup sources of potable water during times of drought and when the surface water treatment plants are undergoing maintenance.
Anticipated Determination:	Finding of No Significant Impact (FONSI)
Tax Map Key:	4-4-04:009
Property Owner:	County of Maui
State Land Use:	Agricultural
County Zoning Ordinance:	Agricultural
Pre-assessment Consultation:	County of Maui, Department of Water Supply County of Maui, Department of Environmental Management County of Maui, Department of Parks and Recreation County of Maui, Department of Planning County of Maui, Department of Public Works Hawaiian Homes Commission Maui Electric Company, Ltd. Maui Land and Pineapple Company, Inc. Office of Hawaiian Affairs State Commission on Water Resource Management State Department of Agriculture Department of Business, Economics, Development and Toursism State Department of Health State Department of Land and Natural Resources State Department of Land and Natural Resources, Historic Preservation Div. State Department of Transportation, Maui District US Army Corps of Engineers USDA Natural Resources Conservation Service US Department of the Interior, Fish and Wildlife Service West Maui Mountains Watershed Partnership

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I. INTRODUCTION

A. PURPOSE OF THE PROJECT

The Maui Department of Water Supply (MDWS) relies heavily on surface water for the public water supply in West Maui. The two regional surface water treatment plants (SWTPs), Lahaina and Mahinahina, provide about 60% of the total demand in the West Maui System. However, during periods of drought the surface water levels can drop to the point where raw water supply to the SWTPs is reduced. In addition, there have been times when the Honolua/Honokohau Ditch system has required maintenance, cutting off the supply of raw water to the Mahinahina SWTP. These periods of drought and maintenance makes the system vulnerable to periodic shortfalls.

To address the vulnerability of the Lahaina system, the MDWS proposes to drill groundwater wells to investigate the viability of backup sources of potable water during times of drought and when the SWTPs are undergoing maintenance. This project will provide one of the exploratory wells. After drilling and testing, the MDWS will use the data to assess the potential for outfitting the well with a pump and for additional wells in West Maui.

The drilling and testing of this well will be subject to the provisions of Chapter 174C Part VIII “Wells”, Hawaii Revised Statutes (HRS).

B. PROJECT LOCATION

The proposed Mahinahina Exploratory Well site is located on the southeast corner of parcel Tax Map Key (TMK) (2)4-4-04:009. A location map and aerial photo of the proposed site are presented in **Figures 1** and **2**, respectively. This parcel is owned by the State of Hawaii and is administered by the Department of Land and Natural Resources. The site is about three miles mauka of Honokowai Beach Park at approximately 1340 feet above sea level and is within a field previously used for pineapple cultivation until 2005. The total area of the parcel is 148.394 acres. The construction will require approximately 20,000 square feet; however, the majority of the area, except for a 6 foot-square concrete pad surrounding the well, will be restored after construction. The proposed well location is at approximate coordinates of latitude 20°56’35.50” North and longitude 156°38’28.80” West.

C. AQUIFER SYSTEM

CWRM has developed an aquifer classification system, which divides each island into Sectors and each Sector into Systems. The Aquifer Sectors reflect broad hydro-geological similarities, and Aquifer Systems are more specifically defined by hydraulic continuity among aquifers in the System. The proposed well is in the Honokowai Aquifer System, which is within the Lahaina Aquifer Sector. The Lahaina Aquifer

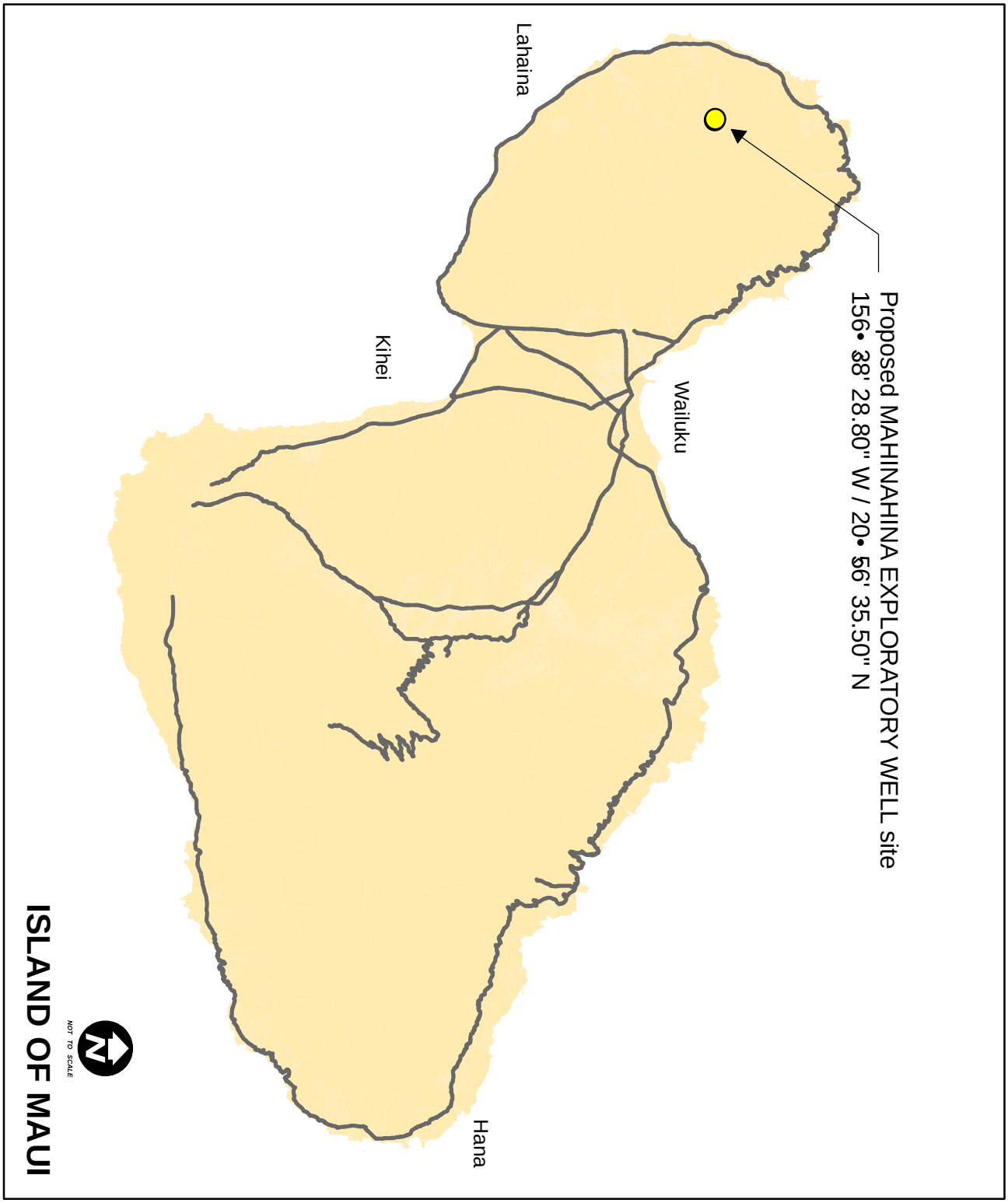


FIGURE 1 - Location Map

FIGURE 2 - Project Location

Sector also includes the Ukumehame, Olowalu, Launipoko, Honolua and Honokohau Aquifer Systems. The Honokowai Aquifer is located on the western side of the West Maui Mountain. Rainfall is the primary source of groundwater recharge in this area. The groundwater is presumed to flow in an overall northwest direction from the peak rainfall distribution above Lahaina town. Potential sources of water for the Honokowai Aquifer include high-level dike-confined groundwater, partially-confined intermediate-level groundwater and basal groundwater.

The Lahaina Aquifer Sector has a total sustainable yield of 34 mgd. The Honokowai Aquifer System has a sustainable yield of 6 mgd, of which 3.41 mgd have already been developed. Therefore, there is 2.59 mgd of groundwater available for development. **Figure 3** shows aquifer sectors and systems with the sustainable yields.

D. EXISTING WATER SYSTEMS

The groundwater is currently pumped from eight major wells or well fields in the Honokowai Aquifer. Those are Wells P-1, P-2, P-4, P-5, P-6, Hahakea 2, Honokowai B and Puukolii. The well locations can be seen on **Figure 10**. All of the groundwater wells are privately owned and managed by Hawaii Water Service Company, Inc. These wells provide potable water to the developments in the Kaanapali area. Hawaii Water Services Company reports that the system serves 700 customers including several resorts and large condominium complexes.

Contamination from the soil fumigant 1,2 Dibromo 3-chloropropane (DBCP) and the solvent 1,2,3-Trichloropropane (TCP) has been found in Wells P-5 and P-6 (Ref. 10). Well P-4 has been found to be contaminated with TCP (Ref. 10). The soil fumigant DBCP was used for the control of nematodes in pineapple fields until 1985 (Ref. 12). TCP is a solvent, degreaser and a byproduct of soil fumigant production (Ref. 11). The water from these wells is sent through granular activated carbon (GAC) purification systems to remove the chemicals and make the water acceptable for potable usage. The proposed Mahinahina Exploratory Well will be at the extreme upper edge of the former pineapple fields, where pristine groundwater first enters the area from the upper-level confined aquifer. Therefore, the potential for contamination at this site is minimized.

The MDWS does not have any groundwater sources within the Honokowai Aquifer. However, the Mahinahina SWTP is located within the Honokowai area. Finished water from the SWTP is stored in a tank at the plant site and feeds water to the 2.0 million-gallon Honokowai tank. The Honokowai tank provides water and pressure to the County water system serving the area along the coast. The proposed well will be located about 1.25 miles above (east) of the Mahiniahina SWTP. If developed, the proposed Mahinahina Exploratory Well will provide back-up potable water capacity to the Mahinahina SWTP. The proposed well is at a higher elevation than the Mahiniahina SWTP finished water tank; therefore, the well water can be conveyed via gravity to the

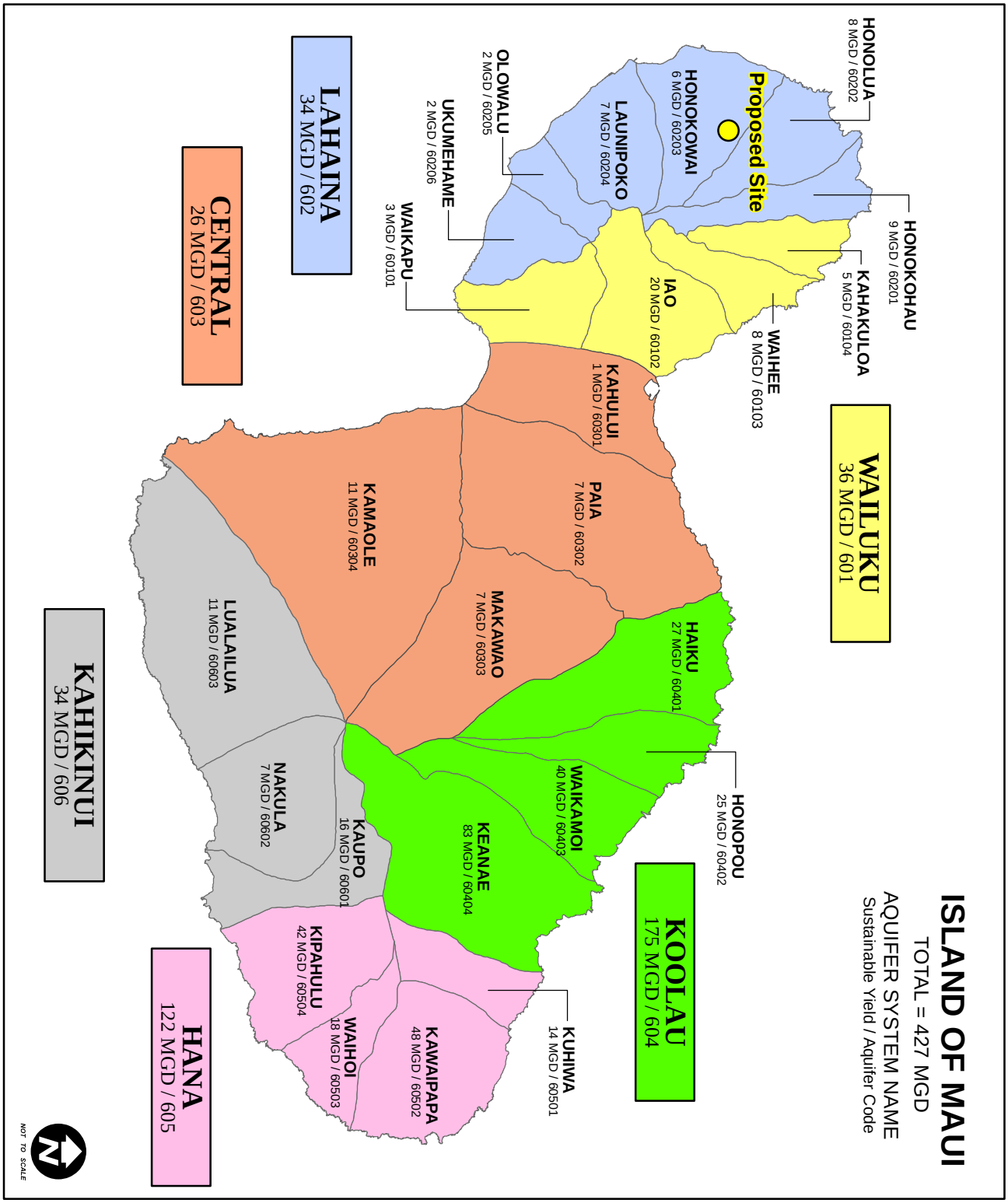


FIGURE 3 - Sustainable Yield / Aquifer Code

finished water tank when needed. Alternatively, the well water can be conveyed via gravity to the Honokowai tank.

E. DEPARTMENT OF HAWAIIAN HOME LANDS

The drilling of the well will not interfere with the rights of the Department of Hawaiian Home Lands (DHHL), as provided in Section 221 of the Hawaiian Homes Commission Act. There is one DHHL exploratory well in the Honokowai Aquifer currently under construction. The well location is shown on **Figure 10**. The DHHL well, if developed, will reduce the 2.59 mgd of groundwater available for development in the Honokowai Aquifer System (see Section C, AQUIFER SYSTEM, above).

F. PROPOSED PROJECT

The Maui Department of Water Supply is proposing the drilling of an exploratory well in the parcel (2)4-4-04:009 owned by the State. The Mahinahina Exploratory Well will be located approximately 1340 feet above sea level on land formerly used for pineapple cultivation. The well will be drilled about 1430 feet down from the surface. The well will be reamed to a diameter of approximately 26 inches. The well will have an upper section cased with 18-inch solid steel casing to a depth of about (-)30 feet msl. The bottom section of the well will be cased with 18-inch louvered screen casing from (-)30 feet msl to (-)90 feet msl. The bottom of the well will be further deepened with an open hole (from about (-)90 feet msl to (-)120 feet msl) if the geologist determines that it will improve the performance of the well. The top 1,200 +/- foot annular section of the well (the area between the outside of the solid casing and the bore hole) will be fully grouted to prevent contamination of the groundwater. The static water level in the well is estimated at elevation +17 feet msl. A schematic of the well section is presented in **Figure 4**.

Testing the exploratory well will be in accordance with HRS Chapter 174C Part VIII "Wells" and CWRM requirements. A temporary pump will be installed for step testing and constant rate testing of the well to determine well capacity and aquifer drawdown. Water quality testing will also be done on water samples taken during the pump testing.

The construction will require approximately 20,000 square feet for drill rig setup, laydown area and discharge water containment basin. However, the majority of the area, except for a 6 foot-square concrete pad surrounding the well, will be restored after construction. The contractor will follow Best Management Practices to reduce impacts to air and water quality and promote good soil conservation practices.

A Well Completion Report will be prepared for the exploratory well drilling. The Well Completion Report will be submitted to CWRM for approval.

The project is expected to take 12 to 18 months to complete.

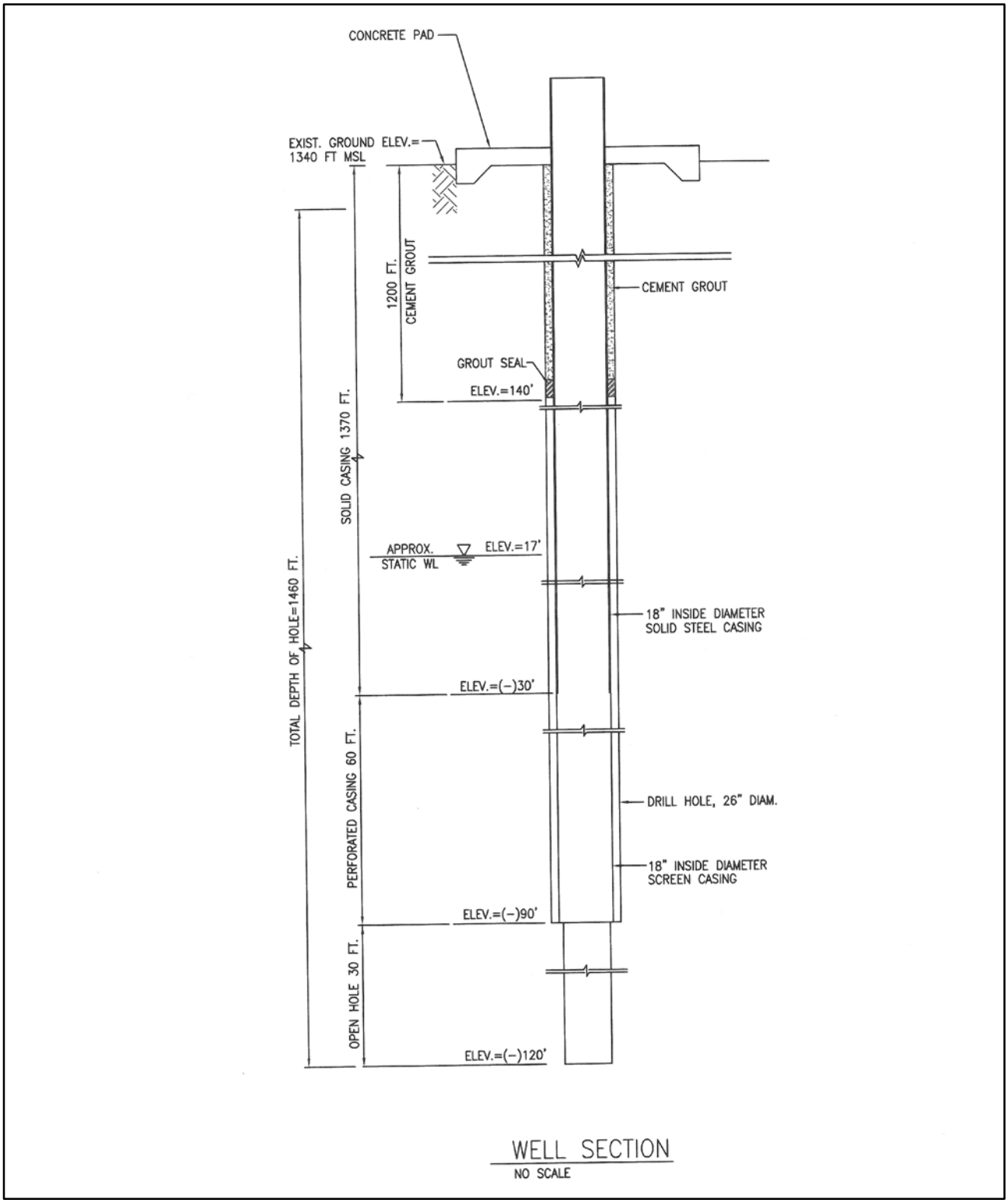


FIGURE 4 - Well Section

II. COMPLIANCE WITH PLANNING DOCUMENTS

The proposed drilling of the exploratory well is consistent with State and County General Plans, general policies, and land use designations. All regulation related to the project will be followed.

A. MAUI COUNTY GENERAL PLAN

The Charter of the County of Maui establishes the structure and organization of the government, and defines the responsibilities of the County. The Charter requires the development of the General Plan and Community Plans.

The County is in the process of updating the Maui County General Plan. The first phase, the 2030 General Plan: Countywide Policy Plan was adopted in March 2010. The Maui County 2030 General Plan addresses development patterns, problems and needs unique to the communities; explains social, economic and environmental impacts of potential developments; and sets the desired sequence, patterns and characteristics of future developments. The General Plan also identifies objectives, priorities, policies and implementing actions with respect to various development matters, including water systems.

The proposed project is consistent with the Countywide Policy Plan objectives for water, and specifically moves toward achieving the Objective 1, "Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water" (Section IV. Goals, Objectives, Policies and Actions: I Improve Physical Infrastructure). The exploration for an additional potable groundwater source to serve the community addresses the following specific policies:

a. *Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents.*
b. *Develop and fund improved water-delivery systems.*
c. *Ensure a reliable and affordable supply of water for productive agricultural uses.*
d. *Retain and expand public control and ownership of water resources and delivery systems.*
e. *Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.*
f. *Explore and promote alternative water-source-development methods.*
g. *Seek reliable long-term sources of water to serve developments that achieve consistency with the appropriate Community Plans.*

B. WEST MAUI COMMUNITY PLAN

For the County of Maui, the General Plan and the Community Plan are long-term strategic planning documents, which guide government actions and decision-making. The Charter deems the Community Plan as part of the General Plan. The West Maui Community Plan is one of nine community plans for Maui County, and reflects anticipated conditions in the region of West Maui, and advances planning goals, objectives, policies and implementation consideration to guide decision-making in the region.

The Plan identified major problems within the region. Under infrastructure, the plan specifically states:

"Water resources should be conserved and new sources developed."

The drilling of the Mahinahina Exploratory Well is a potential new source of potable water and thus addresses this concern stated in the Plan.

The Plan states the following specific objectives and policies:

1. *Protect ground water resources in the region.*

2. *Improve the quality of domestic water.*

3. *Reduce potable water consumption outside urban areas.*

4. *Coordinate the construction of all water and public roadway and utility improvements to minimize construction impacts.*

5. *Study the feasibility of integrating all regional water systems into a public water system to be managed and operated by the County.*

6. *Improve and expand the West Maui water development program projected by the County to meet future residential expansion needs and establish water treatment facilities where necessary.*

7. *Coordinate expansion of and improvements to the water system to coincide with the development of residential expansion areas.*

8. *Promote water conservation and education programs.*

9. *Promote conservation of potable water through the use of treated waste water effluent for irrigation.*

10. *Encourage the installation of underground electrical, telephone and cable television lines.*

11. *Encourage reasonable rates for water and public utility services.*

Drilling of the Mahinahina Exploratory Well is consistent with these objectives and policies.

C. MAUI COUNTY WATER USE AND DEVELOPMENT PLAN

The Maui County Water Use and Development Plan was updated in 1992 as part of the continuing planning process pursuant to the State Water Code, HRS Chapter 174C. Considerable effort was made to detail the present consumption patterns and characteristics in the various water districts served by the Department of Water Supply, County of Maui.

This Water Use and Development Plan mentioned that all DWS systems require urgent and immediate action and are expected to see an increase in demand in the future. The Plan states, "greater attention and resources must be given to water quality and reliability of service to meet the extreme conditions of maximum day demand..." and defines as follows:

1. *Volume to support domestic and agricultural activities*
2. *Water Quality for public health safety*
3. *Reliability for drought protection and quality of service*

The drilling of the Mahinahina Exploratory Well is the first step in implementing measures to address the items 1 and 3 above.

III. DESCRIPTION OF THE ENVIRONMENT

A. LAND CLASSIFICATION AND ZONING

1. State Land Use

The State Land Use Commission classifies all State lands as Urban, Rural, Agricultural, or Conservation with the intent to accommodate growth and development and to manage the natural resources of the area. The State Land Use classification of the project site is Agricultural. See **Figure 5** for the State Land Use zone designation.

2. County Zoning

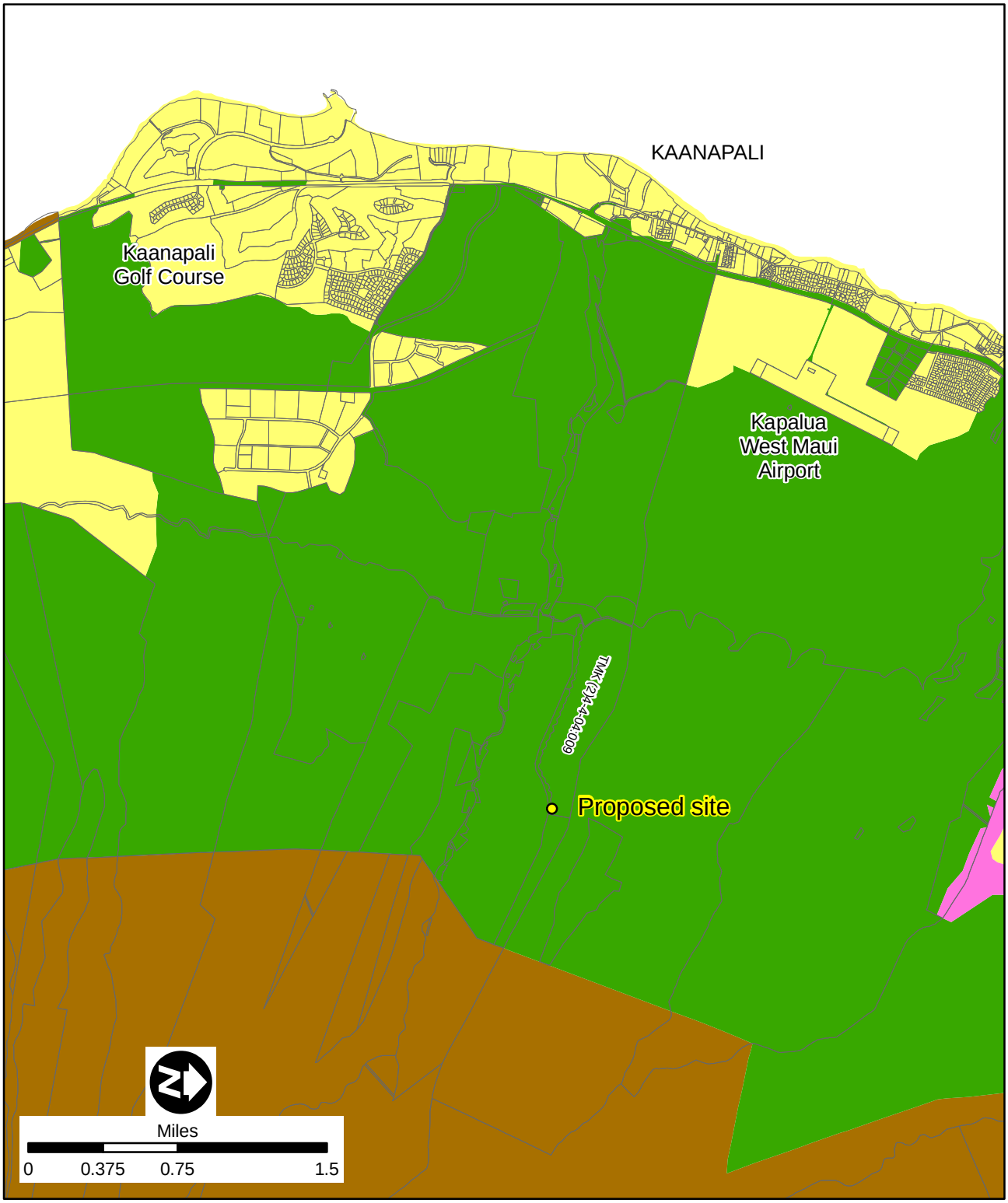
The Comprehensive Zoning Ordinance (CZO) for the County of Maui regulates more detailed land use zoning for the State designated land classifications. The CZO of the project site is Agricultural. The Comprehensive Zoning Ordinance map for the project area is shown in **Figure 6**.

3. Maui General Plan

The County of Maui establishes the structure and organization of the government, and defines the responsibilities of the County. The County of Maui is legally mandated to prepare and adopt a Maui General Plan by State law and the County Charter. The General Plan provides guidance on land use regulations, the location and character of new development and facilities, and planning for County and State facilities and services.

The Maui General Plan addresses development patterns and needs unique to the communities; explains social economic and environmental impacts of potential developments; and sets the desired sequence, patterns and characteristics of future developments. The Maui General Plan also identifies objectives, priorities, policies and implementation actions with respect to various development matters.

The Maui General Plan includes the Land Use Map that depicts policy for long-range land uses. The project site is located in the Agricultural district.



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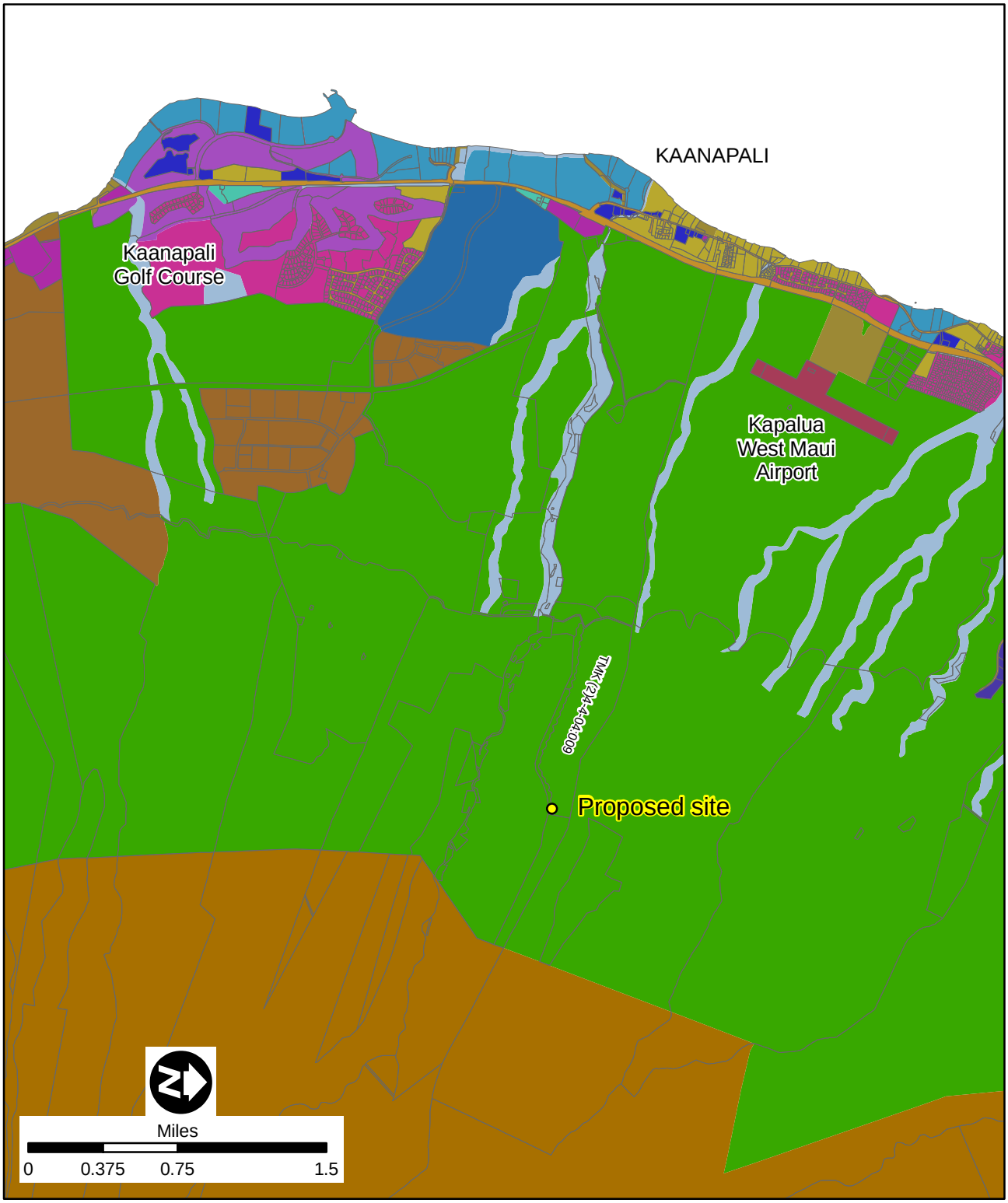
URBAN
RURAL

FIGURE 5 - State Land Use



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AGRICULTURAL

FIGURE 6 - Comprehensive Zoning Ordinance

B. PHYSICAL FEATURES

1. General

The island of Maui is formed by the East and West Maui Volcanos. The Honokowai Aquifer lies on the West Maui Volcano and covers approximately 23.6 square miles. The Honokowai Aquifer boundaries are Kahana Valley to the south, along the coast from Kaea Point to Puunoa Point, and Kahoma Valley to the north. This area is characterized by a steep and mountainous region to the east, a narrow coastal plain of alluvium, and shallow alluvial valley fill.

2. Climate

The climate of West Maui is generally subtropical with moderate rainfall throughout the year. The project area is characteristic of mountainous areas and is relatively moist. The average rainfall is typically 60 to 70 inches per year. See **Figure 7**. The variations in temperature encountered in the area range between 65 and 85° F on the average for the coolest and warmest month, respectively.

3. Topography

The mountainous areas have steep ridges and deep valleys that range in altitude from approximately 300 feet msl at the base to 5,788 feet msl at the summit of Puu Kukui. The proposed project site is located about 3 miles inland from the coast. The topography of the lands surrounding the project site forms a sloping plain. There are deep valleys to the north and south of the sloping plain. The proposed exploratory well site was graded previously for cultivation of pineapple. The ground elevation of site is approximately 1340 feet msl.

4. Geology

The area was formed during the Wailuku volcanic series which occurred in the Pliocene or Pleistocene era. Rock from the Wailuku volcanic series is characterized by thin-bedded a’a and pahoehoe flows of primitive olivine basalt, scattered cinder cones and thin tuff beds, and numerous dikes. This rock is overlain by older alluvium from the Pleistocene and Holocene eras.

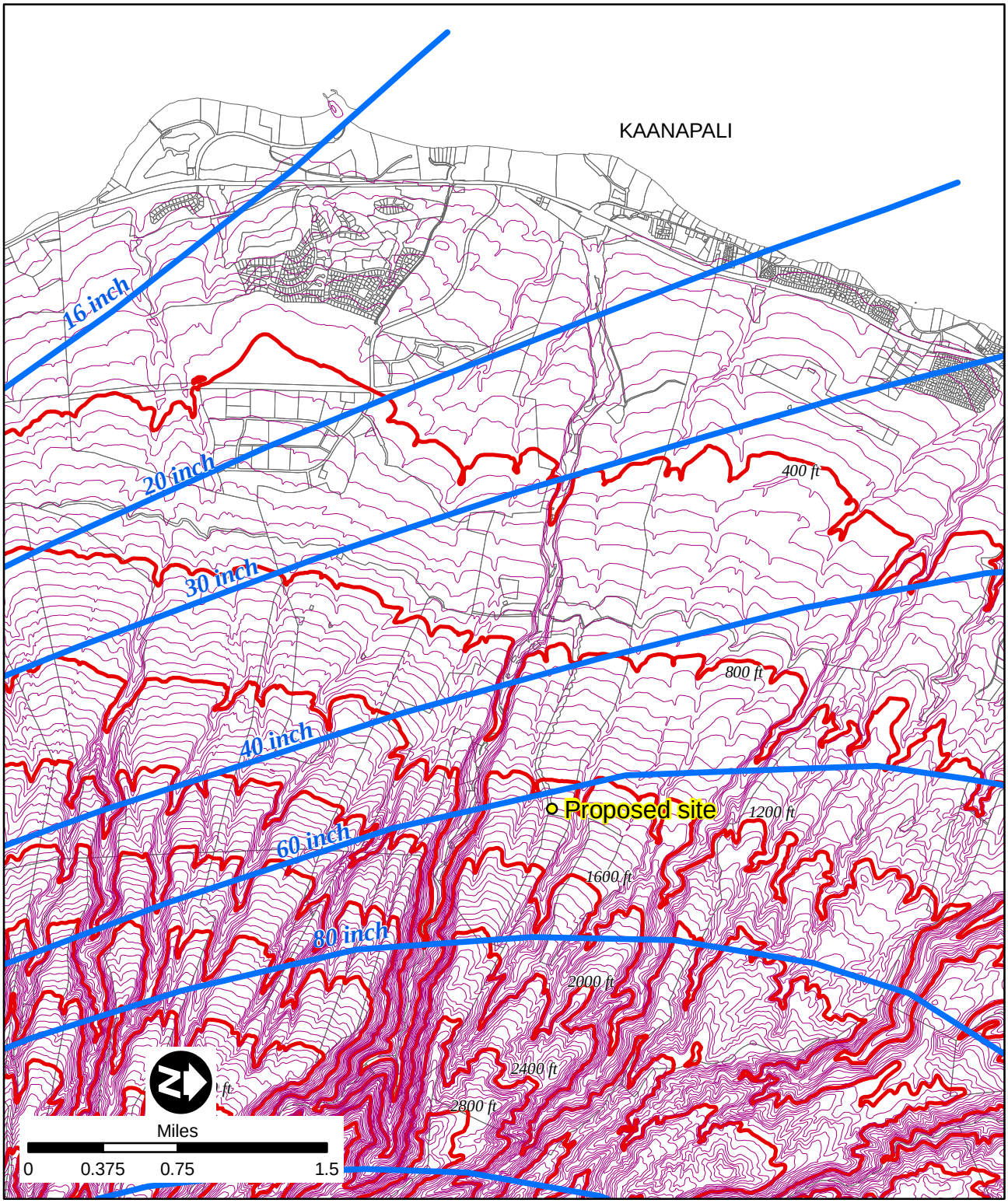


FIGURE 7 - Topographic and Rainfall

5. Soils

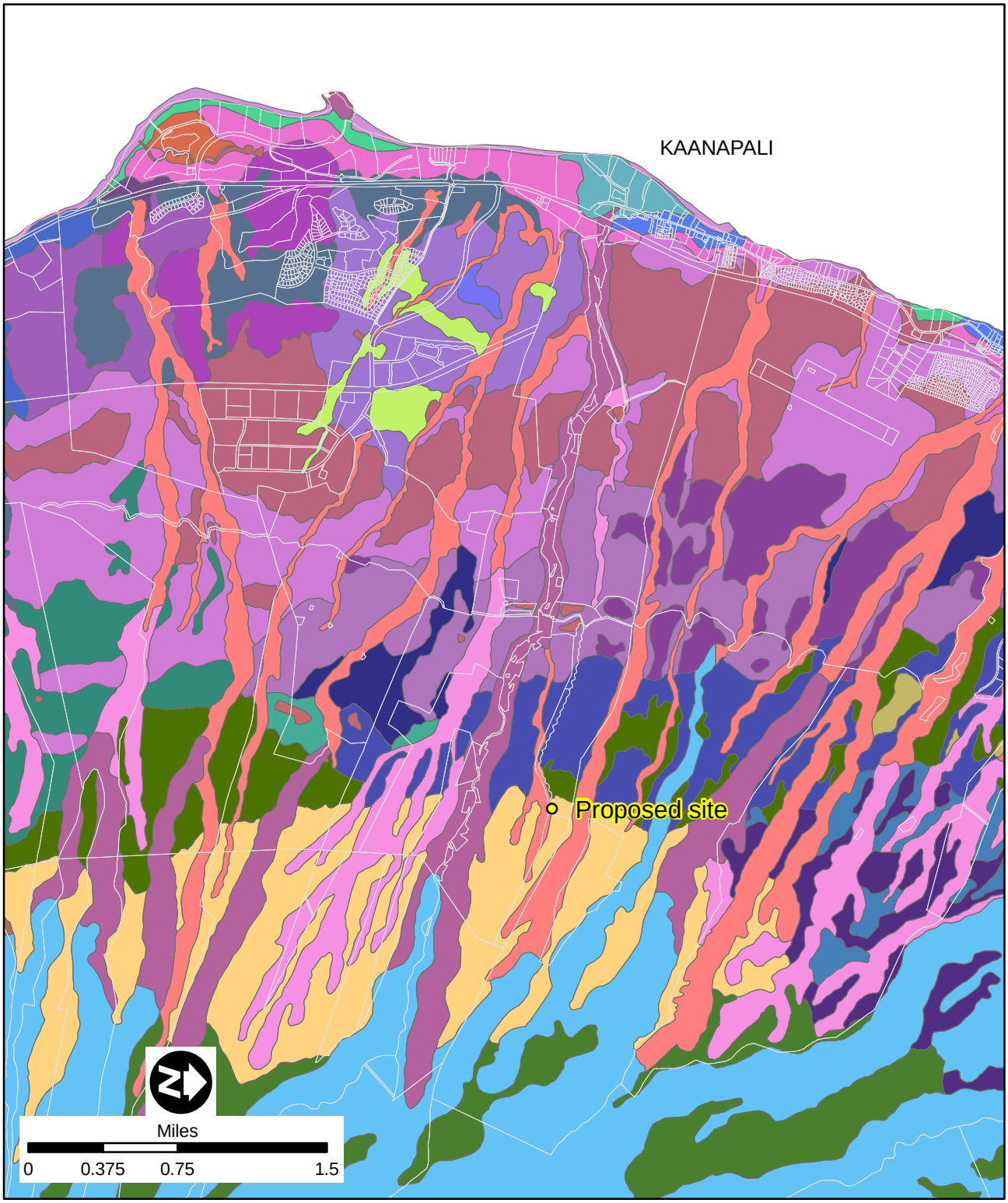
   According to the Soil Survey issued in 2006 by the U.S. Department of Agriculture Soil Conservation Service (USDA SCS), soils of the project site are classified as Olelo Silty Clay, 3 to 15 percent slopes (OFC). These soils developed from basic igneous rock. **Figure 8** shows the detailed soil classification of the project site.

6. Hydrology

   A hydrogeologic report was prepared for this project and is included in the *West Maui Source Development Site Selection Report*. This report interprets the regional hydrology of the Honokowai Aquifer, as shown on **Figure 9**. The Honokowai Aquifer contains: (1) high-level, dike-confined groundwater, (2) intermediate-level groundwater, and (3) basal groundwater. The general movement of fresh ground water is from the dike-confined water body into the basal system, the brackish water transition zone, and then to the ocean.

   There is one major ditch, the Honolua/Honokohau Ditch, that brings water into the Honokowai area from a diversion at Honokohau Stream (Ref 7 & 8). There are also diversions at Kaluanui, and Honolua Streams; however, these diversions are closed (Ref 7 & 8). The ditch currently provides raw water to the Mahinahina SWTP.

   There are eight active water wells in the Honokowai Aquifer, all owned and operated by Hawaii Water Service Company, Inc., a local entity of California American Water Service Group. Honokowai also has a deep monitor well for study of the aquifer system and a number of wells that are not in use. The wells, streams and ditches in the vicinity of the proposed project site are shown in **Figure 10**. Based on the CWRM database, the wells within the Honokowai Aquifer System are listed in **Table 1**.



LEGEND

- Olelo Silty Clay, 3 to 5 percent slopes (OFC)
- Alaeloa Silty Clay, 15 to 35 percent slopes (AeE)
- Rough Broken and Stony Land (rRS)

FIGURE 8 - Soil Map

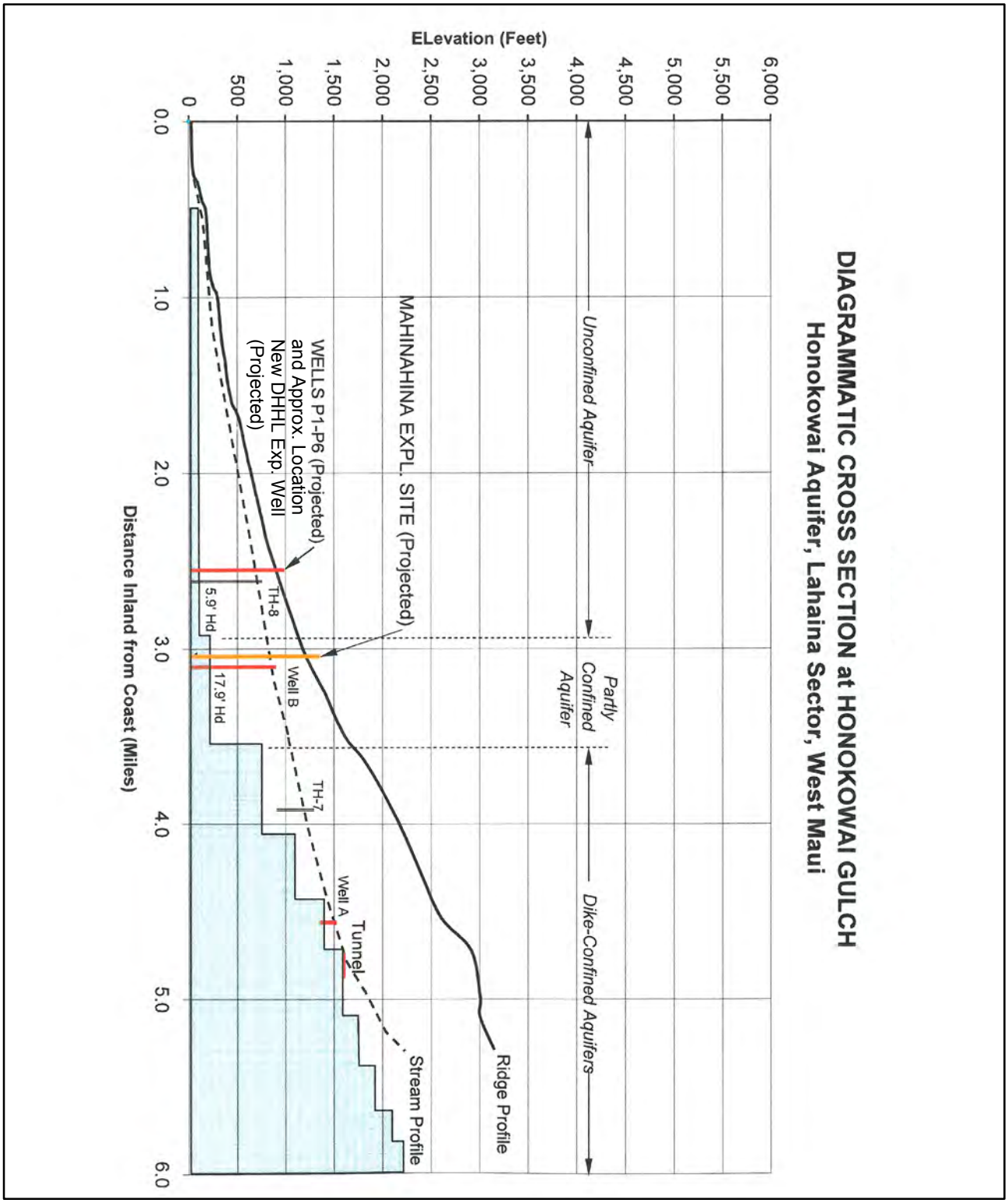
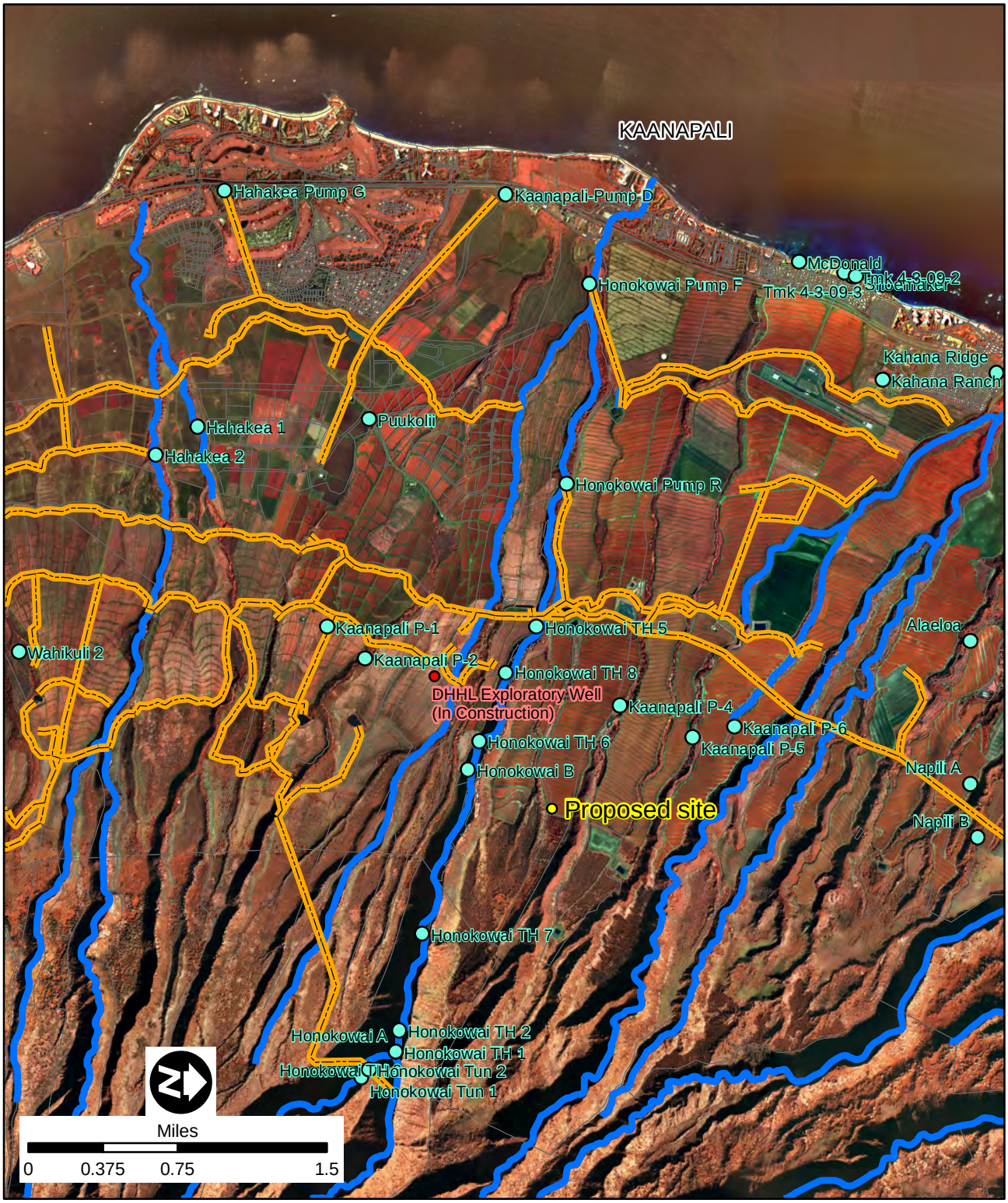


FIGURE 9 - Groundwater Occurrence and Movement



LEGEND
- Wells
- Streams
- Ditches

FIGURE 10 - Wells, Streams, and Ditches

Table 1 – WELLS IN THE HONOKOWAI AQUIFER

WELL NO	WELL NAME	OWNER USER	USE	WITHDRAWAL MGD
5439-01	Wahikuli 1	State HHFDC	Unused	
5439-02	Wahikuli 2	State HHFDC	Unused	
5440-01	Wahikuli Irr	State HHFDC	Irrigation	
5441-02	Lahaina Civic	Maui Parks & Rec	Irrigation	
5537-01	Honokowai Tun 1	Pioneer Mill (Kaanapali Land)	Irrigation	
5537-02	Honokowai Tun 2	Pioneer Mill (Kaanapali Land)	Irrigation	
5539-01	P1 Kaanapali	CA Water Service Group	Potable	0.515
5539-02	P2 Kaanapali	CA Water Service Group	Potable	0.185
5539-03	P3 Kaanapali	CA Water Service Group	Unused	
5540-01	Puukolii	CA Water Service Group	Potable	0.010
5540-02	Hahakea 1	AMFAC (Kaanapali Land)	Unused	
5540-03	Hahakea 2	CA Water Service Group	Potable	0.382
5541-01	Hahakea Pump G	CA Water Service Group	Unused	
5637-01	Honokowai TH 1	AMFAC (Kaanapali Land)	Observation	
5637-02	Honokowai TH 2	AMFAC (Kaanapali Land)	Observation	
5637-03	Honokowai TH 3	AMFAC (Kaanapali Land)	Observation	
5637-04	Honokowai	AMFAC (Kaanapali Land)	Observation	
5637-05	Honokowai A	Pioneer Mill (Kaanapali Land)	Unused	
5638-01	Honokowai TH 6	AMFAC (Kaanapali Land)	Observation	
5638-02	Honokowai TH 7	AMFAC (Kaanapali Land)	Observation	
5638-03	Honokowai B	CA Water Service Group	Potable	0.474
5639-01	Honokowai TH 5	AMFAC (Kaanapali Land)	Observation	
5639-02	Honokowai TH 8	AMFAC (Kaanapali Land)	Observation	
5640-01	Honokowai Pump R	Pioneer Mill (Kaanapali Land)	Irrigation	
5641-01	Kaanapali Pump D	Pioneer Mill (Kaanapali Land)	Irrigation	
5641.02	Honokowai Pump F	Pioneer Mill (Kaanapali Land)	Irrigation	
5738-01	P5 Kaanapali	CA Water Service Group	Potable	1.105
5739-01	P4 Kaanapali	CA Water Service Group	Potable	0.458
5739-02	P6 Kaanapali	CA Water Service Group	Potable	0.283
5739-03	Mahinahina Deep Monitor Well	USGS/CWRM/MDWS	Monitoring	
5741-01	McDonald	McDonald M	Irrigation	
5840-02	Kahana Ridge	Maui Usa Inc	Irrigation	
5840-03	Kahana Ranch	Kahana Ranch	Irrigation	
5841-01	TMK 4-3-09-2	Durksen C H	Irrigation	
5841-02	TMK 4-3-09-3	Tamouchi I	Other	
5841-03	Shoemaker	Shoemaker S	Irrigation	
				3.41

(Source: CWRM Well Database as of April 2009)

7. Wetland

   The U.S. Department of Interior, Fish and Wildlife Service "National Wetlands Inventory Maps 1978" does not identify any wetland in the vicinity of the project site (Ref 9).

8. Water Quality

   "The Water Quality Standards Map" published by the State of Hawaii Department of Health, Office of Environmental Planning classifies the project site as Class II inland classification (Ref. 4).

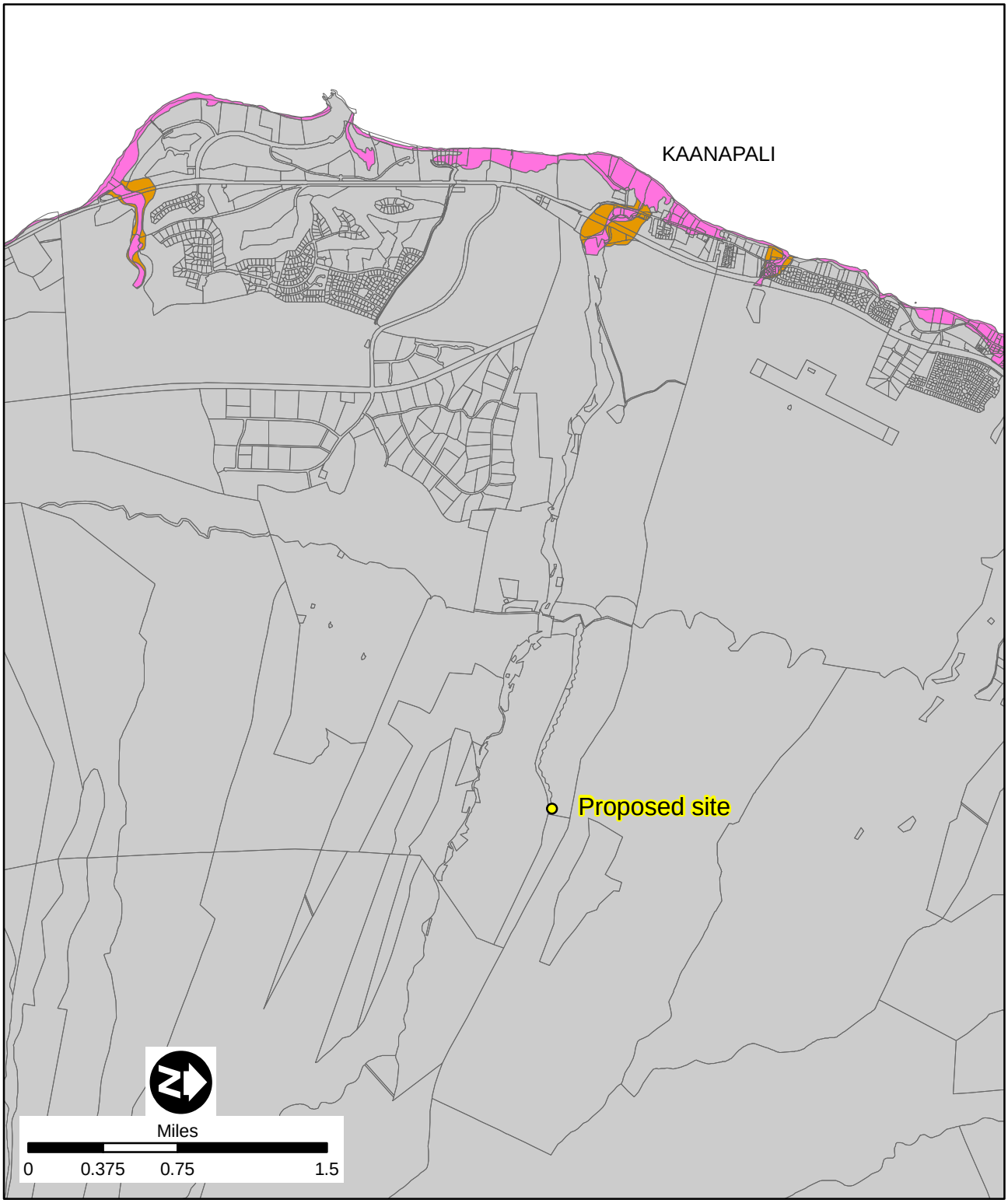
9. Flood and Tsunami

   The Digital Flood Insurance Rate Map (FIRM), a digital flood data scanned and compiled by the Federal Emergency Management Agency (FEMA), indicates that the project site is determined to be Zone X, outside of the 0.2% annual chance floodplain (Ref. 5). The proposed project will have no effect on existing flood areas. **Figure 11** shows the flood zones for the vicinity of the project site.

   Recent Tsunami Evacuation Maps, as published by the Civil Defense Agency, indicate that the proposed site is not currently in a Tsunami Evacuation Zone. In the event of a tsunami warning, people in all areas within the Tsunami Evacuation Zone must be evacuated and follow additional instructions issued by the Civil Defense Agency.

C. SURFACE WATER QUALITY

The closest surface waters to the proposed project site are the Honokowai Stream channel approximately a half-mile to the south, the Kahana Stream channel approximately ¾-mile to the north, and the Honolua/Honokohau Ditch approximately 1-1/8 mile to the west. Water used for drilling and tailings will be deposited in tankers and/or a retention basis temporarily placed at the construction site. Therefore, the drilling of the Mahinahina Exploratory Well is not expected to affect surface water quality.



LEGEND
- Zone X
- Zone X500
- Zone A

FIGURE 11 - Flood Insurance Rate Map

D. ARCHAEOLOGICAL AND HISTORICAL CONSIDERATIONS

The proposed Mahinahina Exploratory Well site is on land that has been extensively used for agriculture. The site has been highly disturbed and altered due to repeated plowing and grading for pineapple cultivation. If construction work uncovers any archaeological remains, work will stop immediately and the State Historic Preservation Division and the Maui Island Burial Council will be contacted.

Current tax maps show no record of Land Commission Awards (LCAs) on the project site. The presence of LCAs is one indicator of native Hawaiian activities or presence in the mid to later half of the nineteenth century.

E. FLORA AND FAUNA

The site has been previously disturbed. The area is currently covered with various weeds and grass. No critical or endangered flora is found at the site.

Common animals found in this area are dogs, cats, mongoose, rodents, feral pigs and axis deer. Typical avifauna found in the area is mynas, sparrows, cardinals, doves, and finches. A few native birds that may be considered to be endangered may periodically enter the area due to the proximity to the West Maui Forest Reserve approximately one mile upland to the east.

Since the project site was cleared of tall trees, graded, and extensively used for pineapple cultivation, there is no known critical, endangered, or threatened plant and animal habitat on the project site. The proposed well site was kept outside of the West Maui Mountains Watershed conservation areas to further minimize impacts on native flora and fauna. Therefore, plants and animals in the surrounding area will not be affected by the proposed project.

IV. PROBABLE IMPACTS AND MITIGATIVE MEASURES

A. SHORT TERM IMPACTS

Short term impacts are associated with the construction activities at the project site. The impacts are not anticipated to be significant; and will be controlled and minimized by Federal, State, and County of Maui laws, regulations, best management practices, permit requirements and monitoring of construction by County inspectors.

1. Air Quality
   (Clean Air Act, Pub.L. 84-159, as amended)

   There will be a temporary increase in dust, and vehicular and equipment exhaust emissions in the vicinity of the project areas during construction; however, dust resulting from construction is anticipated to be minimal. The Contractor will be required to comply with Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control." and Section 11-60.1-33, "Fugitive Dust." Dust control will be maintained by sprinkling with water when needed. Exhaust emission should not have any significant effect on the area because prevailing winds should disperse any exhaust gas concentration.

2. Erosion

   The Contractor will be required to implement erosion and sediment control measures during the construction as appropriate.

3. Surface Water Quality

   No impacts on surface water quality resulting from the construction of this project are anticipated. A National Pollutant Discharge Elimination System (NPDES) permit is not required because the contiguous area to be disturbed by construction activities is less than one acre. In addition, no discharge to navigable waters is anticipated. Through the permitting process, the Contractor will be required to propose construction Best Management Practices (BMPs) for approval.

4. Traffic

   Temporary impacts to traffic may occur during the construction of the improvements. There will be an increase in vehicles entering and exiting the site during construction; however, these impacts will be mainly at the start of construction when the drill rig and support vehicles are brought up to the site, and again when the drill rig and support vehicles are demobilized at the end of construction. Daily vehicular traffic would be limited to workers accessing and leaving the site in light vehicles.

5. Noise

There will be an increase in noise from the construction activities. However, the site preparation, drilling work and site restoration will be limited to normal working hours. There will be some noise due to pump testing of the well that must be done continuously over one or more days to comply with the testing requirements of the Commission on Water Resources Management. The Contractor will be required to comply with the requirements of the Department of Health Hawaii Administrative Rules, Chapter 11-46, "Community Noise Control."

B. LONG TERM IMPACTS

Long term impacts are generally those impacts related to the operation of the proposed development. Appropriate design, and competent, efficient, and effective operations and maintenance will mitigate any potential negative long term impacts associated with the implementation of the project.

1. Water Quality

a. Surface Water

The closest surface waters to the proposed project site are the Honokowai Stream channel approximately a half-mile to the south, the Kahana Stream channel approximately ¾-mile to the north, and the Honolua/Honokohau Ditch approximately 1-1/8 mile to the west. Therefore, no impacts to surface waters are anticipated.

b. Ground Water
(Safe Drinking Water Act, Pub.L. 93-523, as amended)

The Mahinahina Exploratory Well will be drilled to assess the availability of groundwater through pump testing and sampling. The well will be drilled and cased in accordance with CWRM rules. The upper section of the well will be fully grouted and a concrete pad will be constructed around the well casing to prevent intrusion of surface runoff and upper-level waters from reaching the aquifer. Therefore, no impacts to ground water quality are anticipated.

2. Agricultural Land
(Farmland Protection Policy Act, Pub.L. 97-98)

The proposed Mahinahina Exploratory Well is located on agricultural land that has been fallow since 2005. The area is considered to be Class 3 using the Agricultural Lands of Importance in the State of Hawaii (ALISH) classification system. Class 3

is defined as "State or Local important lands for production, not prime or unique; needing irrigation or requiring commercial production management." The proposed well will be at the extreme edges of the viable agricultural land and will not create an "island" within the agricultural field that would be a disruption to production should the land be used for agriculture again.

The CZO requires that the proposed project is not detrimental to health, safety, peace, morals, comfort and general welfare to the public; does not cause any substantial harmful environmental consequences; and will not be inconsistent with the intent of the General Plan. The proposed project is consistent with the current use of the area; therefore, the proposed improvement project will not adversely impact its surroundings.

3. Coastal Zone Management
   (Coastal Zone Management Act, Pub.L. 92-583, as amended)

   The proposed project is not located within the coastal zone Special Management Area.

4. Floodplain Management
   (Floodplain Management, Executive Order 11988, as amended by Executive Order 12148)

   The project site is determined to be outside of the 0.2% annual chance floodplain; therefore, no impact will be anticipated.

5. Flora and Fauna
   (Endangered Species Act, Pub.L. 93-205, as amended and Fish and Wildlife Coordination Act, Pub.L. 85-624, as amended)

   There are no indications of rare or endangered flora or fauna in the project area. The specific project area has already been highly disturbed. Therefore, no negative impacts to existing plants and animals are anticipated.

6. Air Quality
   (Clean Air Act, Pub.L. 84-159, as amended)

   No long term negative impacts on air quality resulting from the proposed project are anticipated.

7. Visual and Auditory Impacts

   The visual impacts of the proposed project area are not expected to be significant. The new facilities will be small (6' x 6' concrete pad and 18" diameter casing sticking 2 feet above grade) and are far from any scenic view planes.

   The exploratory well facilities will not produce any noise after completion.

8. Archeological and Historical Sites
   (Archaeological and Historic Preservation Act of 1974, Pub.L. 86-523, as amended and National Historic Preservation Act, Pub.L. 89-665, as amended)

   There is no historically significant structure on the proposed project site. In addition, since the project will be in an area that has been previously disturbed, no adverse effect on significant historic areas or human burials is anticipated. If necessary, construction and the required mitigation plans will be coordinated with the State Historic Preservation Division, the Maui Burial Council and the Office of Hawaiian Affairs, in accordance with the Hawaii Revised Statutes and the Hawaii Administrative Rules, to minimize any long term negative impacts on historic sites.

9. Public Health and Safety

   Public health and safety will be a priority of this project. Monitoring will be conducted to ensure protection of public health and safety. State DOH regulations will be followed; therefore, no public health or safety problems associated with the system improvements are anticipated.

   The groundwater at other production wells within the Honokowai Aquifer Sector was found to be contaminated with DBCP and TCP (Ref. 10). The water from these wells undergoes treatment using granular activated carbon systems to purify the water for potable use. The proposed location of the Mahinahina Exploratory Well was chosen to minimize the chance of drilling into contaminated groundwater areas. However, should the water quality analysis done during testing of the exploratory well indicate the presence of contaminants, the Maui DWS will consider mitigative measures as part of the development phase of the well. A separate Environmental Assessment will be done as part of the development of the well.

V. ALTERNATIVES TO THE PROPOSED PROJECT

A. NO ACTION ALTERNATIVE

The County DWS relies heavily on surface water treatment for potable water supply in West Maui. About 60% of the regions municipal potable water supply comes from the Lahaina and Mahinahina SWTPs. The County needs backup supplies for times of drought, when the SWTPs require maintenance and when surface water supplies are interrupted due to ditch collapses or other raw water supply problems. The drilling of the Mahinahina Exploratory Well will be the first stage in finding back-up sources of water. Not doing this project could lead to long-term interruptions in municipal water supplies when sufficient volumes of treated surface water are not available.

B. ALTERNATIVE LOCATION

The proposed project site was selected, based on hydrologic, hydro-geologic, land ownership and availability, and engineering studies for West Maui between Kauaula just south of Lahaina to Honokohau in the north. The findings are summarized in the *West Maui Source Development Site Selection Report.* Alternative locations were identified in the report; however, a comparison of the sites using a point ranking system showed that the Mahinahina site was the most favorable.

C. ALTERNATIVE WATER SOURCES

One method to increase water availability is to upgrade the capacity of the water treatment facilities in West Maui. However, as noted previously, the purpose of the exploratory well is to find back-up sources to surface water. Therefore, increasing the capacity of the water treatment facilities will not meet the main objective of the project.

VI. PERMITS AND APPROVALS REQUIRED

Several permits, approvals and clearances may be required for the recommended improvements from the County of Maui and the State of Hawaii.

A. APPROVALS

- State Department of Health
- State Department of Land and Natural Resources, Right-of-Entry
- State Office of Environmental Quality Control
  Environmental Assessment for Mahinahina Exploratory Well
- County of Maui Department of Water Supply
  Environmental Assessment for Mahinahina Exploratory Well

B. PERMITS

- National Pollutant Discharge Elimination System Permit, State of Hawaii, Department of Health (if required by Contractor's construction method)
- Well Construction Permit, State Commission on Water Resource Management
- Grading and Grubbing Permit, County of Maui Department of Public Works

VII. AGENCIES AND ORGANIZATIONS CONSULTED

The following agencies were consulted directly or indirectly during the preparation of this document.

- County of Maui, Department of Water Supply
- County of Maui, Department of Environmental Management
- County of Maui, Department of Parks and Recreation
- County of Maui, Department of Planning
- County of Maui, Department of Public Works
- Hawaiian Homes Commission
- Maui Electric Company, Ltd.
- Maui Land and Pineapple
- Office of Hawaiian Affairs
- State Commission on Water Resource Management
- State Department of Agriculture
- State Department of Business, Economics, Development and Tourism
- State Department of Health
- State Department of Land and Natural Resources
- State DLNR, Historic Preservation Division
- State Department of Transportation, Maui District
- US Army Corps of Engineers
- USDA Natural Resources Conservation Service
- US Department of the Interior Fish and Wildlife Services
- West Maui Mountains Watershed Partnership

VIII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

There are several irreversible commitments of resources including land and financial resources to drill and test the exploratory well, and maintain the well head. Land commitment for the well is minimal. Financial commitment for capital improvements and operations and maintenance are necessary.

The long-term responsibility of the Department of Water Supply to provide adequate water supplies to West Maui supports the implementation of the proposed project; therefore, the commitment of land, labor, materials, energy, equipment and financial resources that are practically irreversible and irretrievable are warranted.

IX. FINDINGS AND DETERMINATION

A. FINDINGS

Based upon the guidelines and provisions of Significance Criteria listed in §11-200-12 Environmental Impact Statement Rules and Chapter 343, Hawaii Revised Statutes (HRS), the findings of this environmental assessment are:

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

   Loss or destruction of a natural or cultural resource is not anticipated. The proposed site has already been disturbed due to agricultural practices for pineapple cultivation. As described in this assessment, there are no archaeological findings anticipated due to the use of the land for agriculture. In case of any finding of archaeologically significant resources during construction, mitigation measures will be implemented under instruction from the State Historic Preservation Division.

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

   The proposed project will enhance management of the surface and groundwater resources; therefore, it will enhance the beneficial use of the environment.

3. Conflict with the State's long term environmental policies or goals and guidelines as expressed in Chapter 344, Hawaii Revised Statutes, and revisions thereof and amendments thereto, court decisions or executive orders:

   The proposed project is in accordance with the guidelines set forth in the State Environmental Policy Chapter 344, HRS, and the National Environmental Policy Act.

4. Substantially affects the economic or social welfare of the community or State:

   The proposed project will potentially provide a backup source of water to the SWTPs and enhance the reliability of the municipal water supply in West Maui. To ensure drinking water supplies will enhance the welfare of the community.

5. Substantially affects public health:

   The new well will potentially provide a new safe drinking water source for the West Maui Water System to serve as a backup to treated surface water. This is necessary to maintain the public health.

6. Involves a substantial secondary impact, such as population changes or effects on public facilities:

   The proposed project will not encourage new population growth. Substantial secondary impacts are not anticipated by this proposed project.

7. Involves a substantial degradation of environmental quality:

   The proposed project will not involve any substantial degradation of environmental quality. As described in this assessment, the impacts on the environment are generally beneficial, and negative impacts are minimal.

8. Individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions:

   As described in this assessment, the proposed project does not have any significant impacts or effects upon the environment. If the testing of the well indicates a viable source of water, then the well can be developed further with the installation of a pump, controls and appurtenances. Further development of the exploratory well will involve a significant commitment for larger actions. A separate environmental assessment will be prepared for the well development should the Maui DWS implement such action.

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

   There are no identified endangered or critical species of flora and fauna in the vicinity of the project site that would be disturbed.

10. Detrimentally affects air or water quality or ambient noise levels:

    This project will not detrimentally affect air or water quality, or ambient noise levels.

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

    The proposed project is not located within any flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater or coastal waters. The proposed project does not detrimentally affect any environmentally sensitive area.

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

    The visual impacts of the proposed project area are not expected to be significant.

13. Requires substantial energy consumption:

    The drilling and testing of the exploratory well requires some energy consumption; however, this is necessary to begin the process of providing a back-up to the SWTPs and thus improving the reliability of potable water delivery in West Maui.

B. DETERMINATION

Based upon the above findings and considerations, the proposed project is not anticipated to have significant adverse environment impacts on the historic sites, coastal waters, local ecology, hydrology and atmosphere. Mitigation measures will be implemented as deemed necessary and as required by the government agencies. A Finding of No Significant Impact (FONSI) determination is anticipated. Therefore, an Environmental Impact Statement is not required.

X. REFERENCES

1. Commission on Water Resource Management & Department of Land and Natural Resources, State of Hawaii. *Maui County Water Use and Development Plan*. February 1992.

2. County of Maui, Department of Planning. *2030 General Plan: Countywide Policy Plan*. March 2010. <http://www.co.maui.hi.us/index.aspx?NID=420>

3. County of Maui, Department of Planning. *West Maui Community Plan (1996)*. 1996.

4. Department of Health. *Hawaii's Water Quality-Limited Waters: The 1997 Assessment* 1997.

5. Digital Flood Insurance Rate Map. 2007. The Office of Planning, State of Hawaii. Also available at National Flood Insurance Program, Flood Hazard Assessment Tool <http://gis.hawaiinfip.org/fhat/>

6. Fukunaga and Associates, Inc. *West Maui Source Development Site Selection Report*. October 2010.

7. State of Hawaii, Department of Agriculture. *Agricultural Water Use and Development Plan*. December 2004 (revised).

8. West Maui Mountains Watershed Partnership. *Headwaters Protection for the Honolua, Pohakupule and Honokohau Streams*. June 2009.

9. National Wetlands Inventory Maps 1978. U.S. Department of Interior, Fish and Wildlife Service.

10. Groundwater Contamination Maps 2002 through 2005. State of Hawaii Department of Health.

11. Oki, Delwyn S.; Giambelluca, Thomas W. "DBCP, EDB and TCP Contamination of Ground Water in Hawaii." Groundwater, Volume 25, Number 6. Nov-Dec 1987.

12. US EPA Technology Transfer Network, Air Toxics Website. "1,2-Dibromo-3-Chloropropane (DBCP)." Revised January 2000. <http://www.epa.gov/ttnatw01/hlthef/dibromo-.html#ref2>

APPENDIX A
AGENCY COMMENTS ON PRE-ASSESSMENT CONSULTATION

ALAN M. ARAKAWA
Mayor
WILLIAM R. SPENCE
Director
MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI

DEPARTMENT OF PLANNING

February 4, 2011

Mr. Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Amuro:

SUBJECT: REQUEST FOR PRE-CONSULTATION COMMENTS IN PREPARATION FOR AN ENVIRONMENTAL ASSESSMENT (EA) OF THE PROPOSED COUNTY OF MAUI, DEPARTMENT OF WATER SUPPLY, MAHINAHINA EXPLORATORY WELL, AT HONOKOWAI BEACH PARK, ISLAND OF MAUI, HAWAII; TMK: 4-4-004:010 (POR.) (RFC 2011/0010)

The Department of Planning (Department) received your request dated January 19, 2011, for consultation in advance of preparation of a Draft EA on the property referenced above. On March 24, 2010, the Department responded to an earlier request for consultation in advance of preparation of a Draft EA for this same project; however, located on a different parcel identified by Tax Map Key (TMK): 4-4-004:009. We have conducted a review of the facts available to us, and offer the following comments:

1. The proposed action is to take place on an approximately 20,000 square foot portion of a 148.394 acre parcel identified by TMK: 4-4-004:009. The site is located on the outskirts of the West Maui Forest Reserve, approximately three (3) miles mauka of Honokowai Beach Park, about 1,340 feet above sea level, and is within a field previously used for pineapple cultivation;

2. The State of Hawaii is the owner of record of the property referenced above;

3. The land use designations for the subject property are as follows:

State Land Use District:	Agricultural
West Maui Community Plan:	Agricultural
County Zoning District:	Agricultural
Special Management Area (SMA):	Not in the SMA

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

Flood Hazard Area Zone:	X[1]
Flood Development Permit:	No

4. The proposed action consists of drilling and testing of an exploratory well to determine its capacity as a potential groundwater production well;

5. The proposed action is considered a minor utility facility as defined in Section 19.04.040, Maui County Code (MCC), and is a permitted use in the Agricultural District;

6. In accordance with Chapter 19.30A MCC, pertaining to the Agricultural District, the following standards apply:

Minimum lot area:	Two (2) acres
Minimum lot width:	200 feet
Minimum yard setbacks	
Front:	25 feet
Side and rear:	15 feet
Maximum developable area:	Not applicable to utility facilities
Maximum height limit:	Unless otherwise provided, the maximum height of any dwelling shall be thirty feet (30'), except that vent pipes, fans, chimneys, antennae, and solar collectors on roofs shall not exceed forty feet (40'). Any nondwelling structure such as a barn or silo that is over thirty-five feet (35') in height shall be set back one (1) additional foot for each foot in structure height
Maximum wall height:	Walls shall not exceed four feet (4') within the yard setback area as measured from the finished or existing grade, whichever is lower, to the top of the wall as defined herein. This does not preclude constructing fences on the top of the wall for safety purposes. The Director of Public Works and Waste Management may permit greater heights of walls as needed to retain earth, water, or both for health and safety purposes

7. Inasmuch as the proposed action involves the use of County funds and County and State lands, an EA is required.

[1] For flood hazard area zones X, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

Thank you for the opportunity to provide comments. If additional clarification is required, please contact Staff Planner Kathleen Ross Aoki by email at kathleen.aoki@mauicounty.gov or by phone at (808) 270-5529.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for WILLIAM SPENCE
Planning Director

xc: Kathleen Ross Aoki, Staff Planner
RFC File
General File

WRS:CIY:KRA:sa
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ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

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

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

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

January 26, 2011

Mr. Andrew Amuro, Engineer
FUKUNAGA & ASSOCIATES, INC.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Amuro:

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR DRAFT ENVIRONMENTAL ASSESSMENT - COUNTY OF MAUI DEPARTMENT OF WATER SUPPLY MAHINAHINA EXPLORATORY WELL RELOCATION; TMK: (2) 4-4-004:009

We reviewed your pre-assessment consultation request and offer the following comments:

1. We will review the project for Building Code requirements during the building permit application process.

2. Comply with Hawaii Revised Statutes, Section 103-50, for projects with State or County funding.

Please call Rowena M. Dagdag-Andaya at (808) 270-7845 if you have any questions regarding this letter.

Sincerely,

for DAVID C. GOODE
Director of Public Works

DCG:RMDA:ls
xc: Highways Division
Engineering Division
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ALAN M. ARAKAWA
Mayor

GLENN T. CORREA
Director

PATRICK T. MATSUI
Deputy Director

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

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

January 25, 2011

Mr. Andrew Amuro, Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd. Suite 1530
Honolulu, Hawaii 96814

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment - County of Maui Department of Water Supply Mahinahina Exploratory Well, (Revised Site) TMK: (2) 4-4-004:009

Dear Mr. Amuro:

The Department of Parks & Recreation has reviewed the revised subject request and does not have any comments at this time. Thank you for the opportunity to comment on this matter.

Please feel free to contact me or Mr. Baron Sumida, CIP Coordinator with the Parks Planning and Development Division at 270-6173 should you have any other questions.

Sincerely,

GLENN T. CORREA
Director

xc: Robert Halvorson, Chief of Parks Planning & Development, TA

GTC:RH:bks

ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division

Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

January 21, 2011

Mr. Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

SUBJECT: MAHINAHINA EXPLORATORY WELL PRE-ASSESSMENT CONSULTATION OF DRAFT EA (RELOCATED FROM PREVIOUS TMK (2) 4-4-004:010) TMK (2) 4-4-004:009, LAHAINA

We reviewed the subject project as a pre-application consultation and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. None.

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

Sincerely,

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

MAUI LAND & PINEAPPLE COMPANY, INC.

January 17, 2011

Fukunaga & Associates, Inc
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Attention: Andrew Amuro

Re: Pre-Assessment Consultation for Draft EA
County of Maui Department of Water Supply
Mahinahina Exploratory Well Relocation

Dear Andrew:

Thank you for the recent update letter dated January 10, 2011, and attached map showing the re-location of the proposed exploratory well. The new location for the Department of Water Supply exploratory well will be on TMK (2)4-4-04:09. As shown on the map this is on State of Hawaii lands. It also appears from the map that access to the proposed well site will be entirely on State of Hawaii lands or Hawaiian Homes lands and not on Maui Land & Pineapple Company, Inc. (ML&P) lands.

At this time Maui Land & Pineapple Company, Inc. has no objections to the proposed exploratory well location and related work. It would be appreciated if you would contact ML&P when the construction period has been determined. Please contact Jeff Pearson at 877-1606 or email at jpearson@mlpmaui.com with any questions you may have.

Sincerely,

Jeffrey T. Pearson, P.E.
Water Manager
Maui Land & Pineapple Co., Inc.

P.O. Box 187, Kahului, Hawaii 96733-6687
(808) 877-3351 • Fax (808) 871-4375 • www.mauiland.com

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

PAUL J. CONRY
ACTING FIRST DEPUTY

LENORE N. OHYE
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

October 14, 2010

Andrew Amuro, Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawai 96814

LOG NO: 2010.0751
DOC NO: 1010MD09
Archaeology

Dear Mr. Amuro:

SUBJECT: Chapter 6E-8 Historic Preservation Review –
Consultation Regarding the Proposed Mahinahina Exploratory Well
Māhinahina Ahupua'a, Lāhainā District, Island of Maui
TMK: (2) 4-4-004:010 (por.)

Thank you for the opportunity to review the aforementioned project, which we received on March 30, 2010. We apologize for the delay in our reply.

This project involves drilling an exploratory well for the County of Maui Water Department within a portion of a parcel owned by the State of Hawaii, located adjacent to the West Maui Forest Reserve. A search of our records indicates that no archaeological inventory survey has been conducted on this parcel, and we have little information regarding the area. Therefore we are requesting the opportunity to conduct a site visit to the proposed location with someone who can positively identify where the proposed well would be drilled. Please contact Morgan Davis at (808) 243-5169 or via email to: morgan.e.davis@hawaii.gov to make arrangements.

Aloha,

Morgan E. Davis
Lead Archaeologist, Maui Island Section
State Historic Preservation Division

Cc:

County of Maui Department of Water Supply via fax to (808) 270-7951

CHARMAINE TAVARES
Mayor
KATHLEEN ROSS AOKI
Director
ANN T. CUA
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

May 14, 2010

Mr. Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Amuro:

SUBJECT: REQUEST FOR PRE-CONSULTATION COMMENTS IN PREPARATION FOR AN ENVIRONMENTAL ASSESSMENT (EA) OF THE PROPOSED COUNTY OF MAUI, DEPARTMENT OF WATER SUPPLY, MAHINAHINA EXPLORATORY WELL, AT HONOKOWAI BEACH PARK, ISLAND OF MAUI, HAWAII; TMK: 4-4-004:010 (POR.) (RFC 2010/0046)

The Department of Planning (Department) received your request dated March 24, 2010, for consultation in advance of preparation of a Draft EA on the property referenced above. We have conducted a review of the facts available to us, and offer the following comments:

1. The proposed action is to take place on approximately 9,000 square foot portion of a 39.78-acre parcel identified by Tax Map Key (TMK) 4-4-004:010. The site is located on the outskirts of the West Maui Forest Reserve, approximately three (3) miles mauka of Honokowai Beach Park, about 1,350 feet above sea level;

2. The State of Hawaii is the owner of record of the property referenced above;

3. The land use designations for the subject property are as follows:

State Land Use District:	Agricultural
West Maui Community Plan:	Agricultural
County Zoning District:	Agricultural
Special Management Area (SMA):	Not in the SMA
Flood Hazard Area Zone:	X[1]
Flood Development Permit:	No

[1] For flood hazard area zones X, a flood development permit would be required if any work is done in any drainage facility or stream area that would reduce the capacity of the drainage facility, river, or stream, or adversely affect downstream property.

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

4. The proposed action consists of drilling and testing of an exploratory well to determine its capacity as a potential groundwater production well, as well as an eight (8) foot high deer fence around the perimeter of the project limits to exclude large mammals;

5. The proposed action is considered a minor utility facility as defined in Section 19.04.040, Maui County Code (MCC), and is a permitted use in the Agricultural District;

6. In accordance with Chapter 19.30A MCC, pertaining to the Agricultural District, the following standards apply:

Minimum lot area:	Two (2) acres
Minimum lot width:	200 feet
Minimum yard setbacks	
Front:	25 feet
Side and rear:	15 feet
Maximum developable area:	Not applicable to utility facilities
Maximum height limit:	Non-dwelling structures over 35 feet in height shall be setback one (1) additional foot for each foot in structure height. The Director of Public Works may permit greater heights for retaining walls.
Maximum wall height:	Four (4) feet within yard setback area as measured from finished or existing grade, whichever is lower, to the top of the wall. Fences may be constructed on top of a wall.

7. Inasmuch as the proposed action involves the use of County funds and County and State lands, an EA is required.

Thank you for the opportunity to provide comments. If additional clarification is required, please contact Staff Planner Livit Callentine at livit.callentine@mauicounty.gov or at 270-5537.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for KATHLEEN ROSS AOKI
Planning Director

xc: Livit U. Callentine, Staff Planner
RFC File
General File

KRA:CIY:LUC:sg
K:\WP_DOCS\PLANNING\RFC\2010\0046_Mahinahina Exploratory Well\Comment.doc

CHARMAINE TAVARES
Mayor

CHERYL K. OKUMA, Esq.
Director

GREGG KRESGE
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division

DAVID TAYLOR, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

April 27, 2010

Mr. Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Amuro:

SUBJECT: **MAHINAHINA EXPLORATORY WELL**
PRE-ASSESSMENT CONSULTATION OF DRAFT EA
TMK (2) 4-4-004:010, LAHAINA

We reviewed the subject project as a pre-application consultation and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. None.

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

Sincerely,

Cheryl K. Okuma

Cheryl K. Okuma, Director

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

TAKE PRIDE IN AMERICA

In Reply Refer To:
2010-TA-0254

APR 2 2 2010

Mr. Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard Suite 1530
Honolulu, Hawaii 96814

Subject: Pre-Assessment for Draft Environmental Assessment for the Mahinahina Exploratory Well, Maui

Dear Mr. Amuro:

Thank you for the opportunity to provide comments regarding the development of a Draft Environmental Assessment (DEA) for the Mahinahina Exploratory Well drilling project on Maui. We received your March 24, 2010, letter on March 26, 2010. The County of Maui Department of Water Supply is proposing to drill an exploratory well and test the capacity for a potential groundwater well. The project will take place on approximately 9,000 square feet of land and include an 8-foot high deer fence around the perimeter.

We have reviewed the information you provided and pertinent information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program. To the best of our knowledge, no federally listed or proposed threatened or endangered species or candidate species, or proposed or designated critical habitat occur within the proposed project footprint identified in your letter.

We hope this information assists you in developing a thorough and complete DEA. If you have questions regarding these comments, please contact Jodi Charrier, Fish and Wildlife Biologist, (phone: 808-792-9400, email: jodi_charrier@fws.gov).

Sincerely,

for Loyal Mehrhoff
Field Supervisor

CHARMAINE TAVARES
Mayor

MILTON M. ARAKAWA, A.I.C.P.
Director

MICHAEL M. MIYAMOTO
Deputy Director

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

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

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

April 22, 2010

Mr. Andrew Amuro, Engineer
FUKUNAGA & ASSOCIATES, INC.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Amuro:

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR DRAFT ENVIRONMENTAL ASSESSMENT FOR COUNTY OF MAUI DEPARTMENT OF WATER SUPPLY MAHINAHINA EXPLORATORY WELL

We reviewed the subject application and have the following comments:

1. Please identify access to the site.

2. We will review the project for Building Code requirements during the building permit application process.

3. Comply with Hawaii Revised Statues, Section 103-50 for projects with State or County funding.

Please call Michael Miyamoto at (808) 270-7845 if you have any questions regarding this letter.

Sincerely,

MILTON M. ARAKAWA, A.I.C.P.
Director of Public Works

MMA:MMM:ls
xc: Highways Division
Engineering Division
S:\LUCA\CZM\Mahinahina_exploratory_well_pre_44004010_ls.wpd

LINDA LINGLE
GOVERNOR
STATE OF HAWAI'I

KAULANA H. R. PARK
CHAIRMAN
HAWAIIAN HOMES COMMISSION

ANITA S. WONG
DEPUTY TO THE CHAIRMAN

ROBERT J. HALL
EXECUTIVE ASSISTANT

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879
HONOLULU, HAWAI'I 96805

April 21, 2010

Mr. Andrew Amuro, Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Amuro:

Subject: County of Maui Department of Water Supply, Exploratory Well, Honokowai, Maui

Thank you for the information regarding the County of Maui's Exploratory Well Drilling Project at Mahinahina, and the preparation of the Draft Environmental Assessment. The proposed well site is near the Department of Hawaiian Home Lands' landholdings at Honokowai and we fully support the project.

It is our understanding that the site will be located on State of Hawaii land near the Forest Reserve. If successful, this exploratory well should produce the capacity needed to convert it to a groundwater production well.

Should you or the County of Maui need any information from this department, please contact Carolyn Darr, Land Agent on Oahu at 808-620-9457 or at Carolyn.i.darr@hawaii.gov.

Aloha and Mahalo,

Linda Chinn, Administrator
Land management Division

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON

WILLIAM D. BALFOUR, JR.
SUMNER ERDMAN
NEAL S. FUJIWARA
CHIYOME L. FUKINO, M.D.
DONNA FAY K. KIYOSAKI, P.E.
LAWRENCE H. MIIKE, M.D., J.D.

KEN C. KAWAHARA, P.E.
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

April 21, 2010

Mr. Andrew Amuro, Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, #1530
Honolulu, HI 96814

Dear Mr. Amuro:

SUBJECT: Mahinahina Exploratory Well

FILE NO.: N/A
TMK NO.: (2) 4-4-004:010

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

Our comments related to water resources are checked off below.

☒ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☒ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.

☐ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EPA as having high water efficiency can be found at http://www.epa.gov/watersense/pp/index.htm.

☐ 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://hawaii.gov/dbedt/czm/initiative/lid.php.

☐ 6. We recommend the use of alternative water sources, wherever practicable.

☐ 7. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:
Additional information and forms are available at *www.hawaii.gov/dlnr/cwrm/forms.htm*.

☐ 8. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water.

☐ 9. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.

☐ 10. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

☐ 11. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

☐ 12. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

☐ 13. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

☐ 14. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

☐ 15. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

☐ 16. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

☒ OTHER:
Pumping water from State lands would require a water license or permit from DLNR Land Division; drilling activities would require right of entry. There are three municipal wells in the vicinity, one directly downgradient about one mile away, one about half a mile across the slope, in Honokowai Stream channel, and the other over a mile and across slope in Kahanaiki Gulch.

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

Sincerely,

Ken C. Kawa

KEN C. KAWAHARA, P.E.
Deputy Director

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

REPLY TO
ATTENTION OF:

April 16, 2010

Regulatory Branch

File No. POH-2010-00093

Fukunga & Associates, Inc.
Attn: Mr. Andrew Amuro
1357 Kapiolani Blvd, Suite 1530
Honolulu, HI 96814

Dear Mr. Amuro:

We have received your request for the Department of the Army to review and comment on the proposed Mahinahina Exploratory Well drilling project, Island of Maui, Hawaii. We have assigned the project the reference number POH-2010-0093. Please cite the reference number in any correspondence with us concerning this project. We completed our review of the submitted document and have the following comments:

Section 10 of the Rivers and Harbors Act (Section 10) of 1899 requires that a Department of the Army (DA) permit be obtained from the U.S. Army Corps of Engineers (Corps) prior to undertaking any construction, dredging, and other activities occurring in, over, or under navigable waters of the U.S. Section 404 of the Clean Water Act (Section 404) of 1972 requires that a DA permit be obtained for the discharge (placement) of dredge and/or fill material into waters of the U.S., including wetlands.

Based on the information provided, it does not appear that navigable waters are present at the project site. Therefore, Section 10 authorization is not likely required. The Corps does not have sufficient information to determine if there are waters of the U.S. present at the project site or if such waters are proposed for impact, which may require authorization under Section 404. When developing the Environmental Assessment, we recommend you include any information regarding any potential waterbodies, including wetlands, drainage ditches, gulches, stream, etc., on-site if they may be impacted by any of the proposed project components as well as the nature of those impacts.

Only the Corps of Engineers has authority to determine if any of these features are or are not waters of the U.S. and, potentially subject to regulations under Section 404 of the Clean Water Act. As such, we encourage the landowner to submit a request for a jurisdictional determination for any potentially regulated waterbodies if proposed for impact. The request should include the aquatic features proposed for impact, flow duration of each feature, and the flow path of each feature into navigable waters. For instance: the unnamed ditch contains flow for two consecutive weeks annually and, from the project impact site, flows for 800 linear feet before discharging into XYZ Stream. XYZ Stream flows year-round and flows 1,200 feet before discharging into the Pacific Ocean. For wetlands, a wetland delineation conducted in accordance with the Corps of Engineers 1987 Wetland Delineation Manual, should be submitted. We

recommend the applicant also include a vicinity map, map of the waterbodies and flow paths, and site photographs so the Corps may conduct a jurisdictional determination if necessary.

If any waterbodies are determined to be waters of the U.S., the applicant will need to obtain authorization from the Corps prior to discharging dredge or fill material into these waterbodies. Fill material may include, but is not limited to: rock, dirt, sand, sandbags, concrete, piping a water of the U.S., or diverting a water of the U.S. into a pipe. Fill can be temporary or permanent. The applicant should contact the Corps to determine if any of the proposed work constitutes a "discharge of fill and submit an application and drawings that meet our drawing recommendations found at http://www.poh.usace.army.mil/EC-R/EC-R.htm. The Corps will then review the application to ensure it complies with all necessary federal laws and regulations. Note that if the fill results in the loss of waters of the U.S. or the waterbodies' associated functions, the applicant may be required to provide compensatory mitigation for any unavoidable impacts. A jurisdictional determination request can be submitted prior to or concurrently with an application.

Thank you for contacting us regarding this project and providing us with the opportunity to comment. Should you have any questions, please contact Ms. Amy Klein at (808) 438-7023 or via email at Amy.S.Klein@usace.army.mil.

Sincerely,

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

LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
EMD/SDWB

April 16, 2010

Mr. Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, HI 96814

Dear Mr. Amuro:

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR DRAFT ENVIRONMENTAL ASSESSMENT
MAHINAHINA EXPLORATORY WELL
MAUI COUNTY DEPARTMENT OF WATER SUPPLY

We would like to acknowledge receipt of the letter dated March 24, 2010, from your office requesting our comments regarding the subject project.

We do not have specific comments at this time prior to preparation of the Draft Environmental Assessment (DEA) for the exploratory phase of the project.

Your letter indicates that should testing for the exploratory well indicate an acceptable groundwater yield for production, a separate environmental review for the development of the well will be conducted.

We welcome the opportunity to comment on the DEA for the exploratory well when it is submitted for formal review and comment, and for the production well should work proceed to that phase.

At this time we offer the following general comments for your consideration:

1. Projects that propose development of new sources of potable water serving or proposed to serve a public water system must comply with the terms of HAR 11-20-29. This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.

2. The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the State Laboratories Division of the state of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

3. All public water system sources must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the drinking water source.

4. All public water systems must be operated by certified distribution system and water treatment plant operators as defined by Hawaii Administrative Rules, Title 11, Chapter 11-25 titled "Rules Pertaining to Certification of Public Water System Operators."

5. All projects which propose the use of dual water systems or the use of a non-potable water system in proximity to an existing potable water system to meet irrigation or other needs must be carefully design and operate these systems to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the potable system. The two systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the potable water supply. In addition backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas should be clearly labeled with warning signs to prevent the inadvertent consumption on non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 11-21 titled "Cross-Connection and Backflow Control" is also required.

6. All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawai`i Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water supply should address

this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.

If there are any questions, please call Craig Watanabe of the Safe Drinking Water Branch, Engineering Section, at 586-4258.

Sincerely,

STUART YAMADA, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

CW:cb

Maui Land & Pineapple Company, Inc.

April 8, 2010

Andrew Amuro
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd.
Suite 1530
Honolulu, Hawaii 96814

Re: Pre-Assessment Consultation for Draft Environmental Assessment
County of Maui, Department of Water Supply
Mahinahina Exploratory Well; TMK (2) 4-4-04:10

Dear Mr. Amuro:

Thank you for informing Maui Land & Pineapple Company, Inc. (MLP) of the proposed exploratory well located on land owned by the State of Hawaii, TMK (2) 4-4-04:10. From the information in your March 24, 2010 letter, should the well have adequate capacity, DWS would continue to develop the well, with hopes of adding capacity to the west side of Maui. That is welcome news.

MLP is concerned about access to the proposed well site. Does access to the proposed well site require crossing MLP lands? If so, please provide to MLP the proposed access route for construction of the exploratory well. The Department of Water Supply must request and have an approved Right of Entry Permit from MLP prior to accessing the well site. Any crossing of MLP lands for access to the proposed well site will require the necessary right of entry permits. Should the proposed well be developed, and access to the well crosses MLP lands, a fully executed access easement will be required, recorded with the Bureau of Conveyances prior to operation of the well.

Should you have additional questions or need more information, please call Jeffrey T. Pearson at 808 877-1606.

Sincerely,

Jeffrey T. Pearson, P.E.
Water Manager
Maui Land & Pineapple Company, Inc.

P.O. Box 187 • Kahului, Maui, Hawai'i 96733-6687 • 808-877-3351 • Fax 808-871-0953
mauiland.com

CHARMAINE TAVARES
Mayor

TAMARA HORCAJO
Director

ZACHARY Z. HELM
Deputy Director

(808) 270-7230
Fax (808) 270-7934

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

April 7, 2010

Mr. Andrew Amuro, Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd. Suite 1530
Honolulu, Hawaii 96814

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment - County of Maui Department of Water Supply Mahinahina Exploratory Well, TMK: (2) 4-4-004:010

Dear Mr. Amuro:

Thank you for the opportunity to review and comment on the subject project. The Department of Parks and Recreation does not have any comments at this time.

Please feel free to contact me or Mr. Patrick Matsui, Chief of Parks Planning and Development at 270-7387 should you have any other questions.

Sincerely,

TAMARA HORCAJO
Director

xc: Patrick Matsui, Chief of Parks Planning & Development

TH:PTM:bks

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD10/4920

April 6, 2010

Andrew Amuro
Fukunaga & Associates
1357 Kapi'olani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Re: Pre-Draft Environment Assessment consultation
Mahinahina Exploratory Well
Island of Maui

Aloha e Andrew Amuro,

The Office of Hawaiian Affairs (OHA) is in receipt of your March 24, 2010 request for comments ahead of a draft environmental assessment (EA) for the proposed Mahinahina Exploratory Well project. According to the information in your letter, the County of Maui-Department of Water Supply is proposing the construction of an exploratory well on a portion of a 39.78 acre parcel under the control of the State of Hawaii which situated on the outskirts of the West Maui Forest Reserve. Approximately 9,000 square feet of land will be used for the drill rig setup and lay down area. The exploratory well will test the potential for a groundwater production well. If testing confirms the potential for a groundwater production well, a separate environmental review will be initiated.

We seek clarification on whether the provisions of Chapter 174C, Hawaii Revised Statutes (HRS) relative to well construction, abandonment and pump installation are applicable for this proposed project. Thank you for initiating consultation at this early stage and we look forward to the opportunity to review the draft EA and provide additional comments at that time. Should you have any questions, please contact Keola Lindsey at 594-0244.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Chief Executive Officer

C: OHA-Maui Community Resource Coordinator

Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96733-6898 • (808) 871-8461

April 1, 2010

Andrew Amuro, Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Oahu, Hawaii 96814

Subject: Pre-Assessment Consultation for Draft Environmental Assessment – County of Maui Department of Water Supply Mahinahina Exploratory Well
Mahinahina, Maui, Hawaii
Tax Map Key: (2) 4-4-004:010

Dear Mr. Amuro,

Thank you for allowing us to comment on Pre-Assessment Consultation for the subject project.

In reviewing our records and the information received, should your exploratory well project or permanent well project require an electrical service, Maui Electric Company may be requiring access and electrical easements for our facilities to serve the subject project site. Thus, the project's anticipated electrical demands may have a substantial impact to our system, so we highly encourage the customer's electrical consultant to submit the electrical demand requirements, electrical service request, and project time schedule as soon as practical so that service can be provided on a timely basis.

Should you have any questions or concerns, please call me at 871-2341.

Sincerely,

Kyle Tamori
Staff Engineer