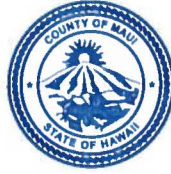


ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

October 30, 2015

Mr. Daniel E. Orodener, Executive Director
State of Hawaii Land Use Commission
Department of Business, Economic Development & Tourism
P.O. Box 2359
Honolulu, Hawaii 96804-2359

Dear Mr. Orodener:

SUBJECT: RECOMMENDATION OF APPROVAL OF TIME EXTENSION AND AMENDMENT OF STATE LAND USE COMMISSION (LUC) SPECIAL PERMIT FOR LUC DOCKET NO. SP 94-386 PERTAINING TO THE LANAI SANITARY LANDFILL, AT KAUMALAPAU HIGHWAY, LANAI CITY, LANAI, HAWAII; TMK: (2) 4-9-002:060 (POR.) (FORMERLY TMK: (2) 4-9-002:001 POR.) (SP 94-386) (SUP 94/0005)

The Department of Planning (Department) is transmitting for your review and action a request for time extension and amendment of State LUC Special Permit (SP 94-386). A summary of the proposed application request is as follows:

SUMMARY OF APPLICATION	
Application Request:	Request amendment to SP 94-386 as follows: a) Condition #1 - approve fifteen (15) year time extension to September 13, 2029; and, b) Condition #9 - modify reporting on solid waste diversion.
Applicant:	Mr. Kyle Ginoza, Director, Maui Department of Environmental Management
Location:	TMK: (2) 4-9-002:060 (por.) Formerly (2) 4-9-002:001 (por.)
Land Use Designations:	State: Agricultural Lanai Community Plan: Public – Quasi Public County Zoning: Interim District Other: Not in Special Management Area

SUMMARY OF APPLICATION	
Brief Description:	Request amendment of State LUC Special Permit: Request amendment to Condition #1 to obtain a fifteen (15) year time extension for the Special Permit until September 13, 2029 ; and request amendment to Condition #9 regarding solid waste diversion reports on recycling, re-use, and reduction.
Public Meeting:	Lanai Planning Commission (Commission), August 19, 2015
Testimony:	See approved minutes attached to report as Attachment 5
Recommendation	The Commission recommended approval of the requested amendment as proposed by the Applicant, and as concurred by the Department, to the State LUC. The vote was as follows: 5 – 3 with one (1) Commissioner excused

On August 19, 2015, the Commission voted to recommend approval of the request, subject to the following ten (10) conditions:

1. That the State Land Use Commission Special Permit shall be valid until **September 13, 2029**, subject to further extensions by the Lanai Planning Commission and the State Land Use Commission upon a timely request for extension filed at least ninety (90) days prior to its expirations.
2. That full compliance with all applicable governmental requirements shall be rendered.
3. That Petitioner shall use non-potable water, to the extent possible, for grading and dust control of the landfill.
4. That Petitioner shall ensure that impacts from wind blown debris into Kalamaiiki Gulch are mitigated in a timely manner.
5. That Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings, or wall be encountered during development of the Special Permit area.
6. That Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.

7. That Petitioner shall timely provide without any prior notice, annual reports to the State Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.
8. That the conditions imposed herein may be fully or partially released upon timely motion to the Lanai Planning Commission and State Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.
9. That the Applicant shall address in the annual report how the County and/or State are addressing solid waste diversion that may include recycling, re-use and reduction.
10. That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.


The Department is transmitting the subject application to the Commission for further consideration and action. Attached is one (1) hard copy and one (1) digital copy of the following:

- Applicant's revised request letter for time extension for 15 years (**Attachment 1**);
- Applicant's original request letter for time extension for 10 years (**Attachment 2**);
- Department Report to the Commission, dated August 19, 2015 (**Attachment 3**);
- Department Recommendation to the Commission, dated August 19, 2015 (**Attachment 4**);
- Commission Minutes of August 19, 2015 meeting (**Attachment 5**);
- Applicant's presentation to Commission, dated August 19, 2015 (**Attachment 6**); and
- Department's transmittal letter to Applicant of Lanai Planning Commission's recommendation of approval of time extension for fifteen (15) years, dated September 2, 2015 (**Attachment 7**).

Mr. Daniel E. Orodener, Executive Director
October 30, 2015
Page 4

Thank you for your cooperation. Should additional clarification be required, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or (808) 270-1789.

Sincerely,



WILLIAM SPENCE
Planning Director

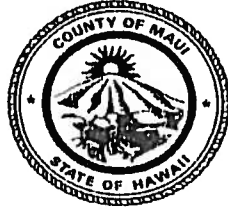
Attachments

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Kyle Ginoza, Director, Environmental Management (PDF)
Michael Miyamoto, Deputy Director, Environmental Management (PDF)
Elaine Baker, Engineer, Environmental Management (PDF)
Project File
General File

WS:KFW:aj

K:\WP_DOCS\PLANNING\SUP\1994\0005_Lanai Sanitary Landfill\Extension_2014\Submission to State LUC\LUC_Transmittal.doc

ALAN M. ARAKAWA
Mnyor
KYLE K. GINOZA, P.E.
Director
MICHAEL M. MIYAMOTO
Deputy Director



MICHAEL RATTE
Solid Waste Division
ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2050 MAIN STREET, SUITE 1C
WAILUKU, MAUI, HAWAII 96793

August 6, 2015

MEMO TO: WILLIAM SPENCE, DIRECTOR OF PLANNING

F R O M: *KG* KYLE GINOZA, DIRECTOR OF ENVIRONMENTAL MANAGEMENT

A handwritten signature in black ink, appearing to read "Michael M. Miyamoto".

**SUBJECT: TIME EXTENSION OF STATE SPECIAL USE PERMIT SP94-386
LANAI LANDFILL TMK (2) 4-9-002:060**

Based on a recent capacity study of the Lanai Landfill estimating a remaining service life of 15.6 years, the Department of Environmental Management, Solid Waste Division, is requesting a time extension of fifteen (15) years for the State Special Use Permit SP94-386 which expired on September 13, 2014.

The Department had requested a ten (10) year extension on January 23, 2014.

If you have any questions, please call Elaine Baker at (808) 270-7872.

A-MEHR, INC.
Memorandum

July 24, 2015

TO: Elaine Baker, County of Maui
FROM: Ali Mehrazarin *M. Ali Mehrazarin*
RE: Lanai Landfill
Airspace Use and Remaining Capacity

Airspace Use

As requested, we have calculated waste fill volume and airspace utilization factor during the period between Lanai Landfill topographic surveys on June 3, 2014 and May 27, 2015. Cut and fill computations using Terramodel software were made for the active landfill area, comparing the 2014 and 2015 topographic data.

Airspace usage is calculated as follows:

Total Fill	20,197 cy
Cut (settlement)	<u>722 cy</u>
Net Fill	19,475 cy

The airspace utilization factor was calculated using the following disposal tonnage data provided by the County:

Month	Tons Disposed
June 3-30, 2014**	395.33
July 2014	484.80
August 2014	451.86
September 2014	586.71
October 2014	554.44
November 2014	418.61
December 2014	415.98
January 2015	487.06
February 2015	374.95
March 2015	331.90
April 2015	441.76
May 1-27, 2015**	342.67
Total Tons	5286.07

** June 2014 and May 2015 tonnage estimated using average calendar day tonnage for month.

Airspace utilization factor (AUF) = 5286.07 tons/ 19,475 cy = 0.271 ton/cy = 542 lb/cy

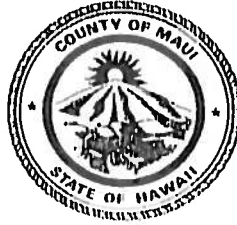
Remaining Capacity and Site Life

We calculated the remaining capacity as the net fill available from the May 27, 2015 topography to final grades (Figure 3), as follows

Net Airspace Remaining	360,848 cy
Less Final Cover	<u>52,428 cy</u> (2 feet over 16.25 acres)
Net Remaining Capacity	308,420 cy

At FY 2015 levels of disposal (5,359 tons/year) and the most recently calculated AUF of 542 lb/cy, the projected future rate of airspace use would be 19,506 cy/year. At this rate the remaining life of the landfill is estimated to be approximately 15.6 years from May 27, 2015, or until approximately January 2031.

ALAN M. ARAKAWA
Mayor
KYLE K. GINOZA, P.E.
Director
MICHAEL M. MIYAMOTO
Deputy Director



TRACY TAKAMINE, P.E.
Solid Waste Division
ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 225
WAILUKU, MAUI, HAWAII 96793
January 23, 2014

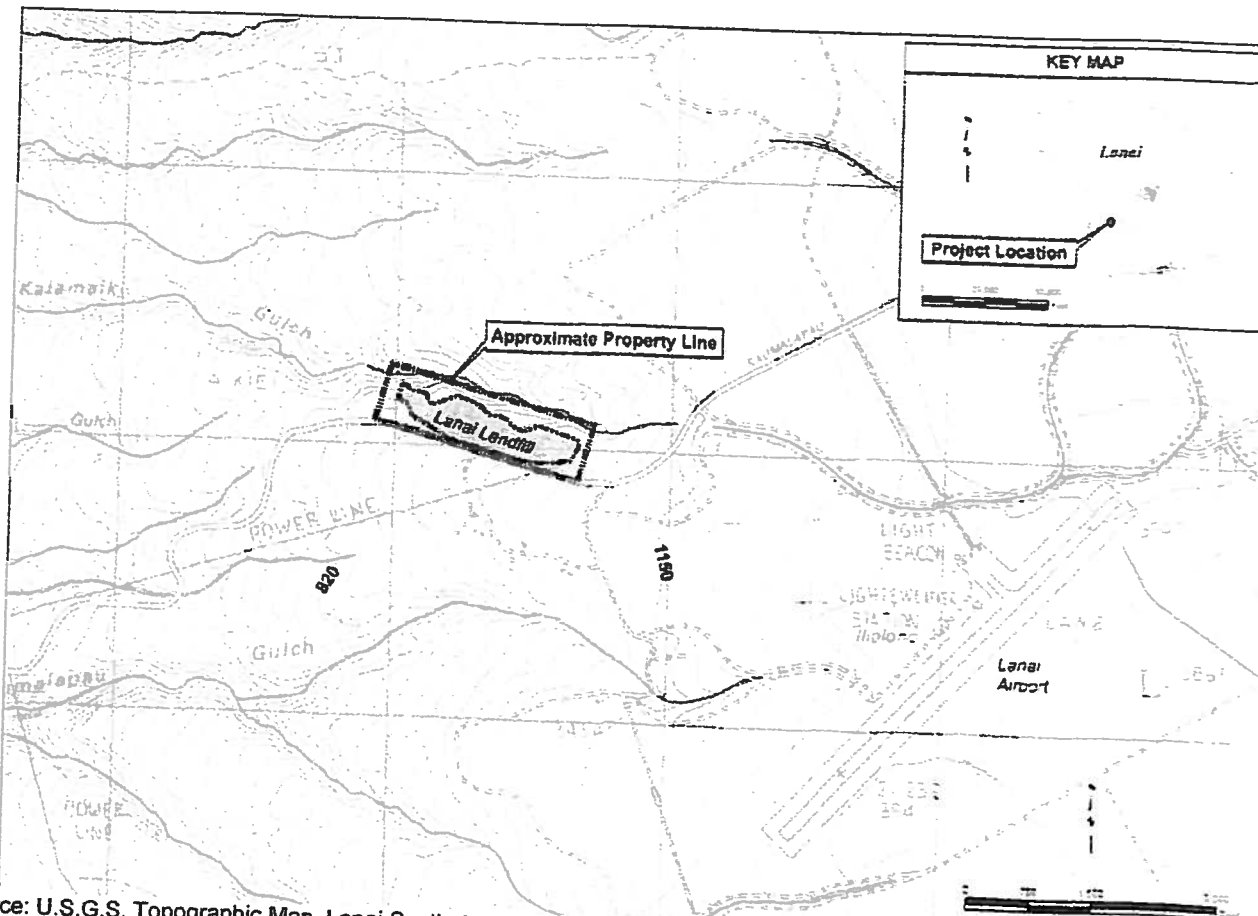
COUNTY OF MAUI
DEPT. OF PLANNING
CURRENTLY RECEIVED

'14 JAN 29 P3:11

MEMO TO: WILLIAM SPENCE, DIRECTOR, PLANNING DEPARTMENT
F R O M: *Kyle Ginoza* KYLE GINOZA, DIRECTOR, ENVIRONMENTAL MANAGEMENT DEPARTMENT
SUBJECT: **TIME EXTENSION OF STATE SPECIAL USE PERMIT SP94-386
LANAI LANDFILL, TMK (2) 4-9-02:01**

The Department of Environmental Management, Solid Waste Division, is requesting a time extension of the State Special Use Permit SP94-386 which will expire on September 13, 2014.

We are requesting a time extension of ten (10) years. If you have any questions, please call Elaine Baker at (808) 270-7872.



Source: U.S.G.S. Topographic Map, Lanai South, Hawaii, Provisional Edition 1984
Note: Contour elevations are in meters with English units on select contours.

Figure 1. Site Location Map

BEFORE THE LANAI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

KYLE GINOZA, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT,
COUNTY OF MAUI

To Obtain a Time Extension of a Special
Permit (SP94-386) for the Continued Operation
of the Lanai Sanitary Landfill on Approximately
25 acres of Land at Kaumalapau Highway
Situated within the State Land Use Agricultural
District at Lanai City, Island of Lanai, County of
Maui, Hawaii, TMK: (2) 4-9-002:060 (portion)

DOCKET NO.

SP 94-386

SUP 94/0005

Lanai Sanitary Landfill Time Extension

Kyle Ginoza, Director, Department of
Environmental Management, County of
Maui

(KFW)

MAUI COUNTY PLANNING DEPARTMENT'S REPORT
TO THE LANAI PLANNING COMMISSION
AUGUST 19, 2015 MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HI 96793

Land Use Commission Special Permit SP94-386 (County SUP 94/0005)

k:\wp_docs\planning\sup\1994\0005_lanai_sanitary_landfill\extension_2014\staff_report_to_approval\pc_report_19-august-2015.doc

BEFORE THE LANAI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

KYLE GINOZA, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT,
COUNTY OF MAUI

To Obtain a Time Extension of a Special
Permit (SP94-386) for the Continued Operation
of the Lanai Sanitary Landfill on Approximately
25 Acres of Land at Kaunalapau Highway
Situated within the State Land Use Agricultural
District at Lanai City, Island of Lanai, County of
Maui, Hawaii, TMK: (2) 4-9-002:060 (portion)

DOCKET NO.

SP 94-386

SUP 94/0005

Lanai Sanitary Landfill Time Extension

Kyle Ginoza, Director, Department of
Environmental Management, County of
Maui

(KFW)

DESCRIPTION OF THE PROJECT

This matter arises from a request to amend the Land Use Commission ("LUC") Special Permit SP 94-386 to allow a fifteen (15) - year time extension for the continued operation of the Lanai Sanitary Landfill ("Landfill") until September 13, 2029. The original time extension request for ten (10) years, submitted in a timely manner 90 days prior to its expiration date of September 13, 2014, was amended to fifteen (15) years after a special landfill capacity was conducted by A-MEHR, Inc. The study concluded that, at the present rate of fill, the remaining life of the Landfill was estimated to be approximately 15.6 years from May 27, 2015, or until approximately January 2031. See **Exhibit 1** for landfill capacity utilization study with site location map. The request was filed pursuant to Section 205-6, Special Permit, Hawaii Revised Statutes (HRS), and Title 15, Department of Planning Economic Development, Subtitle 3, State Land Use Commission, Chapter 15, Land Use Commission Rules, Subchapter 12, Special Permits, §15-15-95, HRS; by Mr. Kyle Ginoza, Director, Department of Environmental Management ("DPEM"), ("Applicant") on approximately 25 acres of land adjacent to the Kaunalapau Highway, TMK: (2) 4-9-002:060 (portion), Island of Lanai, County of Maui. There was a land subdivision that partitioned the Landfill area out of the original parcel TMK (2) 4-9-002:001 (portion).

BRIEF HISTORY

The Lanai Sanitary Landfill was originally approved on 10 acres. This 10-acre property was the subject of a Special Permit petition under LUC Docket No. SP 66-36, approved by the LUC on October 29, 1966. No time period was placed on the SP66-36 Special Permit. See **Exhibit 2**. On April 5, 1994, an application to allow the establishment and operation of an expansion of the original 10-acre landfill onto an additional 25 acres at Lanai City, Lanai was filed with the County of Maui Planning Department.

Per motions on August 23, 1994 and September 9, 1994, the LUC granted a Special Permit (SP 94-386) to establish an expansion of the original sanitary landfill onto approximately 25 additional acres of land situated in the State Land Use Agricultural District at Lanai City, Lanai, Tax Map Key No. (2) 4-9-002:001 (portion), subject to ten (10) conditions of approval. The findings of fact, conclusions of law, and decision and order were adopted on September 13, 1994. The permit allowed the landfill to continue operation on a larger site and extend the lifespan of the landfill to meet the public health and welfare needs of the residents and visitors of Lanai. See **Exhibit 2-A**.

The properties of SP94-386 (approximately 25 acres) and SP66-36 (approximately 10 acres) were consolidated in a subdivision called "Lanai Landfill Subdivision" in Land Court with final subdivision approval granted on September 14, 1995. Gross area totals 35.677 acres with net acreage of 34.33 acres. This subdivision created TMK (2) 4-9-002:060 which is under review in this Special Permit time extension.

On June 30, 2004, the County of Maui Department of Environmental Management filed a written request for a ten-year time extension to continue the operations of the Lanai Sanitary Landfill.

On March 19, 2008, the Lanai Planning Commission conducted a hearing on the Petitioner's request for a time extension and recommended approval. See **Exhibit 3** for the approval letter memorializing the Land Planning Commission decision on approval recommendation to the State Land Use Commission.

On September 12, 2008, the LUC met to consider the Petitioner's request for time extension and approved the request, extending the Special Permit until September 13, 2014, subject to further extensions by the Lanai Planning Commission and the LUC. Decision & Order from the State LUC SP94-386 was filed and effective on October 6, 2008 and is shown in **Exhibit 4**.

The Applicant submitted annual reports in fulfillment of Condition #7 of Decision & Order SP94-386 and the FY2014 Annual Report from the Department of Environmental Management, County of Maui is shown in **Exhibit 5**.

Additionally an annual operating report (AOR) submitted to the Department of Health is included as **Exhibit 6**. An addendum referenced in the AOR and shown in **Exhibit 7** is the Final Lanai Landfill Master Plan developed by Brown & Caldwell, December 2011.

On January 29, 2014, the Applicant filed a time extension request for SP94-386 as previously noted in **Exhibit 1**. The time extension request was filed in a timely manner; however, due to staffing issues and the request for additional information, the application review process has been somewhat lengthy.

On June 3, 2014, and May 27, 2015, Landfill topographic studies were conducted and compared by A-MEHR, Inc., which came to the conclusion that the remaining life of the Landfill was estimated to be approximately 15.6 years from May 27, 2015, or until approximately January 2031. See **Exhibit 1**.

On August 6, 2015, the Applicant filed an amended time extension request for SP94-386 requesting a fifteen (15) year extension of the Special Permit.

DESCRIPTION OF THE PROPERTY

1. The Lanai Landfill is an unlined landfill located on the southwestern side of the island of Lanai, about a mile northwest of Lanai Airport. The landfill is situated between Kaunalapau Highway on the south and Kalamaiki Gulch on the north. Open range areas border the site to the east, north and west. The total property area of the site is 35.677 acres of which 17.44 acres are covered by the active landfill inside the concrete perimeter swale. The Landfill is defined by Tax Map Key (2) 4-9-002:060, which is owned by the County of Maui. Adjacent parcels are owned by Lanai Resorts, LLC, except for Kaunalapau Highway which is owned and maintained by the State of Hawaii. The landfill, which opened in 1969, is operated by the County.
2. Land Use Designations
 - a. State Land Use District - Agricultural
 - b. Lanai Community Plan: Public - Quasi Public
 - c. Zoning - Interim District
 - d. Not in the Special Management Area
3. The site is rectangular in shape with the longest edge along Kaunalapau Highway. The site slopes gently northwest from the highway to the gulch with an elevation range of 850 to 950 feet above mean sea level. The entire site, where not disturbed, is covered in grasses. The northern edge of the site drops off steeply into the Kalamaiki Gulch.

APPLICABLE REGULATIONS

LAND USE COMMISSION SPECIAL PERMIT

Pursuant to Section 205-6 Special Permit, Hawaii Revised Statutes, the county planning commission may permit certain unusual and reasonable uses within agricultural and rural districts other than those for which the district is classified. Special permits for land the area of which is greater than fifteen acres shall be subject to approval by the State Land Use Commission. This application concerns uses on a portion of a parcel, that portion being less than fifteen acres, and therefore the Maui County Planning Commission is the authority for the Special Use Permit.

Standards for reviewing a Land Use Commission Special Permit are found under Title 15 Department of Business, Economic Development, and Tourism; Subtitle 3 State Land Use Commission, Chapter 15 Land Use Commission Rules, Subchapter 12 Special Permits, § 15-15-95 of the Hawaii Administrative Rules.

Certain "unusual and reasonable" uses within agricultural and rural districts other than those for which the district is classified may be permitted. The following guidelines are established in determining an "unusual and reasonable use":

- (1) The use shall not be contrary to the objectives sought to be accomplished by Chapters 205 and 205A, HRS, and the rules of the Land Use Commission.
- (2) The desired use would not adversely affect surrounding property;

- (3) The use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection;
- (4) Unusual conditions, trends and needs have arisen since the district boundaries and rules were established;
- (5) The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

The county planning commission may impose such protective conditions as it deems necessary in the issuance of a Special Permit. The county planning commission shall establish, among other conditions, a reasonable time limit suited to establishing the particular use, and if appropriate, a time limit for the duration of the particular use, which shall be a condition of the Special Permit. If the permitted use is not substantially established to the satisfaction of the county planning commission within the specified time, it may revoke the permit. The county planning commission, with the concurrence of the commission, may extend the time limit if it deems that circumstances warrant the granting of the extension. Pursuant to HRS Section 205-6 (C), the Commission must also find that the use would promote the objectives and effectiveness of Chapter 205 HRS.

PROCEDURAL MATTERS

- On January 29, 2014, the Maui Planning Department received a time extension request from Director Kyle Ginoza, Department of Environmental Management, Solid Waste Division for a time extension of State Special Permit SP94-386. On August 6, 2015, the Applicant, after reviewing an updated Landfill capacity utilization report, filed an amended time extension request for SP94-386 requesting a fifteen (15) year time extension of the Special Permit, to September 13, 2029.
- The subject action for a time extension does not involve an action that triggers compliance to Chapter 343, Hawaii Revised Statutes, relating to Environmental Impact Statements. An Environmental Assessment (EA) was prepared for the landfill and related activities in July 2001. The Department of Environmental Management issued a Findings of No Significant Impact (FONSI) determination on July 23, 2001.
- The Lanai Planning Commission shall transmit findings, conclusions and recommendations for the time extension of SP94-386 to the State of Hawaii Land Use Commission for final dispensation.

REVIEWING AGENCIES

County Agencies:	Comment	Exhibit #
Department of Water Supply	No Comment	8
Fire and Public Safety	No Comment	9
Police Department	No Comment	10
Department of Public Works	Yes	11

State Agencies:	Comment	Exhibit #
Department of Health	Yes	12
Department of Land and Natural Resources	Yes	13

ANALYSIS

LAND USE

1. The proposed project is in conformance with the goals, objectives and policies of the Hawaii State Plan. The subject property is situated in the State Agricultural District and the landfill was granted two prior State Special Permits (Docket No. SP66-36 and SP94-386.)
2. As stated in the Maui County Charter, as amended in 2002:

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

The County of Maui 2030 General Plan Countywide Policy Plan, adopted by the Maui County Council on March 19, 2010, is the first component of the decennial General Plan update. The Countywide Policy Plan replaces the General Plan as adopted in 1990 and amended in 2002. The Countywide Policy Plan acts as an over-arching values statement and umbrella policy document for the Maui Island Plan and the nine Community Plans that provides broad goals, objectives, policies, and implementing actions that portray the desired direction of the County's future. The Countywide Policy Plan includes:

1. A vision statement and core values for the County to the year 2030
2. An explanation of the plan-making process
3. A description and background information regarding Maui County today
4. Identification of guiding principles
5. A list of countywide goals, objectives, policies, and implementing actions related to the following core themes:
 - A. Protect the Natural Environment
 - B. Preserve Local Cultures and Traditions
 - C. Improve Education
 - D. Strengthen Social and Healthcare Services
 - E. Expand Housing Opportunities for Residents

- F. Strengthen the Local Economy
- G. Improve Parks and Public Facilities
- H. Diversify Transportation Options
- I. Improve Physical Infrastructure
- J. Promote Sustainable Land Use and Growth Management
- K. Strive for Good Governance

The proposed project is in keeping with the following Countywide Policy Plan goals, objectives and policies:

I. Improve Physical Infrastructure

Goals, Objectives, Policies, and Actions

Goal: Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective:

- Improve waste-disposal practices and systems to be efficient, safe, and as environmentally sound as possible.

Policies:

- Provide sustainable waste-disposal systems and comprehensive, convenient recycling programs to reduce the flow of waste into landfills.
- Support innovative and alternative practices in recycling solid waste and wastewater and disposing of hazardous waste.
- Develop strategies to promote public awareness to reduce pollution and litter, and encourage residents to reduce, re-use, recycle, and compost waste materials.
- Pursue improvements and upgrades to existing wastewater and solid waste systems consistent with current and future plans and the County's Capital Improvement Program.

COMMENT: *The Applicant reports that green waste was separated for the first time in late spring of FY 2012 with a dedicated collection area designated for it. When sufficient quantities have been collected, it is loaded into the dump truck and taken to the Lanai Resorts LLC grinding and composting site. Also, one collection event was held in November 2013 at Miki Basin for scrap metal and related materials. Regarding electronics, one 20-foot container of 350 items (.30 ton) was collected at the same event in November 2013 at Miki Basin. Beverage containers are redeemed at the Lanai Recycling and Redemption Center. These quantities are reported directly to the Department of Health by the operator, Maui Disposal Company, according to redemption center regulations. No semi-solid liquid waste was received by or disposed at the landfill. No leachate was observed to be generated at this unlined landfill. When three moisture*

probes were installed to average depths of twenty feet in June 2013 the borings were dry.

3. According to the Lanai Community Plan, the majority of the property is identified as Public/Quasi-Public and is consistent with the land use map of the Community Plan. The time extension for the Lanai Sanitary Landfill fulfills a critical solid-waste management need for the Island and its residents. The proposed action is consistent with the following portions of the West Maui Community Plan:

ENVIRONMENT

Goal: Protect and enhance Lanai's land, water and marine environmental resources to perpetuate resource values which may be enjoyed and respected by future generations of Lanai residents and visitors.

PHYSICAL INFRASTRUCTURE

Goal: Provide adequate, reliable and well-designed public infrastructure systems in a timely fashion to meet the social, economic, and public safety and welfare needs of the Lanai community

Liquid and Solid Waste

Objectives and Policies

- Encourage comprehensive waste management planning for the island.
- Maintain and enhance solid waste landfill operations such that adverse impacts upon the physical environment are minimized.

Implementing Actions

- Provide funding to the Department of Public Works and Waste Management's Solid Waste Division for the proper landscaping and maintenance of solid waste facilities and surrounding environs.

COMMENT: *The Applicant in their FY2014 report states that the landfill site includes an office trailer and vehicle parking area with cargo container storage for supplies. Infrastructure improvements were completed in the fall of 2012 with photovoltaic panels installed on top of three containers to power the office including a laptop computer, weather station, refrigerator, lights, and air conditioning. Lanai Landfill is surrounded for most of its perimeter by a concrete storm water diversion swale that drains to a detention basin at the western end of the site. One riprap swale was grouted and bottom slopes of two others were grouted in summer 2012. Two rows of Vetiver grass were planted in the spring of 2013 for erosion control. A third row was added in 2014. Stormwater has been retained by the detention pond. Three moisture probes for leachate detection were installed in June 2013. All borings were dry and subsequent date showed low moisture. The current area is on the makai side of the entrance.*

4. According to County Zoning maps, the majority of the property is zoned as Interim. Interim zoning does allow for public/quasi-public facilities.

COMMENT: *The Applicant indicates that the Landfill does have a finite life. The Landfill has to stay under 20 tons per day to keep the small community Landfill exemption from groundwater monitoring. The addition of Construction and Debris landfill from major Lanai island projects is moving the ton per day limit upwards. The Department requested an updated capacity utilization report. Waste fill volume and airspace utilization factor were calculated during the period between Lanai Landfill topographic surveys on June 3, 2014, and May 27, 2015. At FY 2015 levels of disposal (5,359 tons/year) and the most recently calculated Airspace Utilization Factor of 542 lb/cy, the projected future rate of airspace use would be 19,506 cy/year. At this rate the remaining life of the landfill is estimated to be approximately 15.6 years from May 27, 2015, or until approximately January 2031. See **Exhibit 1 A-MEHR, Inc.** engineering report.*

LAND USE COMMISSION SPECIAL PERMIT

The subject property is in the State Agricultural District. The proposed uses are consistent with the Agricultural designation of the property as identified in the Applicable Regulations section of this report. Chapter 205-6, HRS allows for the establishment of "unusual and reasonable" uses in the State Agricultural District through the approval of a State Land Use Commission Special Permit. The following guidelines are established in determining an "unusual and reasonable use" and the response to these guidelines is indicated as such:

Certain "unusual and reasonable" uses within agricultural and rural districts other than those for which the district is classified may be permitted. The following guidelines are established in determining an "unusual and reasonable use":

- (1) *The use shall not be contrary to the objectives sought to be accomplished by chapters 205 and 205A, HRS, and the rules of the Land Use Commission.*

COMPLIANCE: This section, as specific to the Agricultural District, directly provides broad discretion to the local planning commission to determine if a particular use is consistent and compatible within an area. The existing property meets the objectives of 205 HRS. The time extension for the Landfill continues an operation that is critical to the residents of the Island of Lanai and through the Special Permit process expands upon outright permitted uses similar to that of the Landfill including solid waste transfer stations, public and quasi-public utility lines, transformer stations, etc.

- (2) *The desired use would not adversely affect surrounding properties or applicable district standards;*

COMPLIANCE: The Landfill is surrounded primarily with grassed fallow lands owned by Lanai Resorts LLC. Continuation of the Landfill in its location is not anticipated not affect these surrounding lands to any extent more than in the past.

- (3) *The potential impact on a) natural systems or habitats, b) cultural/natural resources, c) natural resources relevant to Hawaii's economy, d) state funds and*

resources, e) provisions for economic development, and f) provisions for housing opportunities mainly low income people.

COMPLIANCE: The continuation of the Landfill for the foreseeable future is a critical element in the solid waste management strategy for the Island of Lanai. Over the next 10 years efforts to improve solid waste diversion by encouraging recycling, re-use, and reduction will be in motion; however, continuing the Landfill is one part of a total solid waste strategy for the Island. Potential impacts are continuously evaluated through annual reports to the Land Use Commission and other agencies.

(4) *Unusual conditions, trends and needs have arisen since the district boundaries and rules were established;*

COMPLIANCE: The Island of Lanai continues to see enhanced development through the recent purchase by Lanai Resorts LLC. Renovation of existing properties along with new construction will continue and the tourist industry along with the resident population requires a solid waste disposal location.

(5) *The land upon which the proposed use is sought is unsuited for the uses permitted within the district.*

COMPLIANCE: The property is designated with an agricultural rating of Class D. The Landfill is located on approximately 35 acres of land primarily used in the past according to the Detailed Land Classification for game management. There is a significant amount of land with better ratings to be used for agricultural activities and the landfill is a key component to support all industries on Lanai including agricultural activities.

The county planning commission may impose such protective conditions as it deems necessary in the issuance of a special use permit. The county planning commission shall establish, among other conditions, a reasonable time limit suited to establishing the particular use, and if appropriate, a time limit for the duration of the particular use, which shall be a condition of the special permit. If the permitted use is not substantially established to the satisfaction of the county planning commission within the specified time, it may revoke the permit. The county planning commission, with the concurrence of the commission, may extend the time limit if it deems that circumstances warrant the granting of the extension. Pursuant to HRS Section 205-6 (C), the Commission must also find that the use would promote the objectives and effectiveness of Chapter 205 HRS.

AGRICULTURE

The Property, according to best available records, is classified as "D8" by the *Detailed Land Classification – Island of Lanai, Land Study Bureau, University of Hawaii, Hawaii, May 1967*. The classification indicates productivity ratings of land with "A" representing the highest rating and "E" the lowest rating. The "Major Existing Uses" for this land classification at the time of the survey was "Game Management". Productivity Ratings are as follows for "D8" land:

- Machine tillability: Poorly suited
- Stoniness: Nonstony
- Depth (inches): Generally deep, Over 30 inches eroded
- Slope (percent): 0 to 10, predominately 8%

- Texture: Fine
- Drainage: Well-drained
- Mean Annual Rainfall (inches): 15 to 25
- Elevation (feet): 500-1500
- Color: Dark reddish brown
- Soil Series: Lahaina, Molokai, Uwala
- Major Existing Uses: Game Management

INFRASTRUCTURE AND PUBLIC FACILITIES AND SERVICES

1. Water-- The Island of Lanai is served the Lanai Water Company, a privately owned utility company regulated by the Public Utilities Commission. The Maui County Department of Water Supply has no objection to the time extension.
2. Traffic, Access, and Drainage -- Access to the project site is from paved roads specifically Kaunapali Highway which is a State Highway. On-site gravel perimeter roads exist allowing landfill operators to maneuver about the Property.

The Property drains northwest from the Highway to the Gulch. A detention pond is located in the northwestern corner of the site and is designed to manage stormwater runoff from the site allowing runoff water to pool in the detention pond and then to percolate into the soil and eventually into the Gulch.

3. Public Services --

Fire -- Fire protection is from the Lanai Fire Station located approximately four (4) miles to the northeast in Lanai City. The Fire Department has no objections to an extension of the Landfill Special Permit.

Police -- The Lanai Police Department headquarters are located approximately four (4) miles to the northeast in Lanai City. The Landfill is secured during non-business hours by a chain link fence and locked gates. The Police Department has no objections to an extension of the Landfill Special Permit.

Medical Services -- The Lanai Community Hospital is the major medical facility on the Island. The 14-bed facility provides acute and long-term medical care, as well as emergency service.

Solid Waste -- The Project Site is the municipal landfill for the Island of Lanai. Landfill hours from 8:00 AM to 2:30 PM from Tuesday to Saturday. There is an on-site refuse drop off for commercial and residential customers. Residential trash is pickup from individual properties by the County of Maui.

SOCIO-ECONOMIC IMPACTS

Extension of the Lanai Landfill serves a critical need in the solid waste management strategy for residents, businesses, and tourists to Lanai. The Landfill provides a sanitary and controlled environment for the disposal of solid waste. Over the next few years additional strategies will be in motion to improve solid waste diversion by encouraging increasing recycling, re-use, and reduction.

TESTIMONY

As of August 7, 2015, the Planning Department has received no letters in support or in opposition to the subject application.

ALTERNATIVES

State Land Use Commission Special Permit

1. Deferral. The Commission may defer action to another meeting date in order to obtain additional information that will assist in their deliberation on the request.
2. Recommendation of Approval to the State Land Use Commission. The Commission is not the final authority on the extension of the Special Permit over 15 acres and, therefore can make a recommendation to the State Land Use Commission to approve the Special Permit or to deny the Special Permit. The State Land Use Commission is the final authority to act on Special Permits in this matter.
3. Recommendation of Denial to the State Land Use Commission. The Commission is not the final authority on the extension of the Special Permit over 15 acres and, therefore can only make a recommendation to the State Land Use Commission to approve or deny the Special Permit. The State Land Use Commission is the final authority to act on Special Permits in this matter.

APPROVED:

A handwritten signature in black ink, appearing to read 'William Spence', written over a horizontal line.

WILLIAM SPENCE
Planning Director
County of Maui

BEFORE THE LANAI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

KYLE GINOZA, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT,
COUNTY OF MAUI

To Obtain a Time Extension of a Special
Permit (SP94-386) for the Continued Operation
of the Lanai Sanitary Landfill on Approximately
25 acres of Land at Kaumalapau Highway
Situated within the State Land Use Agricultural
District at Lanai City, Island of Lanai, County of
Maui, Hawaii, TMK: (2) 4-9-002:060 (portion)

DOCKET NO.

SP 94-386

SUP 94/0005

Lanai Sanitary Landfill Time Extension

Kyle Ginoza, Director, Department of
Environmental Management, County of
Maui

(KFW)

MAUI COUNTY PLANNING DEPARTMENT'S RECOMMENDATION
TO THE LANAI PLANNING COMMISSION
AUGUST 19, 2015 MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HI 96793

BEFORE THE LANAI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

KYLE GINOZA, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT,
COUNTY OF MAUI

To Obtain a Time Extension of a Special
Permit (SP94-386) for the Continued Operation
of the Lanai Sanitary Landfill on Approximately
25 Acres of Land at Kaumalapau Highway
Situated within the State Land Use Agricultural
District at Lanai City, Island of Lanai, County of
Maui, Hawaii, TMK: (2) 4-9-002:060 (portion)

DOCKET NO.

SP 94-386

SUP 94/0005

Lanai Sanitary Landfill Time Extension

Kyle Ginoza, Director, Department of
Environmental Management, County of
Maui

(KFW)

CONCLUSIONS OF LAW

State Land Use Commission Special Permit

The application complies with the applicable standards for a State Land Use Commission Special Permit as established in the Planning Department's Report to the Lanai Planning Commission, August 19, 2015, Docket No. SP 94-386 and SUP 94/0005 as follows:

- (1) The use shall not be contrary to the objectives sought to be accomplished by Chapters 205 and 205A, HRS, and the rules of the Land Use Commission.
- (2) The desired use would not adversely affect surrounding property;
- (3) The use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection;
- (4) Unusual conditions, trends and needs have arisen since the district boundaries and rules were established;
- (5) The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

Further, at its regularly scheduled meeting on March 19, 2008 the Lanai Planning Commission approved the request for a ten-year time extension of Land Use Commission Special Use Permit (SP 94-386). The previous Findings of Fact, Conclusions of Law, and Decision and Order adopted by the Land Use Commission filed and effective October 6, 2008, are still applicable to the project. Therefore, the sanitary landfill use is still deemed as an "unusual and reasonable" use within the State Agricultural District, therefore a time extension is justified.

RECOMMENDATION

State Land Use Commission Special Permit


Pursuant to the foregoing the Lanai Planning Department recommends approval of the applicant's request for a Land Use Commission Special Permit time extension subject to the following conditions:

1. That the State Land Use Commission Special Use Permit shall be valid until September 13, 2029, subject to further extensions by the Lanai Planning Commission and the State Land Use Commission upon a timely request for extension filed at least ninety (90) days prior to its expirations.
2. That full compliance with all applicable governmental requirements shall be rendered.
3. Petitioner shall use non-potable water, to the extent possible, for grading and dust control of the landfill.
4. Petitioner shall ensure that impacts from wind blown debris into Kalamaiki Gulch are mitigated in a timely manner.
5. Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.
6. Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.
7. Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.
8. The conditions imposed herein may be fully or partially released upon timely motion to the Lanai Planning Commission and Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.
9. That the Applicant shall address in the annual report how the County and/or State are addressing solid waste diversion that may include recycling, re-use and reduction.

10. That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.

In consideration of the foregoing, the Maui County Planning Department recommends that the Lanai Planning Commission adopt the Planning Department's Report and Recommendation prepared for the August 19, 2015, meeting as its Findings of Fact, Conclusions of Law and Recommendation and to authorize the Director of Planning to transmit said written Recommendation on behalf of the Lanai Planning Commission to the State Land Use Commission.

APPROVED:

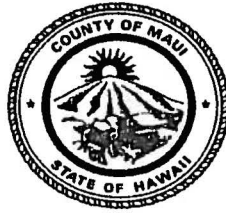
A handwritten signature in black ink, appearing to read "William Spence", is written over a horizontal line.

William Spence
Planning Director
County of Maui

ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director



MICHAEL RATTE
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2050 MAIN STREET, SUITE 1C
WAILUKU, MAUI, HAWAII 96793

August 6, 2015

MEMO TO: WILLIAM SPENCE, DIRECTOR OF PLANNING

F R O M:  KYLE GINOZA, DIRECTOR OF ENVIRONMENTAL MANAGEMENT

A handwritten signature in black ink, appearing to read "Michael M. Miyamoto".

**SUBJECT: TIME EXTENSION OF STATE SPECIAL USE PERMIT SP94-386
LANAI LANDFILL TMK (2) 4-9-002:060**

Based on a recent capacity study of the Lanai Landfill estimating a remaining service life of 15.6 years, the Department of Environmental Management, Solid Waste Division, is requesting a time extension of fifteen (15) years for the State Special Use Permit SP94-386 which expired on September 13, 2014.

The Department had requested a ten (10) year extension on January 23, 2014.

If you have any questions, please call Elaine Baker at (808) 270-7872.

EXHIBIT /

**A-MEHR, INC.
Memorandum**

July 24, 2015

TO: Elaine Baker, County of Maui
FROM: Ali Mehrazarin *M. Ali Mehrazarin*
RE: Lanai Landfill
Airspace Use and Remaining Capacity

Airspace Use

As requested, we have calculated waste fill volume and airspace utilization factor during the period between Lanai Landfill topographic surveys on June 3, 2014 and May 27, 2015. Cut and fill computations using Terramodel software were made for the active landfill area, comparing the 2014 and 2015 topographic data.

Airspace usage is calculated as follows:

Total Fill	20,197 cy
Cut (settlement)	<u>722 cy</u>
Net Fill	19,475 cy

The airspace utilization factor was calculated using the following disposal tonnage data provided by the County:

Month	Tons Disposed
June 3-30, 2014**	395.33
July 2014	484.80
August 2014	451.86
September 2014	586.71
October 2014	554.44
November 2014	418.61
December 2014	415.98
January 2015	487.06
February 2015	374.95
March 2015	331.90
April 2015	441.76
May 1-27, 2015**	342.67
Total Tons	5286.07

** June 2014 and May 2015 tonnage estimated using average calendar day tonnage for month.

Airspace utilization factor (AUF) = 5286.07 tons/ 19,475 cy = 0.271 ton/cy = 542 lb/cy

Remaining Capacity and Site Life

We calculated the remaining capacity as the net fill available from the May 27, 2015 topography to final grades (Figure 3), as follows

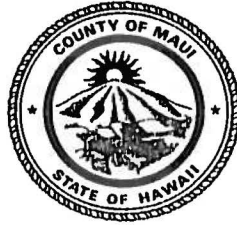
Net Airspace Remaining	360,848 cy
Less Final Cover	<u>52,428 cy</u> (2 feet over 16.25 acres)
Net Remaining Capacity	308,420 cy

At FY 2015 levels of disposal (5,359 tons/year) and the most recently calculated AUF of 542 lb/cy, the projected future rate of airspace use would be 19,506 cy/year. At this rate the remaining life of the landfill is estimated to be approximately 15.6 years from May 27, 2015, or until approximately January 2031.

11/270
ALAN M. ARAKAWA
Mayor

KYLE K. GINOZA, P.E.
Director

MICHAEL M. MIYAMOTO
Deputy Director



TRACY TAKAMINE, P.E.
Solid Waste Division

ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

**COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT**
2200 MAIN STREET, SUITE 225
WAILUKU, MAUI, HAWAII 96793
January 23, 2014

COUNTY OF MAUI
DEPT OF PLANNING
CURRENT DIV RECEIVED

'14 JAN 29 P3:11

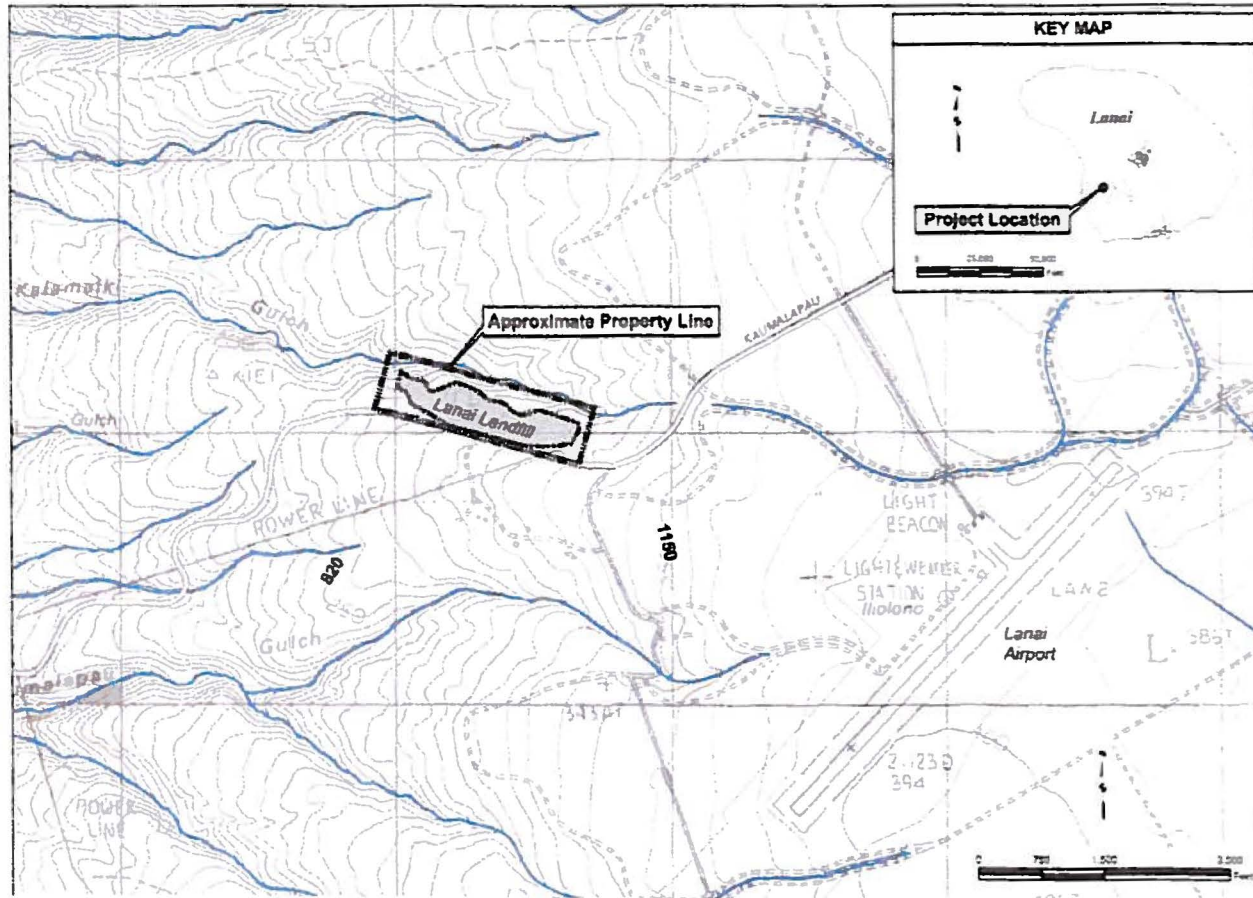
MEMO TO: WILLIAM SPENCE, DIRECTOR, PLANNING DEPARTMENT

F R O M *Kyle Ginoza* KYLE GINOZA, DIRECTOR, ENVIRONMENTAL MANAGEMENT DEPARTMENT

SUBJECT: **TIME EXTENSION OF STATE SPECIAL USE PERMIT SP94-386
LANAI LANDFILL, TMK (2) 4-9-02:01**

The Department of Environmental Management, Solid Waste Division, is requesting a time extension of the State Special Use Permit SP94-386 which will expire on September 13, 2014.

We are requesting a time extension of ten (10) years. If you have any questions, please call Elaine Baker at (808) 270-7872.



Source: U.S.G.S. Topographic Map, Lanai South, Hawaii, Provisional Edition 1984
Note: Contour elevations are in meters with English units on select contours.

Figure 1. Site Location Map

November 2, 1966

Planning & Traffic Commission
County of Maui
P. O. Box 1487
Kahului, Maui

Gentlemen:

At its meeting on October 29, 1966, the Land Use Commission voted to approve the grant of a special permit to the County of Maui, to use approximately 10 acres of land presently in the Agricultural District for a garbage dump site on the Island of Lanai, identifiable by Tax Map Key 4-9-02: portion of 1.

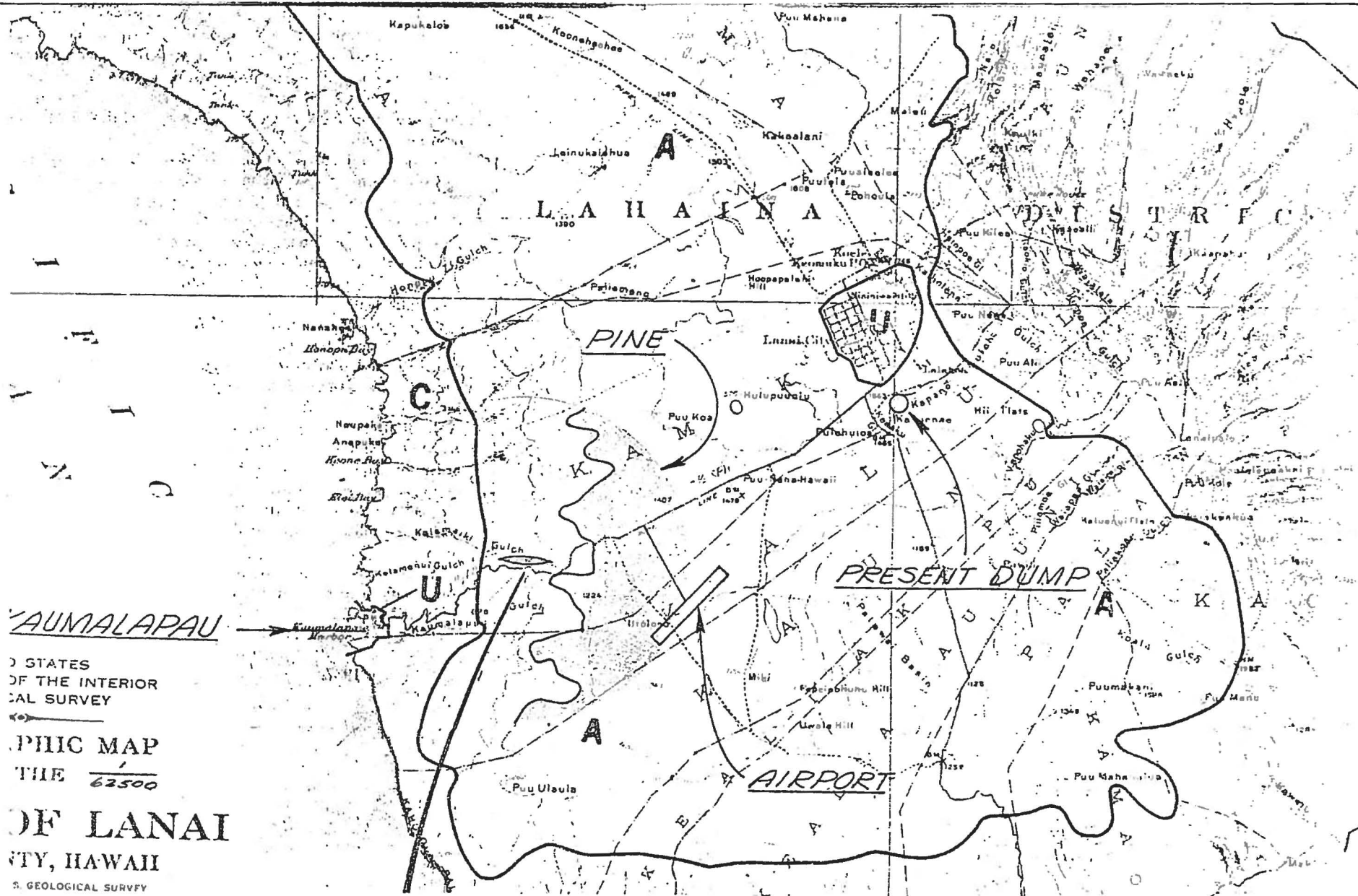
Enclosed for your information is the staff report.

Very truly yours,

GEORGE S. MORIGUCHI
Executive Officer

Encl.
cc: Chairman Thompson
Department of Taxation
County of Maui

EXHIBIT 2



KAUNAKAKAI

UNITED STATES
GEOLOGICAL SURVEY

PHOTOMIC MAP
SCALE 1" = 62500'
OF LANAI
COUNTY, HAWAII

U.S. GEOLOGICAL SURVEY

STATE OF HAWAII
LAND USE COMMISSION

Minutes of Public Hearing
and Meeting

State Highways Division
Hilo, Hawaii

9:30 a.m. - October 29, 1966

Commissioners Present: Myron B. Thompson, Chairman
C. E. S. Burns
Robert Wenkam
Jim P. Ferry
Leslie Wung
Goro Inaba
Shiro Nishimura

Commissioner Absent: Shelley Mark

Staff Present: George Moriguchi, Executive Officer
Roy Takeyama, Legal Counsel
Ah Sung Leong, Draftsman
Dora Horikawa, Stenographer

A short prayer was offered by the Chairman, followed by an introduction of the Commissioners and staff and a brief outline of the hearing process. Individuals testifying during the hearing were sworn in.

Chairman Thompson advised that a rearrangement of the agenda had been necessitated and that the items requiring Commission action would be considered first.

ADOPTION OF MINUTES

Minutes of the August 5, 1966 hearing and meeting were approved as circulated.

ACTION

PETITION OF IIDA SUBDIVISION (A65-102) TO RECLASSIFY APPROXIMATELY 5.3 ACRES AT MIKIOLA, KANEOHE, FROM CONSERVATION TO URBAN, identifiable by Tax Map Key 4-4-13: portions 55 and 56

Staff memorandum, presented by Mr. Moriguchi, recommended denial of the petition based on the extensive grading that would be required and the possible resultant slide and storm water hazards to the abutting landowners.

Commissioner Wenkam brought out the point that on this and previous occasions, the recommendation from the City and County Planning Commission did not seem to reflect any consideration from the resultant slide and water hazards

APPLICATION OF RICHARD SMART DBA PARKER RANCH (SP66-34) TO ALLOW A BUSINESS EXPANSION AT PUUKAPU HOMESTEADS, WAIMEA, HAWAII, TMK 6-4-01: 42

It was recommended by staff that the permit be approved on the grounds that the County General Plan indicated this area as commercial and the request is unusual (see copy of report).

Commissioner Ferry moved to accept staff recommendation for approval, which was seconded by Commissioner Wung and passed unanimously.

✓ APPLICATION OF COUNTY OF MAUI (LANAI DUMP SITE SP66-36) TO USE APPROXIMATELY 10 ACRES OF LAND FOR A GARBAGE DUMP SITE ON THE ISLAND OF LANAI, TMK 4-9-02: portion 1

Favorable action of the application was recommended by staff based on the guidelines established by the Land Use District Regulations. Commissioner Nishimura moved to approve the special permit application, seconded by Commissioner Wung, and the motion was passed.

MISCELLANEOUS

FRANK & BESSIE MONIZ PETITION

The Executive Officer advised the Commissioners that during a previous discussion on Kauai, it was the consensus of those present that they would accept a new petition for the same subject lands only if the new petition contained additional pertinent information that had not been presented or available during the initial hearing. The petitioners had been apprised of this fact by letter.

Chairman Thompson commented that, therefore, the decision before the Commission was whether the additional information submitted by the petitioner warranted or justified acceptance of resubmittal of the petition. In the event the Commission voted to accept the petition, it would be processed through the normal channels of a public hearing.

Mr. Moriguchi added that if the Commission decided to accept the new application, staff would be mandated to review the additional data and make a recommendation. It was brought out that the additional information was comprised primarily of a petition signed by approximately 20 potential purchasers of the Moniz's property should the reclassification take place. There was also a letter from the Soil Conservation Service and the County Extension Agent.

Commissioner Ferry moved that this body declare that the additional information warrants another hearing on the petition. It was seconded by Commissioner Wenkam and passed.

PUBLIC HEARINGS

PETITION OF FRANK E. FERREIRA (A66-130) TO RECLASSIFY 3 ACRES OF LAND FROM AN AGRICULTURAL DISTRICT TO A RURAL DISTRICT AT PAAUHAU, HAMAKUA, HAWAII, TMK 4-4-06; 18

Staff report presented by Mr. Ah Sung Leong recommended retention of the

STATE OF HAWAII
LAND USE COMMISSION

State Highways Division, District
Engineers Office, 50 Makaala Street,
Hilo, Hawaii

9:30 A.M.
October 29, 1966

STAFF REPORT

SP66-36 - COUNTY OF MAUI (Lanai Dump Site)

The County of Maui, through the County Engineer, has applied for a special permit to use approximately ten acres of land presently in the Agricultural District for a garbage dump site on the Island of Lanai. Castle and Cooke, Inc. is the owner of the land which is a portion of parcel 1 of TMK 4-9-02.

Lanai City is approximately 3.5 miles to the northeast of subject site. The land is presently unused and located adjacent to Kalamaiki Gulch. According to the Maui County Planning Director, the site will not be visible from the main highway which is located approximately fifty yards away due to the topography. He also notes that the prevailing wind would take the smoke approximately 90° away from Kaumalapau Harbor located about two miles away.

It was brought out at the public hearing held by the Maui County Planning and Traffic Commission that:

1. The existing dump site is located too close to Lanai City, thus creating a health problem.
2. It is the desire of the petitioner and the Dole Corporation to relocate the site to a more remote area.
3. The proposed site alongside Kalamaiki Gulch is ideal since it is remotely located, with existing access and sufficient cover material nearby.

The Maui Planning and Traffic Commission voted unanimously to recommend approval of this petition.

The Airports Division of the Department of Transportation has no objections to the proposed dump site which would be located about 1.5 miles away from the Lanai Airport.

Application of the guidelines established by the Land Use District Regulations for evaluation of special permit applications indicates that the present one is substantially in conformance. Therefore, favorable action is recommended for this permit.

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)
)
DEPARTMENT OF PUBLIC WORKS AND)
WASTE MANAGEMENT, COUNTY OF MAUI)
)
For a Special Permit to Establish)
and Operate Expansion of the Lanai)
Sanitary Landfill On Approximately)
25 Acres of Land Situated Within)
The State Land Use Agricultural)
District at Lanai City, Lanai, Tax)
Map Key Number: 4-9-02: Portion of)
1)
_____)

DOCKET NO. SP94-386
FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
DECISION AND ORDER

This is to certify that this is a true and correct
copy of the Decision and Order on file in the office
of the State Land Use Commission, Honolulu Hawaii

SEP 13 1994 by *Rothwell*
Date Executive Officer

FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND DECISION AND ORDER

SEP 13 9 44 AM '94
LAND USE COMMISSION
STATE OF HAWAII

EXHIBIT 2-A

BEFORE THE LAND USE COMMISSION
OF THE STATE OF HAWAII

In the Matter of the Petition of)	DOCKET NO. SP94-386
))
DEPARTMENT OF PUBLIC WORKS AND)	FINDINGS OF FACT,
WASTE MANAGEMENT, COUNTY OF MAUI)	CONCLUSIONS OF LAW, AND
)	DECISION AND ORDER
For a Special Permit to Establish)	
and Operate Expansion of the Lanai)	
Sanitary Landfill On Approximately)	
25 Acres of Land Situated Within)	
The State Land Use Agricultural)	
District at Lanai City, Lanai, Tax)	
Map Key Number: 4-9-02: Portion of)	
1)	
_____)	

FINDINGS OF FACT, CONCLUSIONS OF LAW,
AND DECISION AND ORDER

The Department of Public Works and Waste Management, County of Maui ("Petitioner") initiated these proceedings pursuant to Section 205-6, Hawaii Revised Statutes ("HRS"), and Sections 15-15-95 and 15-15-96, Hawaii Administrative Rules ("HAR"). The Land Use Commission ("LUC"), having considered the arguments, both written and oral, presented by the Petitioner and the entire record on this matter, hereby makes the following findings of fact, conclusions of law, and decision and order:

FINDINGS OF FACT

PROCEDURAL MATTERS

1. On April 5, 1994, a Land Use Commission Special Use Permit Application Form ("Petition") to allow establishment and operation of an expansion of the present Lanai Sanitary

Landfill on approximately 25 acres at Lanai City, Lanai, was filed by the Petitioner with the County of Maui Planning Department ("Planning Department").

2. On April 6, 1994, the Petition was certified as complete and ready for processing by the Department of Public Works and Waste Management, County of Maui.

3. On June 16, 1994, the Lanai Planning Commission ("Planning Commission") conducted a public hearing on the Petition.

4. On June 16, 1994, the Planning Commission recommended approval of the Petition to the LUC, subject to the two conditions recommended to the Planning Commission by the Planning Department.

5. On July 26, 1994, the LUC received and accepted for consideration the record of the County of Maui's proceedings on the Petition from the Planning Department.

6. On August 9, 1994, the LUC held a meeting in Lanai City, Lanai on the Petition. The Petitioner was represented by Gary Zakian, Esq., Deputy Corporation Counsel, County of Maui and Mr. Andy Hirose, Engineer, Department of Public Works and Waste Management, Solid Waste Division, County of Maui.

7. On August 9, 1994, the LUC received oral public testimony from Mr. Ron McOmber.

8. Upon due deliberation by the LUC, the Petition was deferred until completion of a site visit by the LUC members.

9. On August 10, 1994, the LUC continued deliberation on the Petition at its meeting at Lanai City, Lanai. The

Petitioner was represented by Gary Zakian, Esq., Deputy Corporation Counsel, County of Maui and Mr. Charles Jencks, Deputy Director, Department of Public Works and Waste Management, County of Maui. The Petition was deferred by the LUC until its next meeting.

10. On August 23, 1994, the LUC held a meeting at Kailua-Kona, Hawaii on the Petition. The Petitioner was represented by Gary Zakian, Esq., Deputy Corporation Counsel, County of Maui and Mr. Charles Jencks, Deputy Director, Department of Public Works and Waste Management, County of Maui.

DESCRIPTION OF THE PROPERTY AND SURROUNDING AREA

11. The special permit area consists of approximately 25 acres located at Lanai City, Lanai, and is identified as Tax Map Key No.: 4-9-02: portion of 1 ("Property").

12. The Property is located along Kaunalapau Highway, approximately 4 miles southwest of Lanai City and approximately 1 mile west from Lanai Airport.

13. The Property is owned in fee by Dole Food Company, Inc. The Property is currently in the process of being subdivided and will be leased by the County of Maui for operation of the Lanai Sanitary Landfill.

14. Current access to the Property is from Kaunalapau Highway.

15. The Property is bounded to the north by Kalamaiki Gulch and partially to the south by Kaunalapau Highway. Open space lies to the west and east with the closest pineapple field located approximately 2,000 feet east of the Property. The

Property is also adjacent to an approximately 10 acre parcel of land to the south, partially forming the south boundary of the Property.

16. The adjacent approximately 10 acre parcel is the existing site of the Lanai Sanitary Landfill. This approximately 10 acre parcel was the subject of a special permit petition under LUC Docket No. SP66-36, approved by the LUC on October 29, 1966, for establishment of the Lanai Sanitary Landfill.

17. A veterinary clinic is located approximately 500 feet south of the existing landfill area.

18. The Property is currently vacant except for an approximately 5.7 acre portion in which the existing landfill area has encroached upon. The encroachment upon the approximately 5.7 acres occurred over a number of years subsequent to the approval of LUC Docket No. SP66-36.

19. The Land Study Bureau's Detailed Land Classification System (with "A" being the best and "E" being the worst) classifies the overall productivity rating of the Property as "D", or low productivity rating.

20. According to the Soil Conservation Service, United States Department of Agriculture, the four soil groups on the area are classed as moderate to severe.

DESCRIPTION OF PROPOSED USES

21. The Applicant is requesting the special permit to establish and operate an expansion of the existing Lanai Sanitary Landfill in order to continue operation of the landfill.

22. The expansion would involve retrieval of debris outside of the current footprint of the landfill, establishment of a perimeter road, development of environmental controls which includes a surface water management system consisting of drainage ditches and a sedimentation basin, fencing of the Property, vertical expansion of the landfill, and environmental monitoring activities.

23. The development of the surface water management system will minimize the amount of water infiltrating into refuse, minimize the amount of leachate generated, and minimize soil erosion.

NEED FOR PROPOSED USE

24. The proposed expansion of the landfill would allow continued operation of the landfill and extend the lifespan of the landfill to meet the public health and welfare needs of the residents and visitors of Lanai.

25. The existing landfill has been in operation for more than 20 years, is at capacity, has encroached onto the Property and was expected to be closed by April 1994, with a new or interim landfill in operation.

26. A new landfill site was approved by granting of a special permit petition (LUC Docket No. SP88-368) by the LUC on October 3, 1988.

27. Upon review of costs to construct the new landfill site and commence closure of the existing landfill site, the County of Maui determined that it would be infeasible to establish a landfill at the new landfill site.

28. The Petitioner currently plans to continue operations at the existing landfill and close portions of it as designed final grades are met. Vertical expansion of the existing landfill footprint would allow the existing landfill to have an extended lifespan of 10 to 15 years.

29. The proposed expansion would rectify the encroachment that has occurred and would upgrade operations to achieve consistency with State regulations.

STATE AND COUNTY PLANS AND PROGRAMS

30. The Property is situated within the State Land Use Agricultural District, as depicted on the State Land Use District Boundary Map for the island of Lanai.

31. The proposed expansion on the Property would meet the objective to provide efficient, safe and environmentally sound systems for the disposal and reuse of liquid and solid waste, as stated in the General Plan of the County of Maui 1990 Update.

32. The Lanai Community Plan of the County of Maui designates the area as Agriculture.

33. The Lanai Community Plan also discourages approvals of Special Permits in the State Agricultural District unless the Special Permit is to accommodate public-facility uses whose location is determined by technical considerations; supportive of agricultural uses; or required for the use or distribution of economic resources and not otherwise adversely affecting the environment or surrounding agricultural uses.

34. Although the Property is within the Coastal Zone Management Area, the Property is not located within the Special Management Area as established by the County of Maui.

35. In accordance with section 11-200-8(6), HAR, the County of Maui has determined that due to the construction or placement of minor structures accessory to existing facilities, the proposed expansion is exempt from the preparation of an environmental assessment for the construction and placement of such accessory structures.

SUMMARY OF COUNTY, STATE AND FEDERAL AGENCY COMMENTS

County Agencies

36. The Department of Public Works and Waste Management had no comments.

37. The Board of Water Supply ("BWS") noted that the Project would be served by a private water system, owned by Lanai Company, Inc. Therefore, a private water system agreement would be required if the applicant constructs new structures. The BWS also advised that non-potable water be used, if possible, for grading and dust control.

State Agencies

38. The Office of Solid Waste Management, Department of Health ("OSWM"), reviewed engineering drawings related to the expansion and revised operating plan for the landfill as part of its permit process. The OSWM has also discussed the encroachment of 5.7 acres and the potential disposal alternatives with the landowner.

39. In light of the OSWM's discussions with the landowner, the OSWM feels that the proposed expansion, along with coordinated efforts by the County and Lanai Company to divert waste, represents the best practical solution to waste disposal on Lanai at this time.

40. The Survey Division, Department of Accounting and General Services had no objections to the proposed expansion.

41. The Department of Transportation commented that the Project will not impact transportation facilities on the island of Lanai.

42. The Department of Land and Natural Resources ("DLNR") did not have any comments to offer.

43. The State Historical Preservation Division, DLNR ("SHPD") commented that given that historical sites were located on adjacent parcels, it recommended that an archaeological inventory survey be conducted on the Property and also recommended deferral of any decision on the Permit until the survey findings could be reviewed by the SHPD.

44. The SHPD revised its position based on clarification by the Petitioner that the proposed expansion was to occur on the existing landfill site. Therefore, the SHPD withdrew its recommendation for an archaeological inventory survey and stated that it would not be necessary for the County of Maui to provide an archaeologist to monitor grading and filling operations.

45. The Office of Environmental Quality Control ("OEQC") concurred with the determination of the County of Maui

that the changes to a negative declaration determination for closure of the Lanai Landfill does not require an amended environmental assessment ("EA")

46. The OEQC also concurred that construction of surface water drainage facilities and installation of ground cover may be exempted from preparation of an amended EA pursuant to section 11-200-8(a)(1), HAR, with due regards to section 11-200-8(b), HAR, and the construction of fencing and internal roadways within areas previously disturbed may be exempted as appurtenant structures pursuant to section 11-200-8(a)(3)(d), HAR, with due respect to section 11-200-8(b), HAR.

Federal Agencies

47. The Department of the Army had no comments to offer regarding the Petition.

48. The Soil Conservation Service ("SCS"), Department of Agriculture commented that the four soil groups on the area are classed as moderate to severe.

49. The SCS also commented that the potential for aquifer use as a potable source is unlikely due to high salinity but vulnerability to contamination is listed as high and raised the concern that possible seepage or wind-blown debris into Kalamaiiki Gulch may result in transport via the gulch to Class AA coastal waters, slightly more than 1 mile away.

SOCIO-ECONOMIC IMPACTS

50. According to the environmental assessment completed for closure of the existing landfill ("Closure EA"), the County currently employs a small staff to collect refuse

and operate the landfill. Two employees are on-site during landfill operation hours.

51. It is expected that there will be little impact on employment as the County expects to have the present landfill employees operate the expansion of the landfill.

IMPACTS UPON THE RESOURCES OF THE AREA

Agricultural Resources

52. Expansion of the existing landfill is expected to have minimal impact on agricultural resources.

53. The Property would be unsuited for uses within the Agricultural District as it is basically open space and has no ongoing agricultural activity.

54. The nearest agricultural activity is a pineapple field situated approximately 2,000 feet east of the Property.

Flora

55. According to the Closure EA, no previous investigation was conducted for rare and endangered plants near the existing landfill. However, the Closure EA states that an investigation was performed at a site approximately 1 mile north of the existing landfill at a similar elevation where an endangered shrub was discovered.

56. It is not expected that rare or endangered plants are currently on the Property as the Property has been cleared and excavated for landfill use.

Fauna

57. The Property is located within public hunting grounds. Therefore, deer may occasionally be found on the

Property. Additionally, mynahs and rats may also be found on the Property.

58. The addendum to the staff report from the Planning Department to the Planning Commission states that according to the DLNR, rare or endangered fauna are not found on Lanai.

Scenic Resources

59. According to the Closure EA, the landfill work area cannot be seen from Kaunalapau Highway. However, it is stated that proceeding major wind storms, paper and other debris blown from the work area can be observed.

60. An existing stockpile of abandoned vehicles located at the existing landfill can be seen from Kaunalapau Highway. The County of Maui currently has a contract for the removal of said vehicles from the landfill.

61. The slope of the land in a northwest direction from Kaunalapau Highway towards Kalamaiki Gulch minimizes the visual impact of the existing landfill and the final grade of the expanded landfill will follow the existing northwest slope. Vertical expansion of the landfill may ultimately be visible from Kaunalapau Highway.

Archaeological and Cultural Resources

62. The State Historic Preservation Division, DLNR ("SHPD") recommended that an archaeological inventory survey be done for the property since historic sites have been located on adjacent parcels and also recommended deferral of any decision on the Permit until the survey findings could be reviewed by the SHPD.

63. The SHPD revised its position based on clarification by the Petitioner that the proposed expansion was to occur on the existing landfill site. Therefore, the SHPD withdrew its recommendation for an archaeological inventory survey and stated that it would not be necessary for the County of Maui to provide an archaeologist to monitor grading and filling operations.

ADEQUACY OF PUBLIC FACILITIES AND UTILITIES

Highway and Roadway Facilities

64. The Property surrounds the existing Lanai Sanitary Landfill site, which has vehicular access from Kaunalapau Highway.

66. The Department of Transportation (DOT) has commented that the proposed expansion of the landfill would not impact transportation facilities.

Drainage

66. Drainage of the Property runs towards Kalamaiki Gulch due to the Property's elevation and slope characteristics.

67. The Federal Emergency Management Agency has not determined flood hazards for the landfill site. Historically, because of the elevation and slope, flooding has not been a problem.

68. The Soil Conservation Service, United States Department of Agriculture, has commented that debris from the landfill may enter Kalamaiki Gulch and be transported to Class AA coastal waters approximately 1 mile away.

Air Quality

69. Short-term effects on air quality can be anticipated, mainly dust from landfill construction and operation. Dust and exhaust emission concentrations will be limited to meet state and federal regulations.

Noise

70. According to the Closure EA, ambient noise on the existing landfill is generally low with occasional noise from the one piece of heavy equipment (bulldozer) that spreads and compacts refuse.

Water

71. The Property is located above an unconfined basal aquifer system which is brackish and unfit for human consumption, nor useful for agricultural activities.

72. The landfill area is downgradient from and in a different aquifer that supplies Lanai City's domestic water supply.

73. The Board of Water Supply of the County of Maui ("BWS") noted that water service to the proposed expansion of the landfill would be through a private water system, owned by Lanai Company, Inc. Therefore, a private water system agreement would be required if the applicant constructs new structures.

74. The BWS also advised that non-potable water be used, if possible, for grading and dust control.

Utilities

75. According to the Closure EA, there are no water, sewer, electrical or telephone services at the Property.

CONFORMANCE WITH SPECIAL PERMIT CRITERIA

76. The Planning Department, in its addendum report to the Planning Commission on the Petition, provided the following findings in regards to the Applicant's conformance with the guidelines for "unusual and reasonable use" authorized by a Special Permit under Section 15-15-95(b), HAR:

- (A) The use shall not be contrary to the objectives sought to be accomplished by chapters 205 and 205A, HRS, and the rules of the commission.

The purpose of the rules of the commission is, "to preserve, protect, and encourage the development and preservation of land in the state for those uses to which they are best suited in the interest of the public health and welfare of the people of the State of Hawaii."

The existing landfill site has been operating for over 20 years. The proposed expansion would allow the County to continue operations and extend the life of this landfill to meet the public health and welfare needs of the residents and visitors of Lanai. Further, the Department of Health feels that the proposed expansion, in conjunction with the coordinated efforts by both the County and Lanai Company in the area of waste diversion, represents the best practicable solution to waste disposal on Lanai at this time.

- (B) The desired use would not adversely affect surrounding property.

Inasmuch as the landfill has been in operation for over 20 years, the expansion would not adversely affect surrounding property. The area around the landfill site is primarily open land. Pineapple fields exists approximately 2,000 feet east of the site and a veterinary clinic approximately 500 feet south of the site.

- (C) The use would not unreasonably burden public agencies to provide roads and streets, sewers, water drainage and school improvements, and police and fire protection.

No infrastructural improvements are proposed by the Applicant or required by governmental agencies at this time. Upon closure of the landfill, the Applicant must comply with various State and Federal requirements pertaining to environmental controls.

- (D) Unusual conditions, trends and needs have arisen since the district boundaries and rules were established.

With the construction of the Manele and Koele Hotels, and the increase in residents and visitor populations, solid waste disposal has increased on Lanai. This increase of solid waste disposal has led the County to expand their existing facility beyond the originally approved 10 acre site. Therefore, unusual conditions, trends and needs have arisen since the district boundaries and rules were established.

- (E) The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

The site has been previously cleared and excavated for landfill operations. Therefore, with (sic) the Property would be unsuited for uses permitted within the Agricultural District. According to the Detailed Land Classification for the Island of Lanai, the Property has an overall productivity rating of "D", low productivity.

PLANNING COMMISSION RECOMMENDATION

77. At its meeting on June 16, 1994, the Planning Commission recommended adoption of the Planning Department's staff report and addendum which recommended approval of the petition, subject to the following stated conditions:

1. That the Land Use Commission Special Use Permit shall be valid for a period of ten (10) years from the date of its granting, subject to further extensions by the Lanai Planning Commission and the State Land Use Commission upon a timely

request for extension filed at least ninety (90) days prior to its expiration.

2. That full compliance with all applicable governmental requirements shall be rendered.

78. Any findings of fact that may be a conclusion of law shall be deemed a conclusion of law.

CONCLUSIONS OF LAW

The Special Permit Petition to establish and operate an expansion of the Lanai Sanitary Landfill constitutes an "unusual and reasonable" use as provided in section 205-6, HRS, and as established in section 15-15-95(b), HAR, and the proposed use is not contrary to the objectives sought to be accomplished by the State Land Use Law to preserve, protect, and encourage development of lands in the State for those uses to which they are best suited in the interest of the public health and welfare. The proposed use is also not contrary to the objectives and policies under chapter 205A, HRS.

ORDER

IT IS HEREBY ORDERED that the Special Permit Petition filed in this Docket No. SP94-386 requesting the establishment and operation of an expansion of the Lanai Sanitary Landfill on approximately 25 acres of land designated within the State Land Use Agricultural District, and identified as Tax Map Key No.: 4-9-02: portion of 1, situated at Lanai City, Lanai and approximately identified on "Exhibit A" attached hereto and incorporated by reference herein, is hereby approved and subject to the following conditions:

1. That the Land Use Commission Special Use Permit shall be valid for a period of ten (10) years from the date of its granting, subject to further extensions by the Lanai Planning Commission and the State Land Use Commission upon a timely request for extension filed at least ninety (90) days prior to its expiration.

2. That full compliance with all applicable governmental requirements shall be rendered.

3. Petitioner shall initiate proceedings to terminate the Special Permit issued in LUC Docket No. SP88-368 within 30 days of the issuance of this decision and order.

4. Petitioner shall begin construction of the landfill expansion within 6 months from the issuance of this decision and order. Construction shall include removal of any debris or waste material currently in the encroached area and any improvements necessary to operate the landfill pursuant to all applicable laws and regulations.

5. Petitioner shall utilize non-potable water, to the extent possible, for grading and dust control of the landfill.

6. Petitioner shall ensure that impacts from wind-blown debris into Kalamaiki Gulch is mitigated in a timely manner.

7. Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal

deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.

8. Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.

9. Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

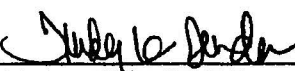
10. The conditions imposed herein may be fully or partially released upon timely motion to the Lanai Planning Commission and Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.


DOCKET NO. SP94-386 - DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT,
COUNTY OF MAUI


Done at Honolulu, Hawaii, this 13th day of September 1994,
per motions on August 23, 1994 and September 9, 1994.


LAND USE COMMISSION
STATE OF HAWAII


By 
JOANN N. MATTSON
Chairperson and Commissioner

By 
TRUDY K. SENDA
Vice Chairperson and Commissioner

By 
ALLEN K. HOE
Commissioner

By 
M. CASEY JARMAN
Commissioner

By 
ALLEN K. KAJIOKA
Commissioner

By 
LLOYD F. KAWAKAMI
Commissioner

By (absent)
EUSEBIO LAPENIA, JR.
Commissioner

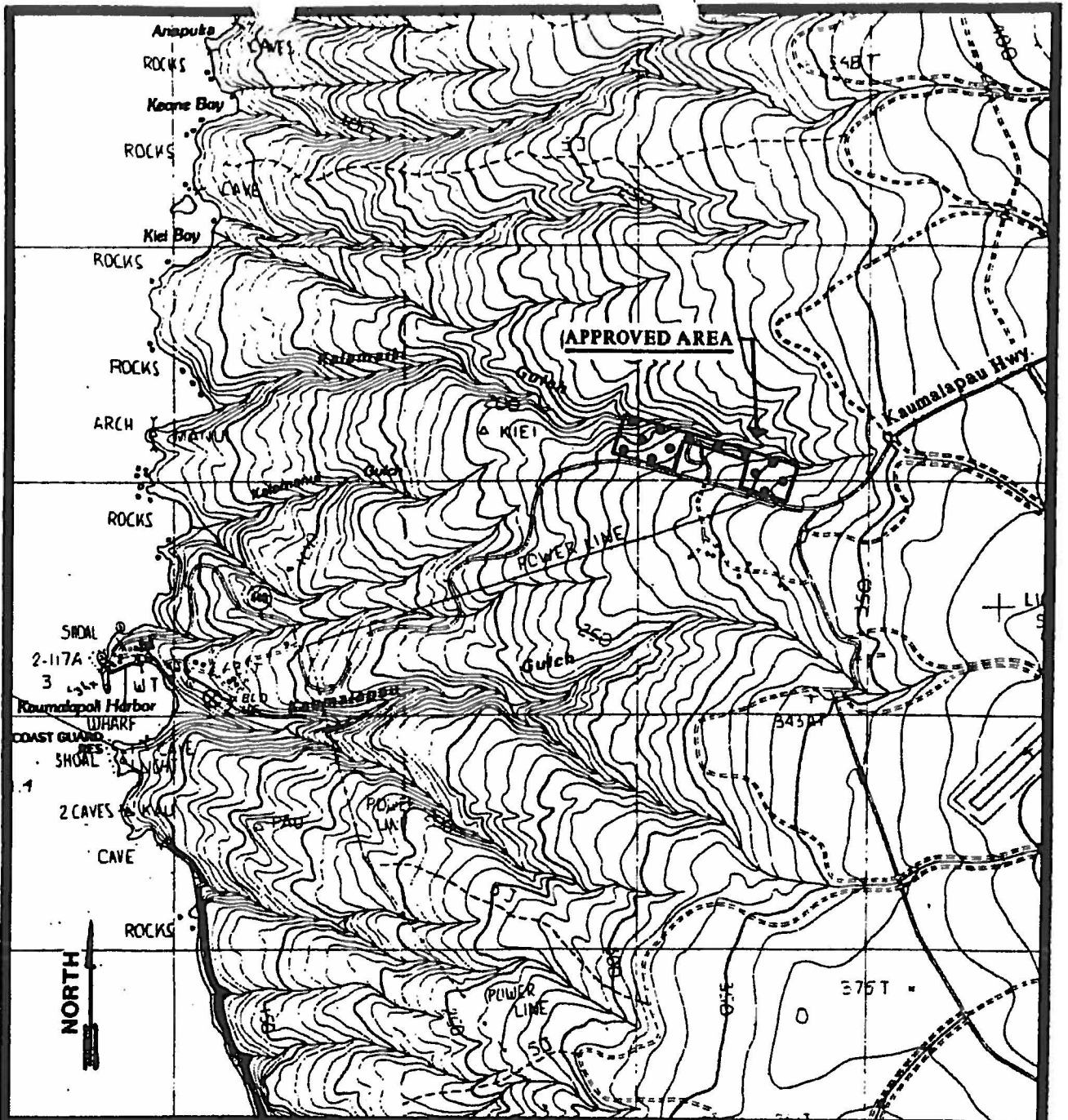
By (absent)
RENTON L. K. NIP
Commissioner

Filed and effective on
September 13, 1994

Certified by:


Executive Officer

By 
ELTON WADA

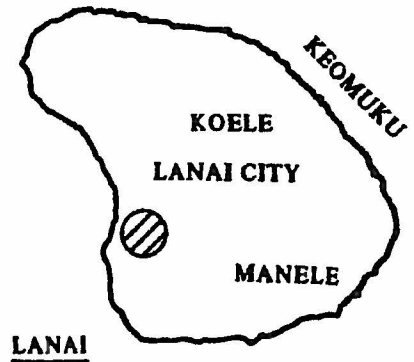
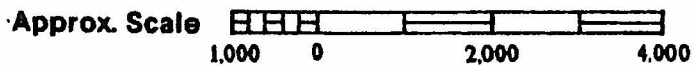


LOCATION MAP

DOCKET NO. SP94-386 / DEPARTMENT OF PUBLIC WORKS AND WASTE MANAGEMENT, COUNTY OF MAUI

TAX MAP KEY: 4-9-02: por. 1

LANAI CITY, LANAI, HAWAII



LANAI

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

COLLEEN M. SUYAMA
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

April 16, 2008

Ms. Cheryl Okuma, Director
Department of Environmental Management
200 South High Street
Wailuku, Hawaii 96793

Dear: Ms Okuma

**SUBJECT: LAND USE COMMISSION SPECIAL USE PERMIT FOR LUC
DOCKET NO. SP94-386 TIME EXTENSION REQUEST FOR
THE LANAI SANITARY LANDFILL, LOCATED ALONG
KAUMALAPAU HIGHWAY, LANAI CITY, LANAI, HAWAII;
TMK: (2) 4-9-002:001 (POR.)**

At its regular meeting on March 19, 2008, the Lanai Planning Commission (Commission) reviewed the above request and after due deliberation and receipt of testimony and exhibits, hereby recommends approval to the Land Use Commission, subject to the following conditions:

1. That the Land Use Commission Special Use Permit shall be valid for a period of ten (10) years from the date of its granting, subject to further extensions by the Lanai Planning Commission and the State Land Use Commission upon a timely request for extension filed at least ninety (90) days prior to its expirations.
2. That full compliance with all applicable governmental requirements shall be rendered.
3. Petitioner shall utilize non-potable water, to the extent possible, for grading and dust control of the landfill.

EXHIBIT 3

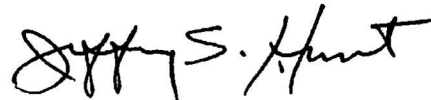
4. Petitioner shall ensure that impacts from wind blown debris into Kalamaiki Gulch are mitigated in a timely manner.
5. Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.
6. Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operations.
7. Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.
8. The conditions imposed herein may be fully or partially released upon timely motion to the Lanai Planning Commission and Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.
9. Two years prior to the expiration of this Permit, the applicant shall come before the Lanai Planning Commission with a comprehensive plan describing how the County and/or State plan to manage the Island of Lanai's solid waste and recycling (added by the Lanai Planning Commission on March 19, 2008).

Further, the Commission adopted the enclosed Staff Report and Revised Recommendation Report prepared by the Department for the March 19, 2008, meeting as its Findings of Fact, Conclusions of Law, and Decision and Order. Parties to proceedings before the Commission may obtain judicial review of decision and orders issued by the Commission in the manner set forth in Chapter 91-14, Hawaii Revised Statutes.

Ms. Cheryl Okuma, Director
April 16, 2008
Page 3

Thank you for your cooperation. If additional clarification is required, please contact Joe Prutch, Staff Planner, at joseph.prutch@mauicounty.gov or at 270-7512.

Sincerely,



JEFFREY S. HUNT, AICP
Planning Director

Attachment

JSH:JMP:bg

c: Clayton I. Yoshida, AICP, Planning Program Administrator
Aaron H. Shinmoto, P.E., Planning Program Administrator (2)
Joe M. Prutch, Staff Planner
Land Use Commission
Project File
General File
K:\WP_DOCS\PLANNING\SUP\1994\0005_Lanai Sanitary Landfill\Extension_2007\LPC_approval.wpd



BEFORE THE LAND USE COMMISSION
STATE OF HAWAII

In The Matter Of The Petition Of) DOCKET NO. SP94-386
)
DEPARTMENT OF PUBLIC WORKS) DECISION AND ORDER APPROVING A
AND WASTE MANAGEMENT,) TIME EXTENSION AND THE DELETION
COUNTY OF MAUI) OF CONDITIONS TO A SPECIAL USE
) PERMIT
)
For a Special Use Permit To Establish)
And Operate Expansion Of The Lāna`i)
Sanitary Landfill On Approximately 25)
Acres Of Land Situated Within The)
State Land Use Agricultural District At)
Lāna`i City, Lāna`i, Tax Map Key)
Number: 4-9-02: Portion Of 1)
_____)

DECISION AND ORDER APPROVING A TIME EXTENSION AND THE DELETION
OF CONDITIONS TO A SPECIAL USE PERMIT

LAND USE COMMISSION
STATE OF HAWAII
2000 OCT -6 P 12:57



BEFORE THE LAND USE COMMISSION
STATE OF HAWAII

In The Matter Of The Petition Of) DOCKET NO. SP94-386
)
DEPARTMENT OF PUBLIC WORKS) DECISION AND ORDER APPROVING A
AND WASTE MANAGEMENT,) TIME EXTENSION AND THE DELETION
COUNTY OF MAUI) OF CONDITIONS TO A SPECIAL USE
) PERMIT
For a Special Use Permit To Establish)
And Operate Expansion Of The Lāna`i)
Sanitary Landfill On Approximately 25)
Acres Of Land Situated Within The)
State Land Use Agricultural District At)
Lāna`i City, Lāna`i, Tax Map Key)
Number: 4-9-02: Portion Of 1)
_____)

DECISION AND ORDER APPROVING A TIME EXTENSION AND THE DELETION
OF CONDITIONS TO A SPECIAL USE PERMIT

On June 30, 2004, the County of Maui Department of Public Works and Environmental Management, Solid Waste Division,¹ filed a written request for a ten-year time extension to continue the operation of the Lāna`i Sanitary Landfill and to delete Condition Numbers 3 and 4 of the Findings of Fact, Conclusions of Law, and

¹ The Department of Public Works and Environmental Management was previously known as the Department of Public Works and Waste Management. On July 1, 2007, the Department of Public Works and Environmental Management split into the Department of Public Works and the Department of Environmental Management. The Solid Waste Division was placed within the Department of Environmental Management ("Petitioner" or "Applicant").

Decision and Order ("Decision and Order") issued on September 13, 1994 ("Request"), with the County of Maui Department of Planning ("DP"), pursuant to section 205-6, Hawai'i Revised Statutes ("HRS"), and sections 15-15-95 and 15-15-96, Hawai'i Administrative Rules ("HAR").²

The Land Use Commission ("LUC") has jurisdiction over Petitioner's Request. Section 205-6, HRS, and sections 15-15-95 and 15-15-96, HAR, confer jurisdiction upon the LUC to approve special use permits and amendments thereto for areas greater than 15 acres.

On March 19, 2008, the Lāna'i Planning Commission ("Planning Commission") conducted a hearing on Petitioner's Request. At the hearing, the Planning Commission heard public testimony from two individuals. After due deliberation, the Planning Commission recommended approval of Petitioner's Request to the LUC, subject to an additional condition to the special use permit.

On April 23, 2008, the LUC received a copy of the decision and a portion of the record of the Planning Commission's proceedings on Petitioner's Request. On July 2, 2008, the LUC received additional documents to the record. On August 8, 2008, the LUC received the remaining portion of the record.

² The DP delayed processing of Petitioner's Request until the issue of whether a use variance was required for the landfill was resolved. It was subsequently determined that the landfill was permitted as a public utility use in the County's Interim Zoning District, and therefore a use variance was not required. Docket No. SP94-386 Department of Public Works and Waste Management, County of Maui Decision And Order Approving A Time Extension And The Deletion of Conditions To A Special Use Permit
Page 2

On September 12, 2008, the LUC met in Makena, Maui, Hawai'i, to consider Petitioner's Request. Jane Lovell, Esq.; Michael Hopper, Esq.; Cheryl Okuma; and Tracy Takamine appeared on behalf of Petitioner. Joe Prutch was also present on behalf of the DP. Bryan C. Yee, Esq., and Abe Mitsuda entered appearances on behalf of the State Office of Planning ("OP").

At the meeting, Petitioner pointed out that Condition Numbers 3 and 4 have already been complied with. Petitioner then provided a background of the landfill, including information on the services provided by the landfill, the ongoing storm water project, the conveyance status of the landfill property, and the status of the draft integrated solid waste management plan.

OP stated that it had no objections to Petitioner's Request.

Following discussion, a motion was made and seconded to approve Petitioner's Request for a ten-year time extension and to delete Condition Numbers 3 and 4 of the Decision and Order issued on September 13, 1994, and further to amend existing Condition Numbers 1 and 5 and to impose an additional condition as follows:³

1. That the State Land Use Commission Special Use Permit shall be valid until September 13, 2014, subject to further extensions by the Lāna'i Planning Commission and the LUC upon a timely request for extension filed at least ninety (90) days prior to its expiration.

³ Because of the deletion of Condition Numbers 3 and 4, existing Condition Number 5 is now identified as Condition Number 3 and the additional condition pertaining to the implementation of Best Management Practices is identified as Condition Number 10. Petitioner had no objections to the amendments to the conditions and the additional condition.

5. Petitioner shall utilize non-drinking water, to the extent possible, for grading and dust control of the landfill.
10. That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.

Following deliberation by the Commissioners, a vote was taken on the motion. There being a vote tally of 6 ayes, 2 absent, and 1 excused, the motion carried.

ORDER

Having duly considered the complete record of Petitioner's Request and the oral arguments presented by Petitioner, and a motion having been made at a meeting on September 12, 2008, in Makena, Maui, Hawai'i, and the motion having received the affirmative votes required by section 15-15-13, HAR, and there being good cause for the motion, the LUC hereby APPROVES Petitioner's Request, subject to the following conditions to replace all previous conditions imposed on the special use permit:

1. That the State Land Use Commission Special Use Permit shall be valid until September 13, 2014, subject to further extensions by the Lāna`i Planning Commission and the LUC upon a timely request for extension filed at least ninety (90) days prior to its expiration.
2. That full compliance with all applicable governmental requirements shall be rendered.

3. Petitioner shall utilize non-drinking water, to the extent possible, for grading and dust control of the landfill.

4. Petitioner shall ensure that impacts from windblown debris into Kalamaki Gulch is mitigated in a timely manner.

5. Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.

6. Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.

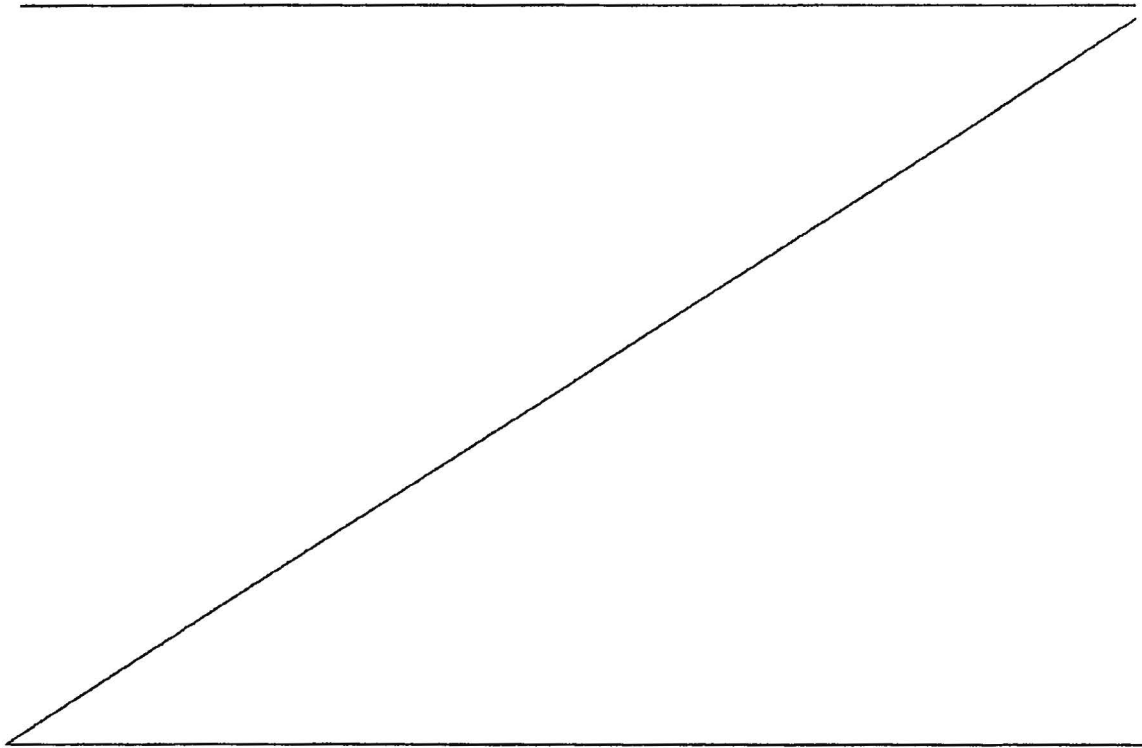
7. Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

8. The conditions imposed herein may be fully or partially released upon timely motion to the Lāna`i Planning Commission and Land Use Commission and

upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.

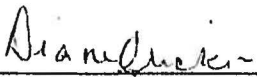
9. Two years prior to the expiration of this Permit, the Applicant shall come before the Lāna`i Planning Commission with a comprehensive plan describing how the County and/or State plan to manage the Island of Lāna`i's solid waste and recycling.

10. That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.




Done at Honolulu, Hawai'i, this 2nd day of
October, 2008, per motion on September 12, 2008.

APPROVED AS TO FORM



Deputy Attorney General

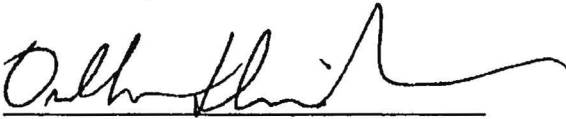
LAND USE COMMISSION
STATE OF HAWAII

By 

DUANE KANUHA
Chair

Filed and effective on
OCT - 6 2008

Certified by:



Executive Officer

Best Management Practices

The following BMPs should be considered with respect to storage of recyclable and waste materials to prevent contamination of runoff.

General BMPs

Scrap containers should be covered to prevent them filling with rain and should not have perforated bottoms to allow fluids to escape.

Scrap containers should be cleaned on a regular schedule and the washwater treated appropriately (i.e., as hazardous waste if necessary).

The area where containers are stored, or uncontainerized scrap is piled, should have an impervious surface area to prevent infiltration. The area should also be bermed to collect all runoff for treatment and kept clean at all times.

Storage of Automotive Batteries

Store batteries upright in a covered place and check routinely for leaks and cracks, especially when exposed to freezing temperatures.

Dropped or cracked batteries should be stored in an acid resistant tub.

Batteries stored outside should be suspended above an impermeable surface and covered to prevent acid runoff.

Keep a neutralizing agent (e.g., baking soda) nearby in case of spills or leaks.

Stack batteries no more than five high and make sure that any leaking fluid will not be washed away as runoff.

Never drain batteries into a drain or onto the ground.

Small quantities of lead acid batteries should be stored in acid resistant tubs.

Large quantities of batteries should be stored in an isolated area with no floor drains.

Avoid long-term storage of batteries.

Storage of Unused Paint

Unused paint should remain in the can and stored in leak-proof tub skids, preferably with a lid. If the tub skid does not have a lid, the collection area should be covered.

The storage site must meet all provincial and local requirements and standards.

Avoid long-term storage of unused paint products.

Storage of Household Hazardous Wastes

Solvents, pesticides, gasoline and other household hazardous wastes must be stored in a concrete bunker. Within in the bunker they should be stored in leak-proof tub skids. The bunker must be fire-proof, vented and provide spill containment capabilities.

Household hazardous waste bunkers must meet all provincial and local requirements and standards, including approval by the local fire authority.

BEFORE THE LAND USE COMMISSION

OF THE STATE OF HAWAII

In The Matter Of The Petition Of) DOCKET NO. SP94-386
)
DEPARTMENT OF PUBLIC WORKS) CERTIFICATE OF SERVICE
AND WASTE MANAGEMENT,)
COUNTY OF MAUI)
)
For a Special Use Permit To Establish)
And Operate Expansion Of The Lāna`i)
Sanitary Landfill On Approximately 25)
Acres Of Land Situated Within The)
State Land Use Agricultural District At)
Lāna`i City, Lāna`i, Tax Map Key)
Number: 4-9-02: Portion Of 1)
_____)

CERTIFICATE OF SERVICE

I hereby certify that a copy of the DECISION AND ORDER
APPROVING A TIME EXTENSION AND THE DELETION OF CONDITIONS TO A
SPECIAL USE PERMIT was served upon the following by either hand delivery or
depositing the same in the U. S. Postal Service by regular mail as noted:

DEL. ABBEY MAYER, Director
Office of Planning
P. O. Box 2359
Honolulu, Hawaii 96804-2359

BRYAN C. YEE, Esq.
Hale Auhau, Third Floor
425 Queen Street
Honolulu, Hawaii 96813

JEFF HUNT, Director
County of Maui Planning Dept.
250 S. High Street
Wailuku, Hawaii 96793

BRIAN MOTO, Esq.
JANE LOVELL, Esq.
Corporation Counsel
200 South High Street
Wailuku, Hawaii 96793

Dated: Honolulu, Hawaii, OCT - 6 2008.

A handwritten signature in black ink, appearing to read "Orlando Davidson", written over a horizontal line.

ORLANDO DAVIDSON
Executive Officer

**LANAI SANITARY LANDFILL
STATE LAND USE COMMISSION
FY2014 ANNUAL REPORT
FOR SP94-386**

Part 1: Project Summary

At the end of June 2013, the County's consultant, Brown and Caldwell with Hirata Drilling, installed three moisture sensors in each of three wells drilled at Lanai Landfill at upslope, downslope, and midslope locations. The installation followed from discussions with the Dept. of Health (DOH) regarding an alternative groundwater monitoring program. These discussions were pursuant to the Department's application for a renewal of the operating permit for Lanai Landfill. Moisture readings were taken immediately following installation to confirm the sensors were working. Subsequent data, recorded hourly, for temperature, moisture content, and electrical conductivity have been downloaded for a report to the DOH.

The County engineer took monthly readings during FY2014 for a report to the Dept. of Health on the data recorded from the installation in June 2013 to March 2014. The report was finalized in April 2014 and transmitted in May 2014. The midslope sensor malfunctioned in December 2014, with breaks in the data as well as negative values. However, when it did produce good data, the conclusion was the same as for the upslope and downslope sensors, that there is no leachate collecting in the landfill.

On January 23, 2014 the Dept. of Environmental Management requested of the Planning Dept. Director a time extension of ten years for this permit. The Dept. of Environmental Management sent out response letters to agencies commenting on this extension, and is waiting for the Land Use Commission hearing to be scheduled by the Planning Dept.

Part 2: Project Compliance

Condition No. 1

That the State Land Use Commission Special Use Permit shall be valid until September 13, 2014, subject to further extensions by the Lana'i Planning Commission and the LUC upon a timely request for extension filed at least ninety (90) days prior to its expiration.

Response

On March 19, 2008 the Lanai Planning Commission heard the County's request to extend the current Special Use Permit for another ten years. This request was approved and forwarded to the Land Use Commission for review. On September 12, 2008 the Land Use Commission approved the extension for another ten years. On January 23, 2014 the Dept. of Environmental Management requested another ten year extension of the Planning Dept. The reply was received on January 27, 2014. Agencies were notified and response letters were sent to those commenting on the extension. The Dept. is waiting for the Planning Dept. to schedule the Land Use Commission hearing on the extension.

Lanai Landfill FY2014 LUC Annual Report for SP94-386

Page 2

Condition No. 2

That full compliance with all applicable governmental requirements shall be rendered.

Response

The landfill follows the operating criteria of RCRA 40 CFR Part 258 Subpart C--operating criteria and Chapter 58.1 of Title 11, Hawaii Administrative Rules, 11-58.1.1-15--Municipal solid waste landfills--operating criteria. The installation of moisture sensors meets the requirement of an alternative groundwater monitoring program for this remote landfill which receives less than 20 tons per day and has an annual rainfall of less than 20 inches.

Condition No. 3

Petitioner shall utilize non-drinking water, to the extent possible, for grading and dust control at the landfill.

Response

The landfill did get their own water truck and currently uses an agricultural source of water provided by Pulama Lana'i for dust control and soil moisture conditioning.

Condition No.4

Petitioner shall ensure that impacts from windblown debris into Kalamaiki Gulch is mitigated in a timely manner.

Response

A series of litter fences are placed next to and downwind of the working face to catch litter before it blows away. Netting has been anchored by poles at the downwind landfill perimeter as well as downwind of the working face; portable litter fences are located downwind and adjacent to the working face. Landfill personnel routinely collect litter from these fences. Additionally, a 6-foot fence functions as a litter barrier on three sides of the landfill. Wood panels have been placed along the bottom of the fence to prevent litter from blowing under it. A new fence has been placed along a section of the swale on the gulch side to stop litter from blowing over the side of the landfill. Refuse disposal is confined to the working face and is compacted after receipt to stop litter at its source.

Condition No.5

Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.

Response

The landfill is expanding vertically over an existing footprint so that filling occurs over a previously established disposal area rather than over new ground.

Lanai Landfill FY2014 LUC Annual Report for SP-94-386

Page 3

Condition No. 6

Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.

Response

The Department of Health has reviewed and commented on the updated Operations Plan and Closure Plan and Master Plan which was submitted in December 2011 and further revised in February 2012 as part of the permit renewal application.

Condition No.7

Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.

Response

This submission of this report to the State Land Use Commission complies with this condition. Remaining capacity, projected by Brown and Caldwell in the Master Plan from surveys by Akamai Land Surveying in 2007 and 2008, was 313,00 CY in 2012. Topography in June 2012 supported the estimate of 20 years remaining life. The 2013 topography indicated a similar rate of fill as in previous years. The commercial tonnage increased in 2014 by 13% with a total tonnage of 4990 tons, about 13.5 tons/day.

Condition No. 8

The conditions imposed herein may be fully or partially released upon timely motion to the Lana'i Planning Commission and Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.

Response

In the June 29, 2004 request to the Planning Department for a time extension, the Solid Waste Division also requested that the former Conditions No. 3 and No. 4 be deleted as they have been met and are no longer applicable. They were deleted.

Condition No. 9

Two years prior to the expiration of this Permit, The Applicant shall come before the Lana'i Planning Commission with a comprehensive plan describing how the County and/or State plan to manage the Island of Lanai's solid waste and recycling.

Response

The lease to the redemption site, operated by Maui Disposal with state bottle bill funds, was not renewed by owner Larry Ellison effective June 30, 2013. The County does fund scrap metal and electronics collection events. However, no other recycling is funded.

Condition No. 10

That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.

Response

Containers for supplies are kept on a concrete slab near the trailer office. A 15 ft. wide concrete perimeter swale collects run-on into and run-off from the landfill and routes it into a collection basin via two riprap channels. The basin is cleared of accumulated sediment prior to the rainy season. The swale is routinely cleared of any debris and sediment. The landfill side slopes and cover minimize infiltration of storm water into the waste. Greenwaste berms, placed around the top of the slopes, prevent run-off down the slopes. Soil is applied on rainy days instead of the tarp as alternative daily cover.

In March 2013, the County hired a vendor to plant 400 feet of Vetiver grass along the lower fence and around the bottom slope of the landfill to control stormwater run-off which flowed across the bottom portion of the landfill from a culvert under the highway in September 2012. The Vetiver hedges have become established and have prevented stormwater run-off from flowing onto the landfill. An additional Vetiver hedge was planted at the base of the landfill in April 2014 for a total of three hedges in three areas.

**ANNUAL OPERATING REPORT – FY 2014
LANAI LANDFILL**

I. General Site Description

Lanai Landfill is an unlined landfill located on the southwestern side of the island of Lanai, about a mile northwest of Lanai Airport. The landfill is situated between Kaunalapau Highway on the south and Kalamaiki Gulch on the north. Open range areas border the site to the east, north, and west. The total property area of the site is 35.77 acres, of which 17.44 acres are covered by the active landfill inside the concrete perimeter swale. The landfill is defined by Tax Map Key (TMK) 4-9-02:01, Lot 2, which is owned by the County of Maui. Adjacent parcels are owned by Lanai Resorts, LLC, except for Kaunalapau Highway, which is owned and maintained by the State of Hawaii. The landfill, which opened in 1969, is operated by the County.

The landfill site includes an office trailer and vehicle parking area with cargo container storage for supplies. Infrastructure improvements were completed in the fall of 2012 with photovoltaic panels, installed on top of three containers, to power the office including a laptop computer, weather station, refrigerator, lights, and air conditioning. Lanai Landfill is surrounded, for most of its perimeter, by a concrete storm water diversion swale that drains to a detention basin at the western end of the site. One riprap swale was grouted and bottom slopes of two others were grouted in summer 2012. Two rows of Vetiver grass were planted in the spring of 2013 for erosion control. A third row was added in 2014. Stormwater has been retained by the detention pond. Three moisture probes for leachate detection were installed in June 2013. All borings were dry and subsequent data indicate low moisture. The current fill area continues to be on the makai side of the entrance. Locations of site features and traffic patterns are shown on the attached drawing, *Fill Phase 1*, from the Final Lanai Landfill Master Plan by Brown and Caldwell, December 2011.

II. Permit Requirements

According to Section H., Recordkeeping and Reporting, of draft permit number LF-0034-07 issued for review on February 2009 for Lanai (small) MSWLF the permittee shall submit an Annual Operating Report (AOR) using June 30 of each year as the year-end point. This report is submitted to meet this requirement.

III. Reporting Requirements

a. Types of solid waste received (MSW, greenwaste, industrial/ commercial, tires, wood, metals, metal containers of 20 gallons or larger capacity, asbestos and other special wastes).

1. Commercially hauled waste increased by 13% to 3,963.6 continuing the increase of recent years (61% to 3,510.86 tons in FY 2013 from 2178.90 tons in FY 2012 which was a 70% increase over FY 2011, which was a 25% increase over FY 2010.) There were 38 commercial customers including: four state agencies, construction and engineering companies, restaurants, stores, communication companies, service station, Maui Disposal and various departments of Lanai Resorts, LLC, the dba of the new owner.

2. County miscellaneous waste was received totaling 5.7 tons.
3. Residential (County-hauled)
The County provided once a week pick up for 709 residential accounts. A total of 832.72 tons were hauled, an 11% decrease from 933.96 tons in FY 2013 which was almost the same as the previous year's 932.02 tons, although there were only 608 residential accounts in FY 2012.
4. Residential self-haul
Residential self-hauled waste was recorded as 102.14 tons, a 38% increase from 74.38 tons in FY 2013.
5. Special waste
Asbestos was received with a total weight of 7.6 tons.
6. Recoverable waste

Green waste

Green waste was separated for the first time in late spring of FY 2012 with a dedicated collection area designated for it. When sufficient quantities have been collected, it is loaded into the dump truck and taken to the Lanai Resorts LLC grinding and composting site. 79.2 tons were received in FY 2014 compared to 60.25 tons in FY 2013, a 31% increase.

Scrap metal and related materials

One collection event was held in November 2013 at Miki Basin.

Materials	Tonnage
Vehicles	30
White Goods	17.79
Scrap Metal	127.38
TOTAL METALS	175.17
Tires	12
Auto batteries	4.53
TOTAL	191.70

Electronics

One 20-foot container of 350 items (.30 ton) was collected at the same event in November 2013 at Miki Basin.

Redemption containers

Beverage containers are redeemed at the Lana'i Recycling & Redemption Center. Those quantities are reported directly to the Department of Health by the operator, Maui Disposal Co., according to redemption center regulations.

- b. **Quantities of solid wastes received by type with totals using an appropriate unit of measure.**

Waste Type	Tonnage	Distribution (%)
MSW: Commercial	3,963.6	79
MSW: County	5.7	0.1
MSW: County refuse trucks	832.72	17
MSW: Residential self-hauled	102.14	2.1
Special waste	7.6	0.2
TOTAL LANDFILLED	4,911.76	
Recoverable waste (green waste)	79.2	1.6
TOTAL RECEIVED AT LANDFILL	4,990.96	100.0

- c. **The average daily disposal rate on a yearly basis in accordance to requirements of HAR 11-58, 1-11(f) small landfill exemption.**

4,990.96 tons/year/365 days/year = 13.67 tons/day is the FY 2014 disposal rate for materials received at the landfill, municipal solid waste and green waste.
 4,911.76 tons/year/365 days/year = 13.5 tons/day is the FY 2014 landfilled rate.

Scrap metal and electronics are not included in the daily disposal rate since these materials are not received at the landfill nor are they in the draft permit.

- d. **Quantities of semi-solid liquid waste received and how it is handled or disposed.**

No semi-solid liquid waste was received by or disposed at the landfill.

- e. **Quantities of leachate (gallons) generated and how it was handled or disposed.**

No leachate was observed to be generated at this unlined landfill. When three moisture probes were installed to average depths of twenty feet in June 2013, the borings were dry and subsequent readings.

- f. **Volume of airspace filled during the reporting year, airspace filled during previous years, and airspace remaining in both cubic yards and years shall be provided. The information shall be provided in both numerical and graphical presentations.**

Lanai Landfill continued with the Alternative Daily Cover program during FY 2014, using a tarp 4 days/week and covering with soil on the fifth day of the week before closing for two days on Sunday and Monday. An average of 900 tons of cover material was used as landfill cover and for erosion control to maintain the slopes during an unusually wet winter. The western slope has interim cover.

Volume of airspace filled during the reporting year

Assuming a compaction rate of 30% from the Master Plan, 4911.76 tons/0.3 tons/CY = 16,372.53 cubic yards consumed by municipal solid waste with an estimated 20% airspace volume occupied by daily and intermediate cover soils.

Volume of airspace filled during previous years

Of the total estimated volume of 968,000 CY less 53,000 CY for final cover or 915,000 CY, approximately 621,140 CY had been used as of the December 2011 revised Master Plan. With the FY 2014 volume added to that of the intervening years, 665,973 CY have been placed with 73% of capacity used.

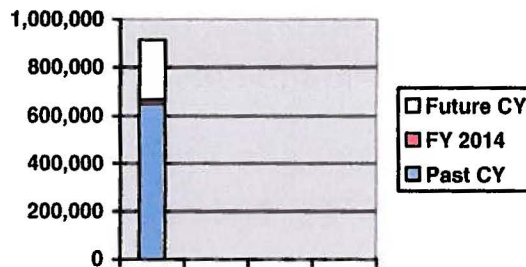
Airspace remaining in both cubic yards and years

The Master Plan revised by Brown and Caldwell in December 2011 estimates a remaining capacity of 379,711 CY of which 53,271 CY will be taken up by final cover, leaving 326,440 CY based on 2008 topography. Subtracting the FY 2014 volume, along with those from the intervening years, is 249,027 CY or 27% of remaining capacity. Final grades will fill over the current office area.

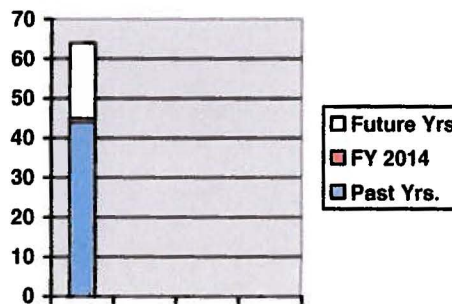
Numerical Summary of Airspace for Lanai Landfill

Airspace Units	Past Filled Airspace	FY 2014 Filled Airspace	Remaining Airspace	Total Airspace w/out Final Cover
CY	649,600	16,373	249,027	915,000
Years	44	1	19	64

Graphical Summary of Airspace (CY) for Lanai Landfill



Graphical Summary of Landfill Life in Years for Lanai Landfill



- g. An annual topographic survey of the site as prepared by a land surveyor registered in the State of Hawaii or an approved alternate method. Any exceedance of permit grades shall be identified and the Department shall**

be notified by the use of a Non-Compliance Report. This survey shall clearly show the horizontal and vertical dimensions of the landfilled area. The topographic map dated April 11, 2014 by Akamai Land Surveying, Inc. was generated from grid shots taken at the active area and overlain on the aerial flown on August 9, 2012.

- h. **A Sequencing Plan, including a drawing, identifying the cell areas to be filled in the coming year including identification of the wet-weather areas. The cell areas and wet weather area capacity shall be provided using an appropriate unit of measure.**

Operations have followed the cell sequencing plan described in the Master Plan, working at the makai end with benches placed to control run-off on long slopes. Filling continues above the second bench. A wet weather pad of concrete rubble is on the top plateau area near the active area. The FY 2014 fill area is on the highway side of the top plateau shown on the Sequencing Plan overlain on the 2014 topographic map. FY 2015 cells will continue filling across this plateau as shown in the Attachments. The Sequencing Plan continues the 3:1 western slope upward across the plateau to fill 20-feet vertical on average over this area.

- i. **Final fill area, intermediate fill areas, and future unused fill areas shall be identified for the projected year.**

The contours of the finished portion of the FY 2014 fill area are shown on the *Fill Phase 1* drawing at the top of the darkened area. Filling will continue upslope.

- j. **A soil-balance report of the past year and coming projected year reported separately. The soil daily cover and intermediate cover including erosion replacement soil also shall be reported separately. The source and type of soil shall be recorded separately for daily cover and intermediate cover. The soil-balance report for the past year shall be based on records of actual use in a daily, weekly and monthly basis. Any incomplete/non-application of daily cover shall be identified. Current soil use records shall be maintained at the facility for review**

Lanai Rock and Quarry Company delivered 900 tons of cover material in FY 2014. Although the soil is dry and powdery, the Landfill has a water truck and a source of water from Lanai Resorts, LLC to moisture condition the soil. The full implementation of the Alternative Daily Cover program has significantly reduced soil demand; however, the wet winter required increased soil for erosion repair.

Lanai Landfill Cover Soil Usage

Fiscal Year	Daily Cover (tons)	Intermediate Cover (tons)	Erosion Replacement Soil
FY 2013 Actual	300	300 (sideslopes)	300
FY 2014 Projected	400	200	300

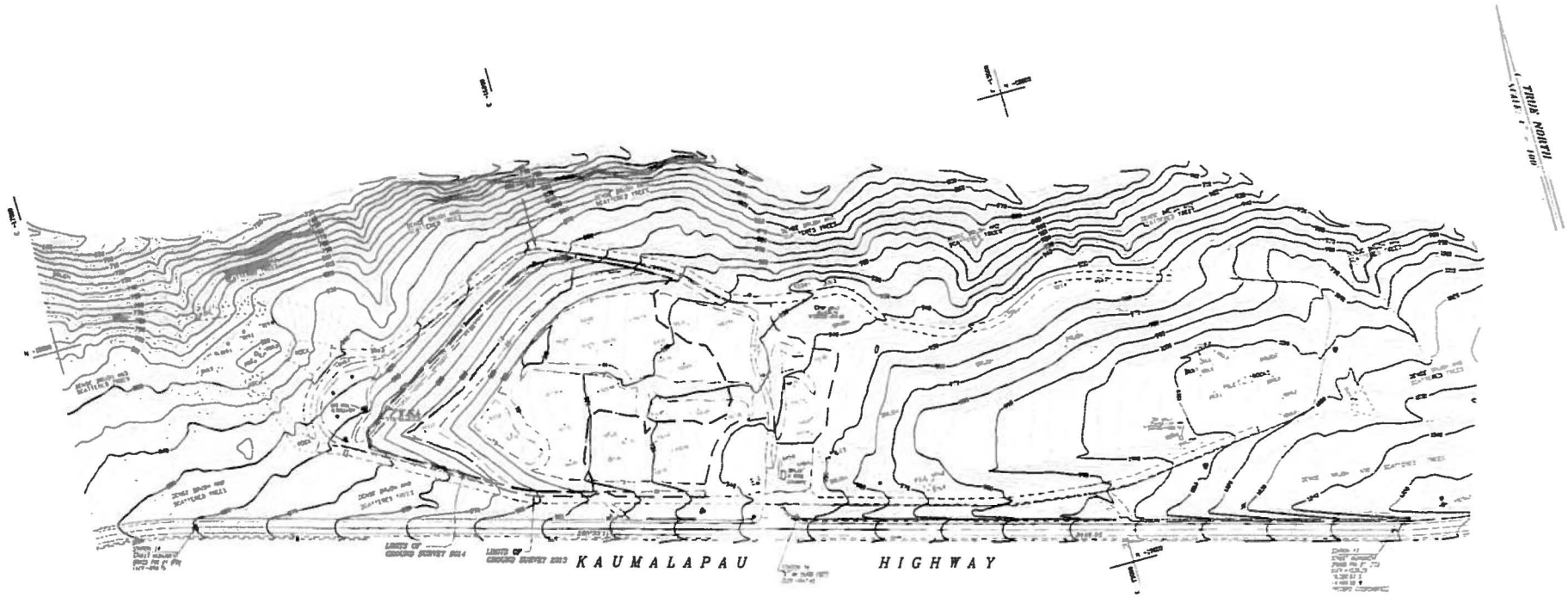
- k. **After closure of any portion of the landfill, a summary of post-closure care and maintenance activities conducted at the closed landfill phases.**

No portion of the landfill has been closed so no post-closure care has been conducted.

I. A copy of the detailed written estimates and documentation of financial assurance.

Adding 4% to update closure and post-closure costs for inflation for FY 2014 (since detailed estimates were made in December 2011) increases closure costs to \$9,016,303 and post-closure costs to \$92,518. The County's Finance Director provides documentation of financial assurance in the letter included in the Attachments.

ATTACHMENTS



**AERIAL & GROUND SURVEY OF
A PORTION OF
LANAI SANITARY LANDFILL**

ISLAND OF LANAI
COUNTY OF MAUI, HAWAII

DATE: APRIL 11, 2014 SCALE: 1" = 100'

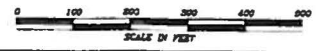
AKAMAI LAND SURVEYING, INC.

P.O. BOX 1740
MAKAPUU, MAUI, HAWAII 96768
(808) 879-0277

- NOTES:**
1. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AN ACTUAL AERIAL SURVEY. PLANS ON SUCH IS BASED BY AIR PHOTO INTERPRETATION AND COMPILED BY LANDSCAPE AERIAL MAPPING, INC. WITH A PORTION REDONE WITH A GROUND SURVEY OF JULY 20, 2003 AND AGAIN ON MARCH 06, 2004.
 2. ELEVATION SURVEY HEREON ARE BASED ON A STEEL MONUMENT (MARKER PIN #1) ON KAMALAPAU HIGHWAY ELEVATION TAKEN AS 1958 IN ABOVE M.S.L. (LOCAL TIDE DATUM).
 3. BENCHMARK, AZIMUTH AND COORDINATES REFERRED TO CONTIGUATION PLANS HAWAII LAND ASSOCIATES LANAI SANITARY LANDFILL.



THIS WORK WAS DONE BY ME OR UNDER MY DIRECT SUPERVISION
SHERMAN DUDLEY DEPONTE
SHERMAN DUDLEY DEPONTE
LICENSED PROFESSIONAL LAND SURVEYOR
STATE OF HAWAII CERTIFICATE NO. 5080
EXPIRES 04/30/2008

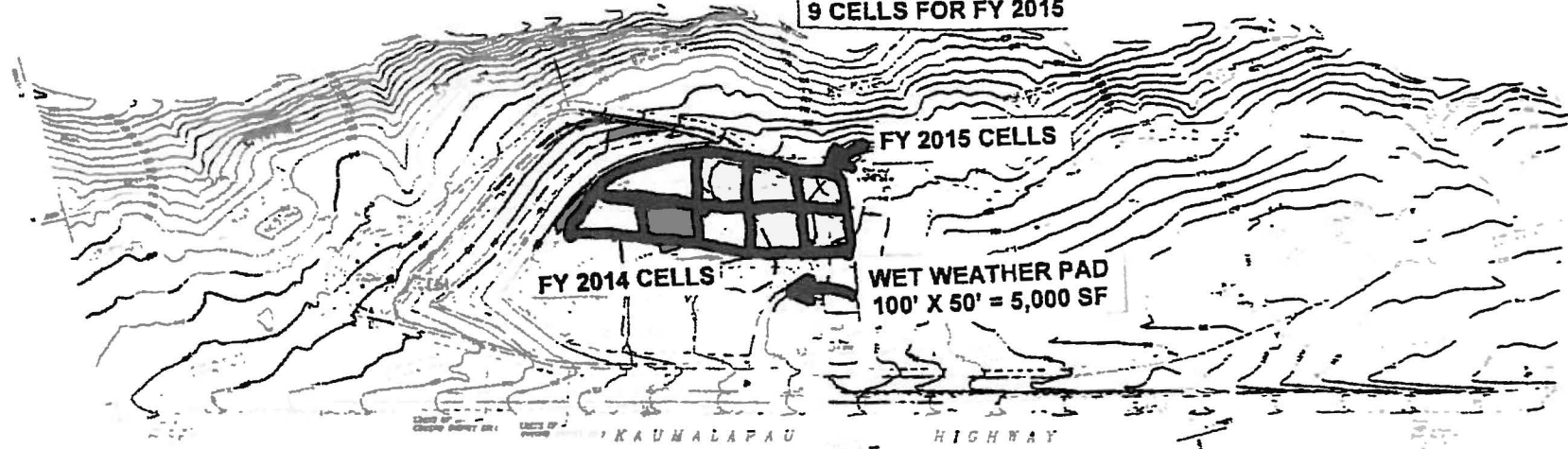


TMK (2) 4-9-02-01

LANAI LANDFILL FY 2015 CELL SEQUENCING PLAN

100' X 50' = 5,000 SF X 10' = 50,000 CF = 1850 CY X 10 = 16,650 CY

9 CELLS FOR FY 2015



AERIAL & GROUND SURVEY OF
A PORTION OF
LANAI SANITARY LANDFILL

STATE OF HAWAII
COUNTY OF MAUI, HAWAII

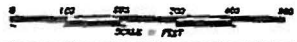
DATE: APRIL 11, 2014 SCALE: 1" = 100'

AKAMU LAND SURVEYING, INC.



SHERMAN STEDDY, SURVEYOR
10000
10000
10000

- NOTES:**
1. DIMENSIONS OF PROPOSED CELLS ARE BASED ON A 10' X 50' CELL AREA.
 2. ELEVATIONS ARE BASED ON A SPHERE WITH MEAN RADIUS OF 2553.0 MILES.
 3. ELEVATIONS ARE BASED ON A SPHERE WITH MEAN RADIUS OF 2553.0 MILES.
 4. ELEVATIONS ARE BASED ON A SPHERE WITH MEAN RADIUS OF 2553.0 MILES.



**FINAL
LANAI LANDFILL
MASTER PLAN**



Prepared for
County of Maui
Department of Environmental Management
Solid Waste Division
December 2011

BROWN AND CALDWELL

1955 Main Street, Suite 200
Wailuku, HI 96793

EXHIBIT 7

FINAL
LANAI LANDFILL
MASTER PLAN

Prepared for
County of Maui
Department of Environmental Management
Solid Waste Division
December 2011



A handwritten signature in black ink, appearing to read "Douglas B. Lee".

Douglas B. Lee, P.E.
Brown and Caldwell

This work was prepared by me or under my supervision.

BROWN AND CALDWELL

1955 Main Street, Suite 200
Wailuku, HI 96793



TABLE OF CONTENTS

LIST OF TABLES..... III

LIST OF FIGURES..... III

LIST OF ACRONYMS..... IV

HISTORY OF REVISIONS..... V

1. INTRODUCTION..... 1-1

 1.1 Purpose and Objectives..... 1-1

 1.2 Applicable Regulations and Permits..... 1-1

 1.2.1 Compliance Review..... 1-1

 1.3 Small Landfill Exemption..... 1-2

 1.4 Previous Studies..... 1-2

2. FACILITY DESCRIPTION..... 2-1

 2.1 Site Location and Description..... 2-1

 2.2 Waste Stream..... 2-1

3. LANDFILL AIRSPACE & ESTIMATED LIFE..... 3-1

 3.1 Refuse Disposal Rate..... 3-1

 3.2 Compaction and Soil Use..... 3-2

 3.3 Available Volume..... 3-2

 3.4 Site Life..... 3-3

 3.5 Filling Sequence..... 3-3

 3.5.1 Phase 1..... 3-3

 3.5.2 Phase 2..... 3-4

 3.5.3 Phase 3..... 3-4

 3.5.4 Phase 4..... 3-4

 3.6 Airspace Management..... 3-4

4. OPERATIONAL ASSESSMENT..... 4-1

 4.1 Personnel..... 4-1

 4.1.1 Training..... 4-1

 4.2 Equipment..... 4-2

 4.3 Cover Materials..... 4-2

 4.4 Vector Control..... 4-3

 4.5 Landfill Gas Control..... 4-3

 4.6 Stormwater and Erosion Control..... 4-3

 4.6.1 Stormwater Controls..... 4-3

 4.6.2 Erosion..... 4-4

 4.7 Access Control..... 4-4

 4.8 Liquids Control..... 4-4

4.9 Groundwater Monitoring4-4

4.10 Leachate Management4-5

4.11 Litter Control4-5

4.12 Hazardous/ Banned Materials Exclusion4-5

4.13 Emergency Operations4-6

4.14 Recordkeeping and Reporting4-6

5. WASTE DIVERSION & RECYCLING5-1

 5.1 Current and Planned Activities.....5-1

 5.2 Recommendations.....5-1

6. LANDFILL CLOSURE & POST-CLOSURE PLAN6-1

7. REFERENCES7-1

8. LIMITATIONS8-1

APPENDICES

APPENDIX A Landfill Operations Plan (Bound Separately)

APPENDIX B Landfill Closure/Post-Closure Plan (Bound Separately)

APPENDIX C Application For Small Landfill Exemption

LIST OF TABLES

Table 1. Lanai Island Solid Waste Projections	3-1
Table 2. Potential Airspace Consumption Volumes for Three Values of In-Place Waste Density.....	3-2
Table 3. Airspace by Phase.	3-3
Table 4. Equipment List.....	4-2

LIST OF FIGURES

Figure 1. Site Location Map.	2-2
Figure 2. Existing Site Plan.	2-3
Figure 3. Fill Phase 1	3-6
Figure 4. Fill Phase 2	3-7
Figure 5. Fill Phase 3	3-8
Figure 6. Fill Phase 4	3-9
Figure 7. Conceptual Final Fill and Stormwater Controls	3-10
Figure 8. Cross-Sections 1.....	3-11
Figure 9. Cross-Sections 2.....	3-12

LIST OF ACRONYMS

Ac	Acre	NGVD	National Geodetic Vertical Datum
ADC	Alternative Daily Cover	NPDES	National Pollutant Discharge Elimination System
AED	Automated External Defibrillator		
AMSL	Above Mean Sea Level		
		PCB	Polychlorinated Biphenyls
BC	Brown and Caldwell	pcd	pounds per capita per day
CDL	Commercial Driver's License	SWPCP	Storm Water Pollution Control Plan
County	County of Maui		
CPR	Cardiopulmonary Resuscitation	TMK	Tax Map Key
CTB	Cement –Treated Base	Towill	R.M. Towill Corporation
cy	cubic yards	tpd	tons per day
		tpy	tons per year
DOH	Department of Health	typ	typical
ft	feet	USGS	United States Geological Survey
FY	Fiscal Year		
		V	vertical
GBB	Gershman, Brickner & Bratton, Inc.		
		yr	year
H	horizontal		
HAR	Hawaii Administrative Rules		
HHW	Household Hazardous Waste		
HLA	Harding Lawson Associates		
ISWMP	Integrated Solid Waste Management Plan		
lb	pounds		
LEL	Lower Explosive Limit		
max	maximum		
min	minimum		
MOLO	Management of Landfill Operations		
MRF	Materials Recovery Facility		
MSW	Municipal Solid Waste		

HISTORY OF REVISIONS

The Hawaii State Department of Health must be notified when this Plan is updated or modified.

Date	Revision	Plan Sections
12/07/11	Issuance of Final Master Plan	All

1. INTRODUCTION

1.1 Purpose and Objectives

On behalf of the County of Maui Department of Environmental Management (the County), and in accordance with Hawaii Administrative Rules, Title 11, Chapter 58.1 (Solid Waste Management Control), Brown and Caldwell (BC) has prepared this Master Plan for the Lanai Landfill (the Landfill). The Landfill is located on the island of Lanai, in Maui County, in the state of Hawaii. The Landfill is owned and operated by the County. This Master Plan evaluates existing regulatory compliance and operational conditions at the Landfill, and presents a plan for the Landfill's ongoing development. The Plan covers a ten year planning period, from 2008 through 2018 and the draft Lanai Landfill Master Plan was finished in 2009. This final Lanai Landfill Master Plan provides available information (e.g. actual tonnage of solid waste generated) to account for the 3 years already elapsed in the plan period. In accordance with the Landfill's Operating Permit, the Master Plan is updated every five years.

1.2 Applicable Regulations and Permits

The Landfill is regulated under Hawaii Administrative Rules, Title 11, Chapter 58.1 (Solid Waste Management Control). The Landfill is subject to the following permit categories:

- Storm water permitting under the National Pollutant Discharge Elimination System (NPDES), administered by the Hawaii State Department of Health (DOH) Clean Water Branch.
 - Current General NPDES Permit Form B (Permit No. HI R50A625) related to storm water control during landfill operation (Original Issue Date: June 22, 2005; Date of Permit Extension: October 19, 2007). The renewal application is now under the review process.
- Solid waste management facility permit, including the application for the small landfill exemption, issued by DOH's Solid and Hazardous Waste Branch.
 - The County applied to renew its Facility Operating Permit in February 2009 after COM acquired ownership of the landfill site from Castle and Cooke.
 - Application for Small Landfill Exemption was submitted to DOH in February 2009.
- Special Use Permit issued by the State of Hawaii Land Use Commission
 - In October 2008 the County received a ten year extension to the existing Special Use Permit SP94-386, which is valid until September 2014.

1.2.1 Compliance Review

In September 2006, DOH and the County entered into a Settlement Agreement to resolve outstanding operational issues at the Landfill. The County submitted a formal response in March 2007, outlining how they had responded to items in the Agreement. The County's response included submitting an application to renew the Landfill's Facility Operating Permit in December 2006. This Master Plan and attachments are intended to supplement the February 2009 permit reapplication, which is currently under review by DOH. Permit Attachment P-3, Operations Plan, is listed as Appendix A of this Master Plan, but is bound separately for ease of use. Permit Attachment P-4, Closure/Post-Closure Plan, is listed as Appendix B of this Master Plan, but is also bound separately for ease of use. Permit attachments P-5, Zoning Clearance, and P-6, Property Owner Approval, were submitted separately to DOH by the County on February 4, 2009.

1.3 Small Landfill Exemption

The County submitted an Application for Small Landfill Exemption in February 2009 (see Appendix C), which applies to facilities with a waste intake of less than 20 tons per day (tpd). The Small Landfill Exemption exempts the Landfill from requirements of Hawaii Administrative Rules (HAR) 11-58.1-14, Municipal solid waste landfills – design criteria, and 11-58.1-16, Municipal solid waste landfills – ground water protection, so long as:

- (1) There is no evidence of existing groundwater contamination from the Landfill;
- (2) The Landfill serves a community that has no practicable waste management alternative and is located in an area that annually receives less than or equal to twenty-five inches of precipitation; and
- (3) The owners or operators place in the operating record information demonstrating that the requirements of the exemption are met.

Between July 1, 2010 and June 30, 2011, the County estimates that 3,232.5 tons of waste was delivered to the Landfill, which gives an approximate daily average of 8.9 tpd (see calculations in Appendix C).

The County will notify DOH if average daily tonnage for a 12-month period exceeds 20 tpd.

1.4 Previous Studies

Previous studies assessing the Landfill's airspace and remaining life include the following:

- Harding Lawson Associates (HLA), *Operations Manual*, 2/28/94

The previous Operations Manual was developed for the Landfill by Harding Lawson Associates in 1994. It addressed several general aspects of Landfill operations including the site location, site concept, landfill design and construction, facility operations, personnel and equipment, emergency procedures, and training.

Since the 1994 Operations Manual was developed, HAR Title 11, Chapter 58.1, Solid Waste Management Control has been enacted, which specifically addresses operating requirements for solid waste management facilities. This regulation is incorporated into the Landfill's current Operations Plan (see Appendix A) and the discussion below.

The projected waste filling plan showed 3.5H:1V (horizontal to vertical) slopes, although the regulations and operational considerations allow filling at the typical outer slope of 3H:1V. Airspace calculations in this Master Plan assume a 3H:1V slope.

- R.M. Towill Corporation (Towill), *Public Facilities Assessment Update*, March 2007

Section 13 of this report by Towill assesses all public solid waste disposal facilities in Maui County. The main purpose of this report was to estimate future waste generation by each of the Maui County planning districts and the capacity of current and future County landfills. The report also discussed alternative waste management strategies that the County might explore.

The Towill study estimated a total landfill capacity of 968,000 cubic yards (cy), based on a standardized landfill capacity formula, which assumes a capacity equal to 75% of the available landfilling footprint multiplied by a 30-foot fill height. However, the approximate nature of this estimate makes it a poor comparison to the airspace calculated from a topographic survey of the site.

- A-Mehr, Inc., *Technical Memorandum, Task 4, Landfill Capacity and Siting*, June 2007

This technical memorandum was prepared in support of the Maui County Integrated Solid Waste Management Plan (see below). The purpose of the memorandum was to generally describe the site, its remaining disposal capacity, and approximate annual disposal volumes. The memorandum also assessed the Landfill's remaining life and potential for expansion.

A-Mehr estimated that the Landfill had a life of 17 years beyond March 2007, which corresponds to a total remaining airspace of 238,000 cy and an assumed disposal rate of 13,400 cy per year. The memorandum states that this airspace would be achieved by increasing waste fill slopes along the gulch side of the site to 3H:1V and raising the Landfill's peak height by 10 feet, to approximately 1,228 feet above mean sea level (AMSL).

- Gershman, Brickner & Bratton, Inc. (GBB), *Maui County Integrated Solid Waste Management Plan (Final)*, February 17, 2009.

In accordance with the Hawaii Integrated Solid Waste Management Act, each county in the state must develop an Integrated Solid Waste Management Plan (ISWMP) and update it every five years. The purpose of the ISWMP is to provide an assessment of current County waste management and a plan for a long-term waste management strategy. The 2009 Maui County ISWMP includes a goal of diverting 60% of waste from disposal, improving the existing waste handling infrastructure, and looking at alternative waste disposal technologies that would reduce the dependence on landfills. This plan incorporates results of the Towill *Public Facilities Assessment* and the A-Mehr *Technical Memorandum*.

Data from the 2009 ISWMP is used in this Master Plan's analysis of population growth and waste disposal projections.

2. FACILITY DESCRIPTION

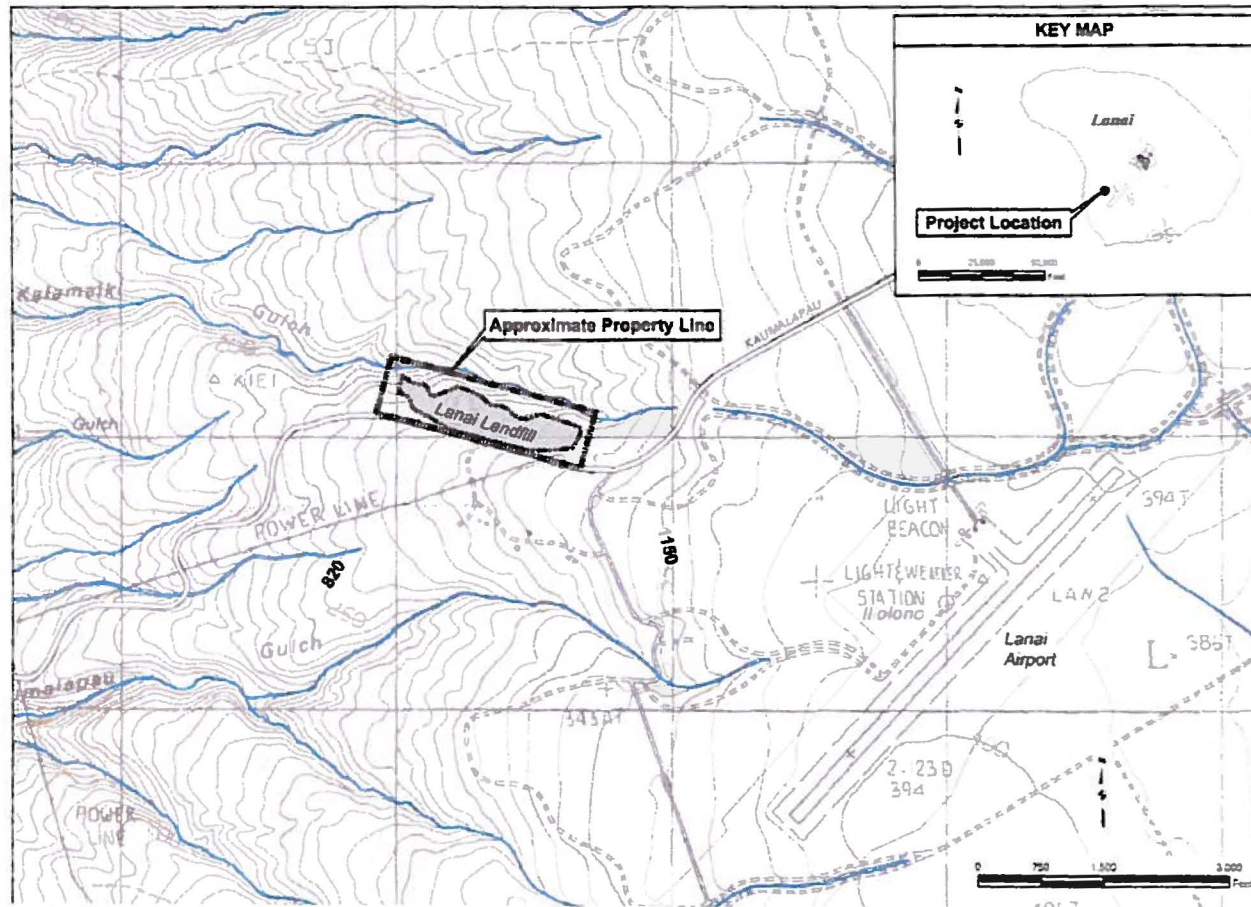
2.1 Site Location and Description

The Lanai Landfill is an unlined sanitary landfill located on the southwestern side of the island of Lanai, about a mile northwest of Lanai Airport, as shown on Figure 1. The Landfill is situated between Kaunapali Highway on the south and Kalamaiki Gulch on the north. Open range areas border the site on the east and west. The total property area of the site is 35.7 acres (Ac), of which 17.44 acres are covered by the active Landfill. The majority of the Landfill is defined by Tax Map Key (TMK) 4-9-02:01, Lot 2, which is owned by the County. Adjacent parcels are owned by Castle and Cooke or one of their subsidiaries, with the exception of Kaunapali Highway, which is owned and maintained by the State of Hawaii. The Landfill is operated by the County, and has been in operation since 1969.

The Landfill site includes an office trailer and vehicle parking area. The Landfill is surrounded by a perimeter stormwater diversion swale that drains to a detention/sedimentation basin at the western end of the site. Locations of the site features and general traffic flow patterns are shown on Figure 2, Existing Site Plan.

2.2 Waste Stream

Wastes received at the Landfill include municipal, agricultural, commercial, and light industrial wastes. The Landfill is the only disposal facility on Lanai. According to the Landfill's Annual Operating Report for Fiscal Year (FY) 2011, the distribution of incoming waste tonnage included approximately 8% self-hauled residential waste, 29% county-hauled residential waste, 62% commercial waste. The remaining 1% consisted of special waste and recoverable waste (green waste).



Source: U.S.G.S. Topographic Map, Lanai South, Hawaii, Provisional Edition 1984
Note: Contour elevations are in meters with English units on select contours.

Figure 1. Site Location Map

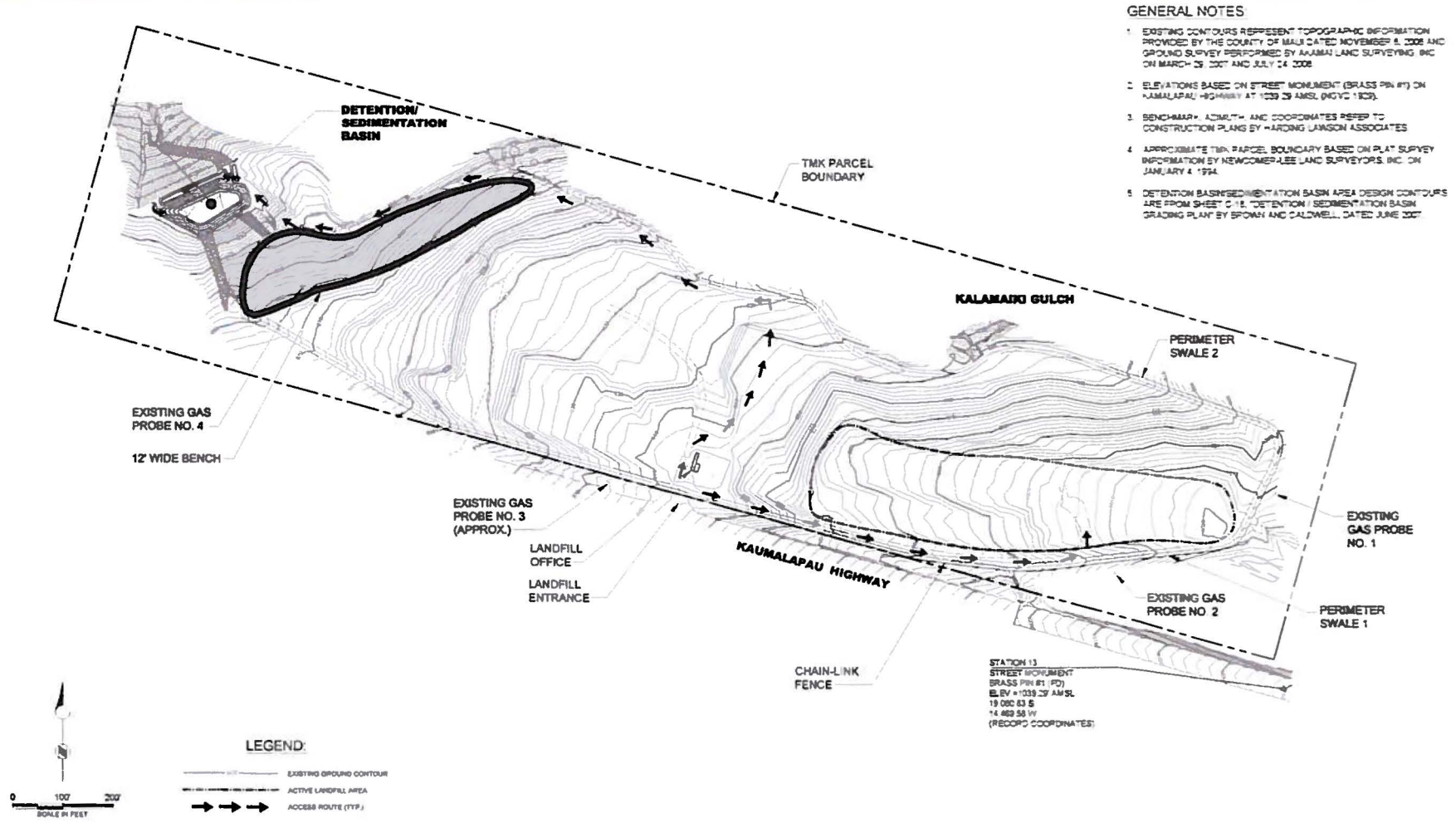


Figure 2. Existing Site Plan

3. LANDFILL AIRSPACE & ESTIMATED LIFE

3.1 Refuse Disposal Rate

The Landfill is the only disposal facility on Lanai, and so all waste disposed on the island is disposed in the Landfill. In FY 2006, the per capita waste generation was 2.6 tons per year (tpy), or 14.3 pounds per capita per day (pcd) (ISWMP 2-12). This amount includes residential and commercial municipal solid waste (MSW), recyclables, and special wastes.

Projected disposal tonnages for the Island of Lanai, over a 10-year planning period, are presented in Table 1 below, which is a reproduction of Table 2-11 (page 2-18) of the ISWMP. Disposal tonnages are based on the actual tonnage landfilled in 2005, and are projected forward based on County projections of population growth. Materials recycled or diverted are similarly calculated from actual amounts processed at facilities during FY 2006 and similarly projected forward, assuming the overall recycling and diversion rate would stay constant. Waste generation was then calculated by adding the tonnage diverted or recycled to the tonnage disposed. Table 1 also shows the actual tonnage in FY 2007, 2008, 2009, and 2011 and a comparison of the 2010 projected tonnage and the actual tonnage based on FY 2010 Annual Operating Report and it is found that the projected tonnage is about 125% higher than the actual tonnage.

Table 1. Lanai Island Solid Waste Projections

Lanai Island Solid Waste Projections (tpy)									
	2005 (actual)	2007 (actual)	2008 (actual)	2009 (actual)	2010 (actual)	2010 (projected)	2011 (actual)	2015 (projected)	2020 (projected)
MSW Generated	6,439	5,659	3,696	3,000	3,085	6,924	3,232	7,470	7,931
Materials Recycled or Diverted	1,401	302	145	225	30	1,441	21	1,498	1,556
MSW Disposed	5,038	5,357	3,551	2,775	3,055	5,484	3,211	6,030	6,433

Note: The annual tonnage of solid waste of each fiscal year begins from July 1 of previous year to June 30.

Other assumptions made in the ISWMP include the following:

- Tonnages include both residential and commercial waste.
- Industrial wastes (e.g. sugar cane bagasse) are not included.
- Residential waste generation is based on number of households.
- Waste from visitors is included in commercial waste.
- Population projections were based on the County's 2030 Development Plan.
- Recycling stays at the FY 2006 rate.
- The disposal rate is approximately 67% of generation rate.

There is currently no scale at the Landfill, and so incoming waste quantities are based on vehicle counts and estimated volumes. The Landfill keeps a daily record of all vehicles and waste types accessing the Landfill. Commercial tonnages are estimated from manual tickets, which are categorized by vehicle descriptions. Residential disposal tonnage is estimated by multiplying the number of households by an average waste disposal rate of 60 pounds per week per household.

Based on the previous five Annual Operating Reports (FY07, FY08, FY09, FY10, and FY11), the total tonnage disposed at the Landfill decreased 34% from FY07 to FY08, decreased 22% from FY08 to FY09, increased 10% from FY09 to FY10, and increased 5% from FY10 to FY11.

3.2 Compaction and Soil Use

Because the Landfill has no scale, and incoming waste tonnage is not precisely measured, previous reports assumed several different values of compaction. A-Mehr (2007) assumed an in-place waste density of 700 pounds (lb)/cy (0.35 tons/cy) based on the airspace utilization factor achieved at Molokai Landfill, which does have a scale. Towill (2007) assumed an in place waste density of 0.5 tons/cy. Typical in-place densities at state-of-the-art landfill sites range from 0.65 tons/cy to above 0.8 tons/cy, depending on waste stream composition and level of compaction effort.

In general, increasing the in-place waste compaction will lengthen the Landfill's life. For the airspace assessment and operational staging purposes of this Master Plan, three values of in-place waste density (600, 800, and 1200 lb/cy, or 0.3, 0.4, and 0.6 ton/cy) were used in calculations, to give a range of expected values. These values of in-place waste density include an assumed 20% of airspace volume occupied by daily and intermediate cover soils.

Table 2. Potential Airspace Consumption Volumes for Three Values of In-Place Waste Density

Year	MSW Disposed (tpy)	Cumulative Tonnage	Airspace Consumption Rate at 0.3 ton/cy (cy/yr)	Cumulative Airspace Consumption (cy)	Airspace Consumption Rate at 0.4 ton/cy (cy/yr)	Cumulative Airspace Consumption (cy)	Airspace Consumption Rate at 0.6 ton/cy (cy/yr)	Cumulative Airspace Consumption (cy)
2011	5,593	21,778	18,643	72,593	13,983	54,445	9,322	36,297
2012	5,702	27,480	19,007	91,600	14,255	68,700	9,503	45,800
2013	5,812	33,292	19,373	110,973	14,530	83,230	9,687	55,487
2014	5,921	39,213	19,737	130,710	14,803	98,033	9,868	65,355
2015	6,030	45,243	20,100	150,810	15,075	113,108	10,050	75,405
2016	6,111	51,354	20,370	171,180	15,278	128,385	10,185	85,590
2017	6,191	57,545	20,637	191,817	15,478	143,863	10,318	95,908
2018	6,272	63,817	20,907	212,723	15,680	159,543	10,453	106,362

Based on this analysis, the Landfill has more than adequate disposal capacity through 2018. However, if in-place waste compaction is increased, airspace consumption will decrease, and a smaller volume of daily cover soil will be required per ton of incoming waste, since more tons of waste will be compressed into a given volume. This will make better use of the available airspace and require a smaller quantity of cover soils to be imported and stored on site, and will also increase the landfill's lifespan proportionally to the increase in compaction.

3.3 Available Volume

Conceptual final landfill contours have been developed based on a topographic survey of the Landfill site conducted by Akamai Land Surveying, Inc. on March 29, 2007 and updated on July 24, 2008. The final contour plan assumes maximum side slopes of 3 horizontal to 1 vertical. The plan also leaves room for a 10-

foot-wide access road along the interior of the existing perimeter drainage swale. The July 2008 conditions are presented on Figure 2 and the final contours are presented on Figure 7. Four landfill phasing plans have also been developed and are presented on Figures 3 through 6, showing fill progression in different areas of the site. Based on the final fill contours shown on Figure 7, the remaining landfill volume is approximately 380,000 cy, which includes disposed waste and daily, intermediate and final cover. Approximately 53,000 cy of the volume will be occupied by final cover. This leaves remaining operational landfill airspace of approximately 326,500 cy based on the contour elevations in 2008.

3.4 Site Life

For the current analysis, we assumed the airspace consumption rate assumed by A-Mehr of 13,400 cy per year, which includes the volume of daily cover soils (A-Mehr 2007). Based on the remaining airspace of approximately 326,500 cy (after final cover volume is deducted), the expected remaining landfill life is about 24 years from Year 2008 as shown on Table 3 or about 21 years from Year 2011.

Table 3. Airspace by Phase

	Phase 1	Phase 2	Phase 3	Phase 4	Total
Available Volume (cy)	99,157	66,183	65,965	148,406	379,711
Final Cover Deduction (cy)	(13,118)	(13,623)	(8,019)	(18,511)	(53,271)
Landfill Airspace (cy)	86,039	52,560	57,946	129,895	326,440
Airspace Utilization Rate (cy/yr)	13,400	13,400	13,400	13,400	13,400
Estimated Life Expectancy (years)	6.4	3.9	4.3	9.7	24

The final cover deduction is based on a final cover thickness of 2 feet, and the estimated life expectancy is the Landfill airspace divided by the airspace utilization rate of 13,400 cy/yr.

3.5 Filling Sequence

The landfill phasing plans developed by HLLA in 1994 showed landfilling progressing in an east-to-west direction. This filling procedure has generally been followed. Some key features of the HLLA phasing plans were the development of new cells by landfilling closest to the highway, which creates a visual barrier to operations. This has been maintained in the updated phasing plans.

The landfill surface ranges in elevation from 1020 feet at the eastern end to an elevation of 840 feet at the western end, near the storm water basin. The landfill side slopes generally are at an inclination of 25% (4H:1V), except along the south side of the Landfill closest to Kaunalapau Highway, where the slopes are approximately 33% (3H:1V). 15-foot-wide benches shall be placed approximately every 30 feet and wrap around the landfill to tie into the perimeter swale on two sides.

The landfill phasing plans presented in Figures 3 through 6 show a fill sequence in four phases, with a maximum elevation of approximately 1025 feet AMSL. The fill sequence is as follows:

3.5.1 Phase 1

The first phase of filling is at the western end of the site (see Figure 3). The top of waste will be a plateau at approximately 930 feet AMSL. Stormwater will be collected and controlled by the existing concrete perimeter swale. Access to the active fill area will be immediately to the left on entering the site. Access to

the stormwater basin will be around the northern edge of the fill area, via the perimeter road. When this fill stage is completed, final cover may be installed over the side slopes to an approximate elevation of 928 feet AMSL, as shown on Figure 3.

3.5.2 Phase 2

The second phase of filling is at the eastern end of the site (see Figure 4). The top of waste will reach the maximum landfill elevation of approximately 1025 feet AMSL. Stormwater will be collected and controlled by the existing concrete perimeter swale. Access to the active fill area will be to the right on entering the site. Access to the stormwater basin will be around the northern edge of the Phase 1 fill area, via the perimeter road. When Phase 2 is completed, final cover may be installed over the side slopes and top slope of the eastern end of the landfill, as shown on Figure 4.

3.5.3 Phase 3

The third phase of filling is in the central portion of the site, against the Phase 2 fill area (see Figure 5). The maximum waste fill elevation of this phase will be approximately 1020 feet AMSL. Similar to the other fill phases, stormwater will be collected and controlled by the existing concrete perimeter swale. Access to the active fill area will be immediately to the right on entering the site. Similar to Phase 2, access to the stormwater basin will be around the northern edge of the Phase 1 fill area, via the perimeter road. When the Phase 3 fill stage is completed, final cover may be installed over the northern and southern side slopes of the fill area, as shown on Figure 5.

3.5.4 Phase 4

The fourth and final phase of filling will fill in the remaining central portion of the site (see Figure 6). The minimum waste fill elevation will be approximately 930 feet AMSL, and the maximum will be approximately 1000 feet AMSL. Stormwater will be collected and controlled by the existing concrete perimeter swale. A mid-slope diversion berm will be installed on the northwestern landfill slope, and a rip-rap lined letdown channel will carry flow from the diversion berm into the perimeter swale, as shown on Figure 6. Access to the active fill area will be immediately to the left on entering the site. Access to the stormwater basin will be around the southern edge of the Landfill, via the perimeter road. When the Phase 4 fill is completed, final cover may be installed over the remaining landfill area, as shown on Figure 6.

Figure 7 shows the final cover elevations for the entire landfill area as well as typical cross-sectional details of the final cover system and the perimeter road. Figures 8 and 9 show cross-sectional profiles of the fill phases.

3.6 Airspace Management

BC recommends that an annual ground survey be performed on all active areas of the Landfill to assess airspace use. Without a scale to record actual tonnage disposed, compaction cannot be analyzed, but the ability to track the volume used each year is still beneficial for predicting remaining Landfill life.

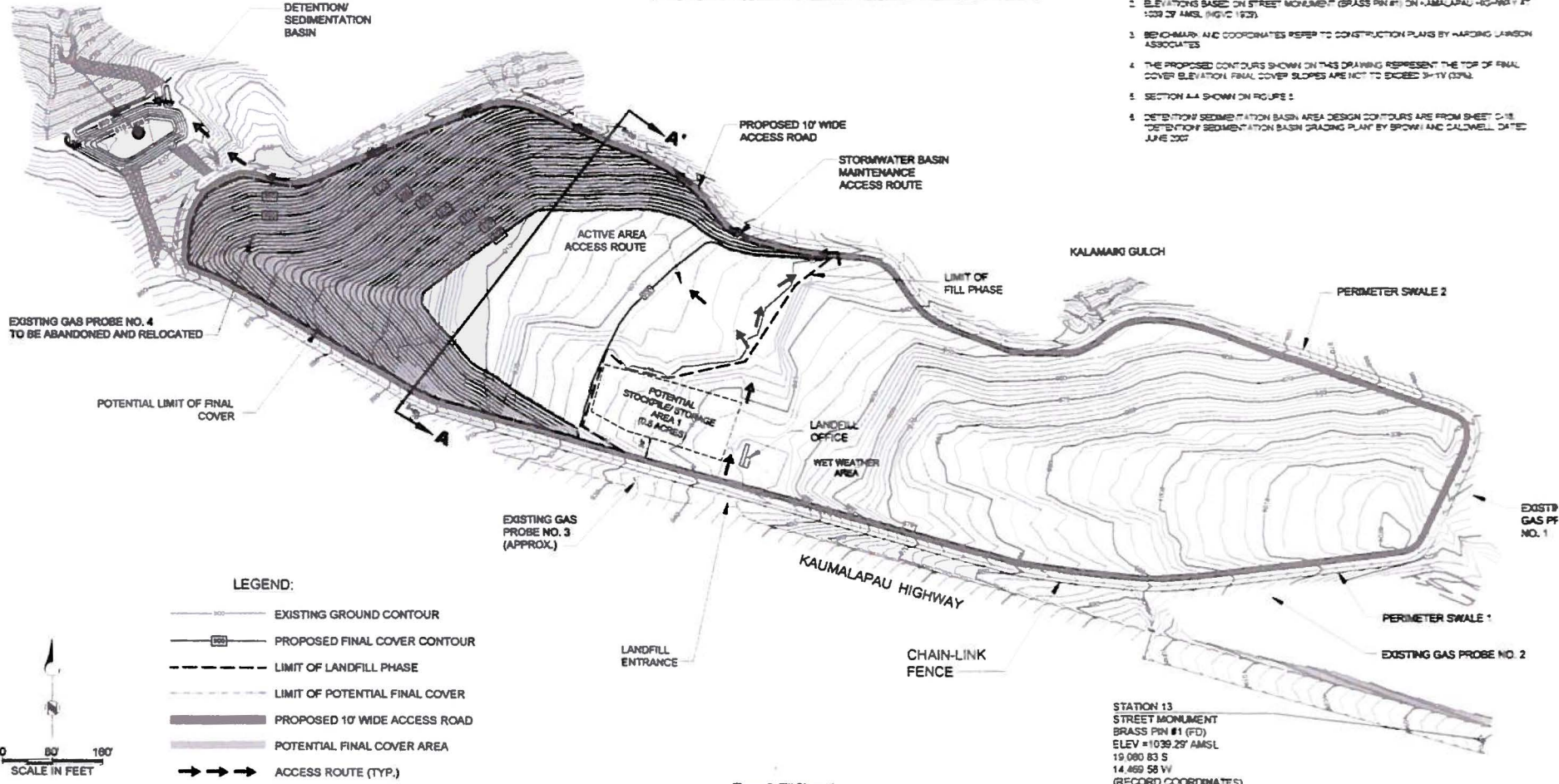
Options for reducing airspace demand include increasing waste compaction or using alternative cover materials such as tarps to reduce the airspace volume occupied by cover soils. Increased compaction will add site life and reduce the required volume of daily cover per ton of waste disposed. A demonstration program of using tarps as alternative soil cover (ADC) for two consecutive days per week was undertaken at the landfill. COM received an approval letter dated May 25, 2011 to continue tarp use for two consecutive days at Lanai Landfill. A demonstration period was extended for another three months to evaluate using the tarp for four successive days per week, beginning from July 1, 2011 to September 30, 2011.

Another factor influencing airspace demand is the rate of commercial development on the island. Landfill disposal dropped nearly 34% from 2007 to 2008 and nearly 22% from FY 08 to FY09, largely due to the reduced number of new construction projects on the island. Airspace demand may also be reduced in the future as County-wide recycling and waste diversion programs become more established.

Volume Report			
Phase	Minimum Fill (ft)	Maximum Fill (ft)	Volume (CY)
1	0.000	33.484	5,890
			29,157

GENERAL NOTES

- EXISTING CONTOURS REPRESENT TOPOGRAPHIC INFORMATION PROVIDED BY THE COUNTY OF MAUI DATED NOVEMBER 6, 2008 AND GROUND SURVEY PERFORMED BY KAMAHA LAND SURVEYING, INC. ON MAPS 23-2007 AND JULY 24, 2008.
- ELEVATIONS BASED ON STREET MONUMENT (BRASS PIN #1) ON KAMALAPAU HIGHWAY AT 1039.29' AMSL (NGVD 1929).
- BENCHMARK AND COORDINATES REFER TO CONSTRUCTION PLANS BY HAROLD JARSON ASSOCIATES.
- THE PROPOSED CONTOURS SHOWN ON THIS DRAWING REPRESENT THE TOP OF FINAL COVER ELEVATION. FINAL COVER SLOPES ARE NOT TO EXCEED 3:1V (33%).
- SECTION AA SHOWN ON FIGURE 2.
- DETENTION SEDIMENTATION BASIN AREA DESIGN CONTOURS ARE FROM SHEET C-18, "DETENTION SEDIMENTATION BASIN GRADING PLAN" BY BROWN AND CALDWELL, DATED JUNE 2007.



- LEGEND:**
- (thin line) — EXISTING GROUND CONTOUR
 - (thick line) — PROPOSED FINAL COVER CONTOUR
 - - - - - LIMIT OF LANDFILL PHASE
 - - - - - LIMIT OF POTENTIAL FINAL COVER
 - (thick solid line) — PROPOSED 10' WIDE ACCESS ROAD
 - (dashed line) — POTENTIAL FINAL COVER AREA
 - → → → ACCESS ROUTE (TYP.)



STATION 13
 STREET MONUMENT
 BRASS PIN #1 (FD)
 ELEV = 1039.29' AMSL
 19 080 83 S
 14 459 58 W
 (RECORD COORDINATES)

Figure 3. Fill Phase 1

Volume Report				
Phase	Minimum Fill (ft)	Maximum Fill (ft)	Plan Area (Ac)	Volume (CY)
2	0.000	25.425	4.78	66183

GENERAL NOTES

- EXISTING CONTOURS REPRESENT TOPOGRAPHIC INFORMATION PROVIDED BY THE COUNTY OF MAUI DATED NOVEMBER 8, 2008 AND GROUND SURF PERFORMED BY ANAMAN LAND SURVEYING, INC. ON MARCH 28, 2007 AT JULY 24, 2008.
- ELEVATIONS BASED ON STREET MONUMENT (BRASS PIN #1) ON KAUMALAPAU HIGHWAY AT 1039.27' AMSL (NGVD 1989).
- BENCHMARK AND COORDINATES REFER TO CONSTRUCTION PLANS BY HARDING JAWSON ASSOCIATES.
- THE PROPOSED CONTOURS SHOWN ON THIS DRAWING REPRESENT TO TOP OF FINAL COVER ELEVATION. FINAL COVER SLOPES ARE NOT TO EXCEED 3:1 (33%).
- SECTION B-B SHOWN ON FIGURE 5.
- DEFINITION: SEDIMENTATION BASIN AREA DESIGN CONTOURS ARE FROM SHEET 2-18 "DEFINITION: SEDIMENTATION BASIN GRADING PLAN" BY SPORN AND CALDWELL DATED JUNE 2007.

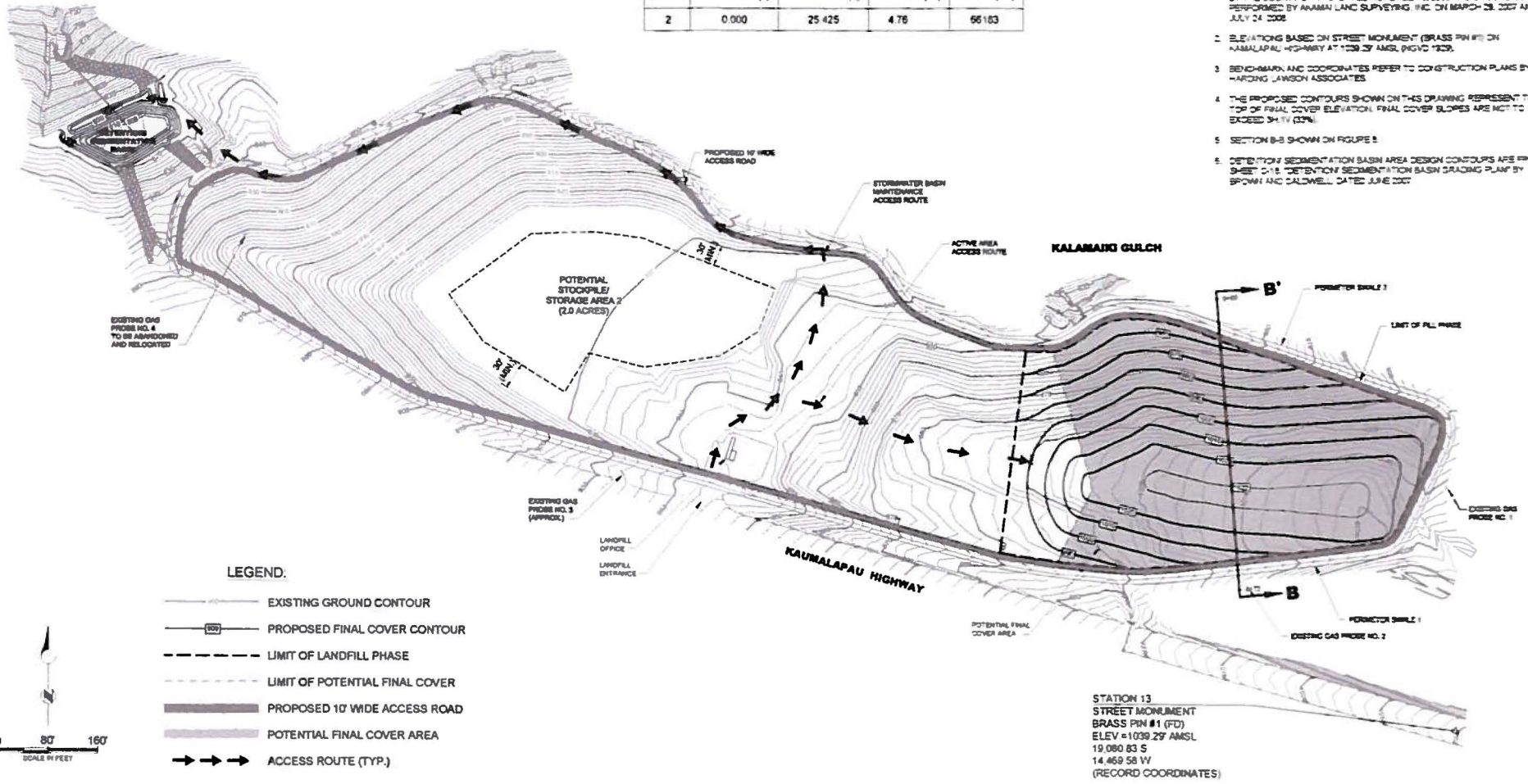


Figure 4. Fill Phase 2



Volume Report				
Phase	Minimum Fill (ft)	Maximum Fill (ft)	Plan Area (Ac)	Volume (CY)
3	0.000	30.219	3.39	65065

GENERAL NOTES:

- EXISTING CONTOURS REPRESENT TOPOGRAPHIC INFORMATION PROVIDED BY THE COUNTY OF MAUI DATED NOVEMBER 8, 2008 AND GROUND SURVEY PERFORMED BY ANAMA LAND SURVEYING, INC. ON MARCH 28, 2007 AND JULY 24, 2008.
- ELEVATIONS BASED ON STREET MONUMENT (BRASS PIN #1) ON KAUMALAPAU HIGHWAY AT 1039.29 AMSL (445G 1829).
- BEYOND MAP AND COORDINATES REFER TO CONSTRUCTION PLANS BY HARDING LAWSON ASSOCIATES.
- THE PROPOSED CONTOURS SHOWN ON THIS DRAWING REPRESENT THE TOP OF FINAL COVER ELEVATION. FINAL COVER SLOPES ARE NOT TO EXCEED 3H:1V (33%).
- SECTION CC SHOWN ON FIGURE 8.
- DETENTION SEDIMENTATION BASIN AREA DESIGN CONTOURS ARE FROM SHEET C-15, "DETENTION SEDIMENTATION BASIN GRADING PLAN" BY BROWN AND CALDWELL, DATED JUNE 2007.

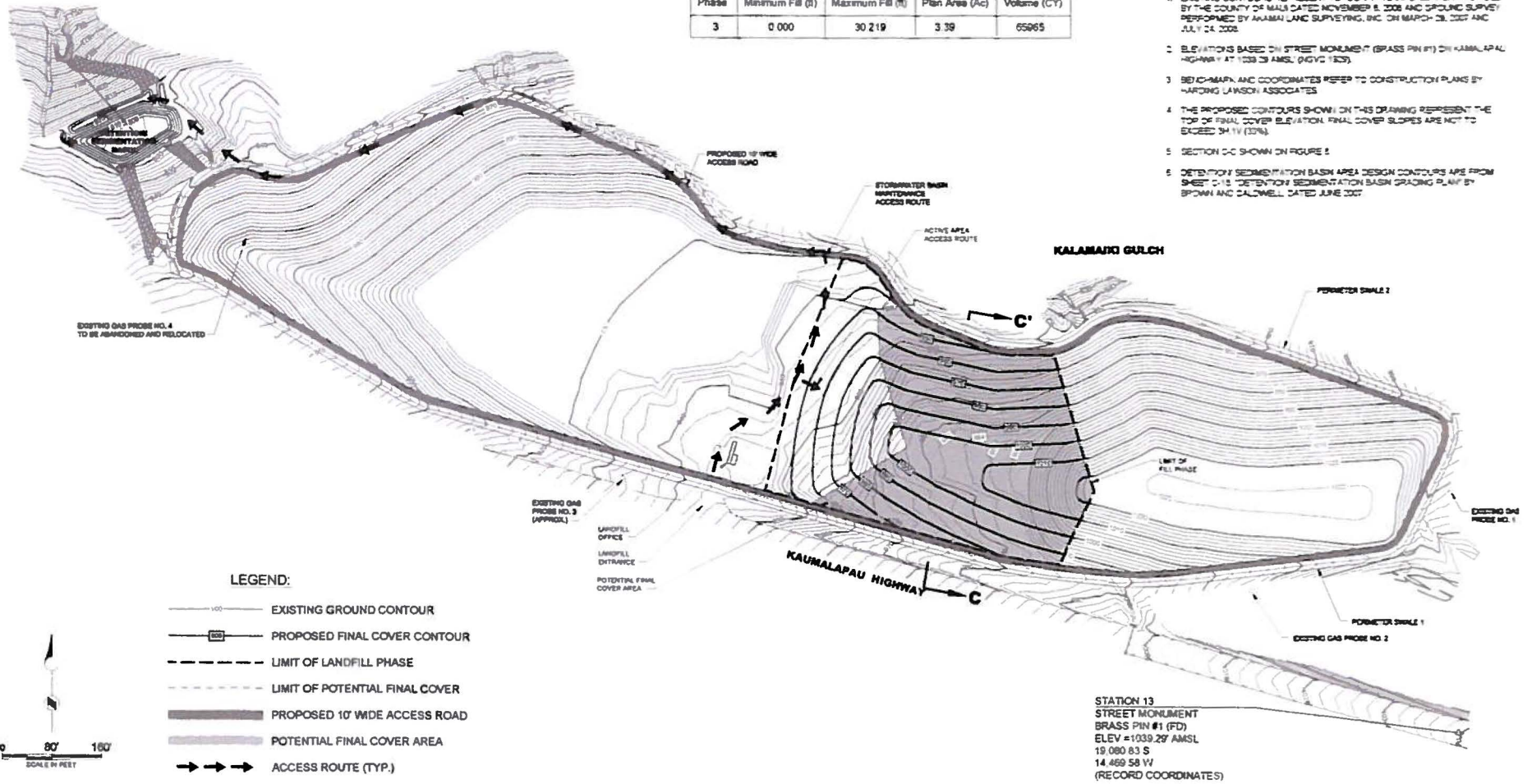


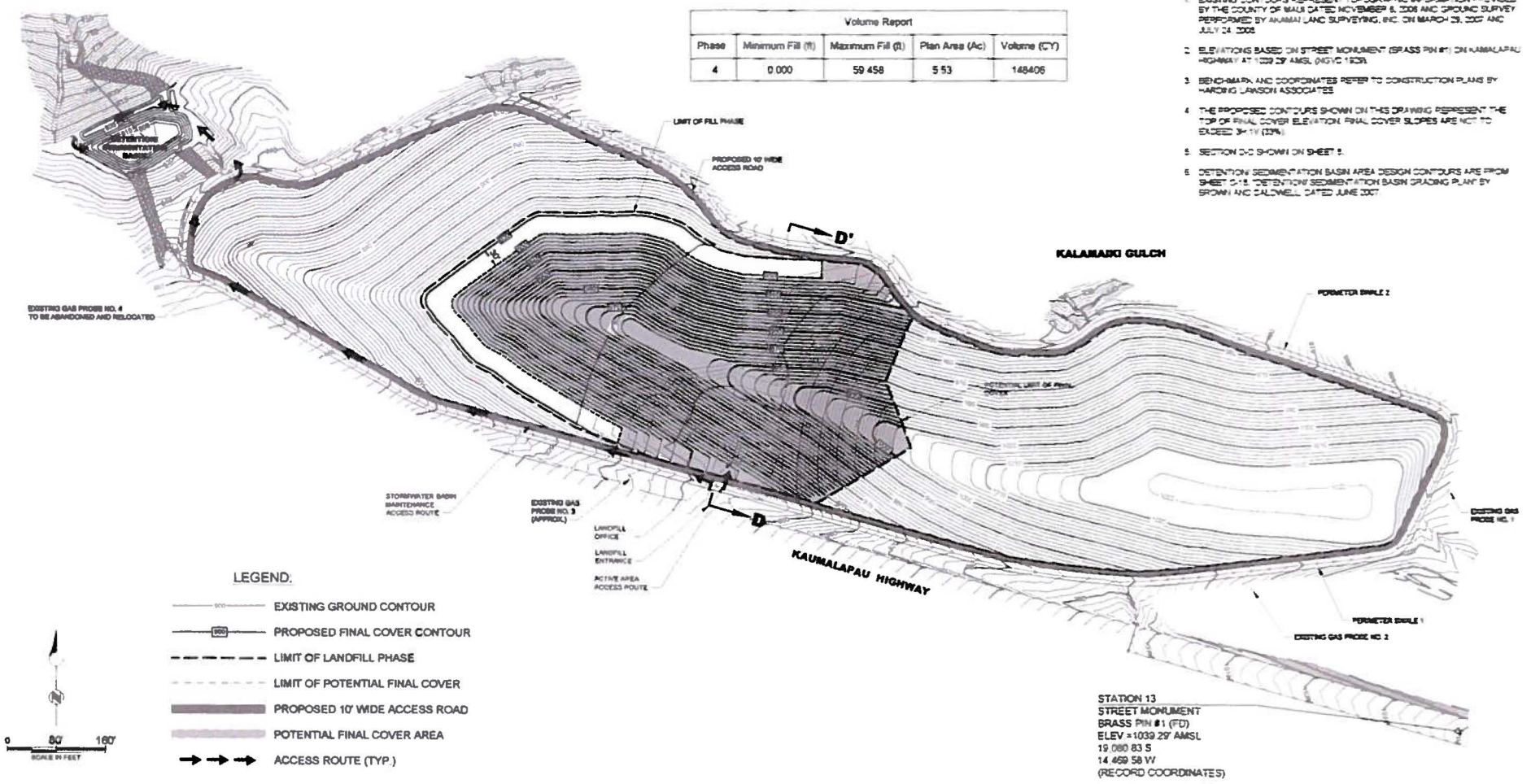
Figure 5. Fill Phase 3



GENERAL NOTES

- EXISTING CONTOURS REPRESENT TOPOGRAPHIC INFORMATION PROVIDED BY THE COUNTY OF MAUI DATED NOVEMBER 8, 2008 AND GROUND SURVEY PERFORMED BY ANAMAL JUNG SURVEYING, INC. ON MARCH 23, 2007 AND JULY 24, 2008.
- ELEVATIONS BASED ON STREET MONUMENT (BRASS PIN #1) ON KAUMALAPAU HIGHWAY AT 1039 29' AMSL (NGVD 1929).
- BENCHMARK AND COORDINATES REFER TO CONSTRUCTION PLANS BY HARBING LARSON ASSOCIATES.
- THE PROPOSED CONTOURS SHOWN ON THIS DRAWING REPRESENT THE TOP OF FINAL COVER ELEVATION. FINAL COVER SLOPES ARE NOT TO EXCEED 3H:1V (33%).
- SECTION D-D SHOWN ON SHEET 5.
- DETENTION SEDIMENTATION BASIN AREA DESIGN CONTOURS ARE FROM SHEET 0-15, "DETENTION SEDIMENTATION BASIN GRADING PLAN" BY BROWN AND CALDWELL, DATED JUNE 2007.

Volume Report				
Phase	Minimum Fill (ft)	Maximum Fill (ft)	Plan Area (Ac)	Volume (CY)
4	0.000	59.458	5.53	168406



- LEGEND:**
- 0'00" — EXISTING GROUND CONTOUR
 - 0'00" — PROPOSED FINAL COVER CONTOUR
 - - - - - LIMIT OF LANDFILL PHASE
 - - - - - LIMIT OF POTENTIAL FINAL COVER
 - ▬▬▬▬▬▬ PROPOSED 10' WIDE ACCESS ROAD
 - ▬▬▬▬▬▬ POTENTIAL FINAL COVER AREA
 - → → → ACCESS ROUTE (TYP.)

STATION 13
 STREET MONUMENT
 BRASS PIN #1 (FD)
 ELEV = 1039 29' AMSL
 19 080 83 S
 14 469 58 W
 (RECORD COORDINATES)

Figure 6, Fill Phase 4



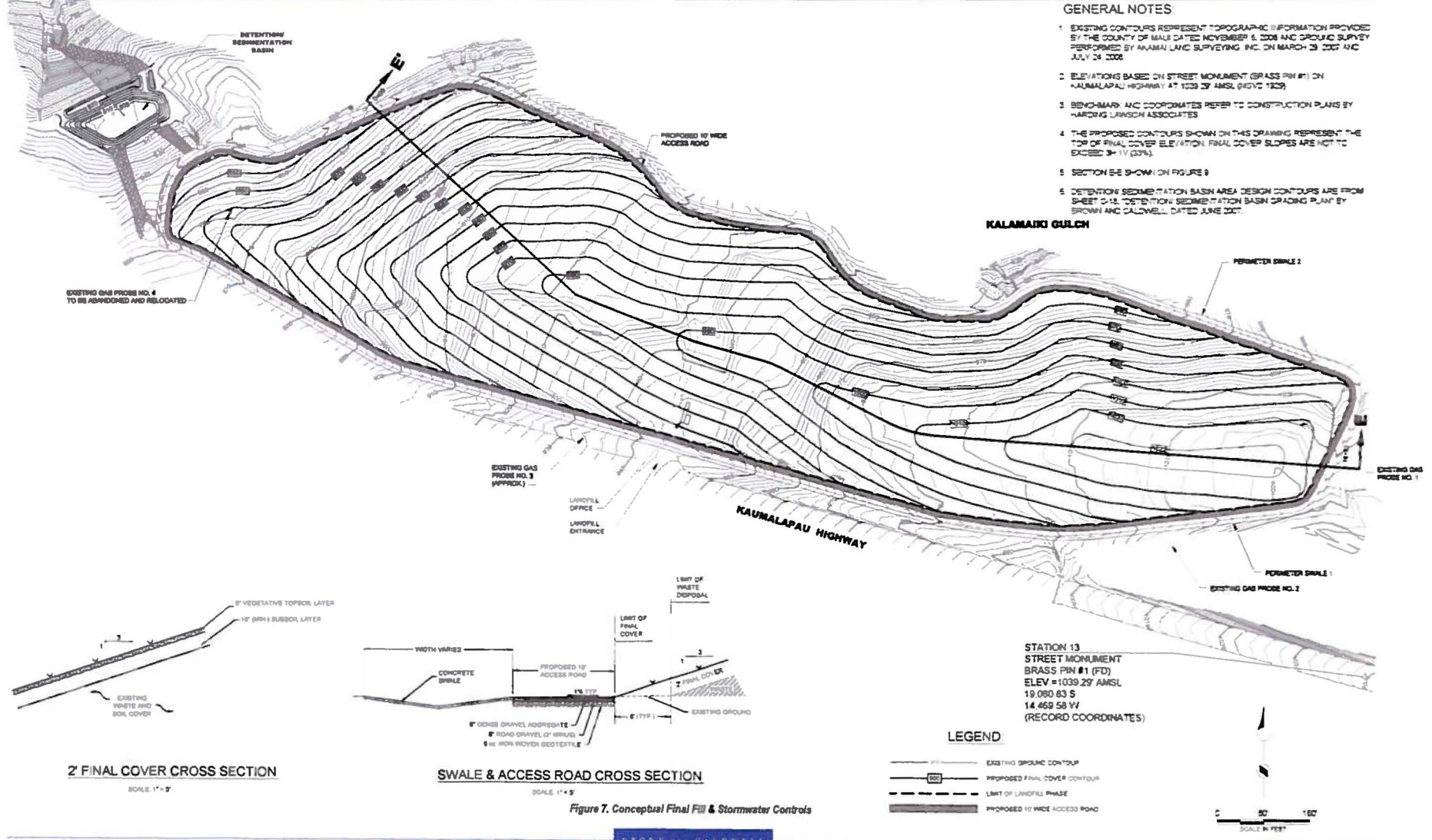


Figure 7. Conceptual Final Fill & Stormwater Controls

SPORN AND CALDWELL

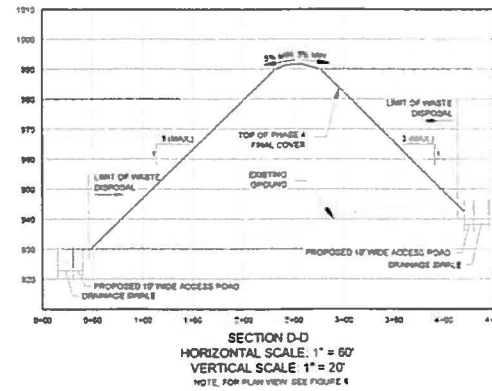
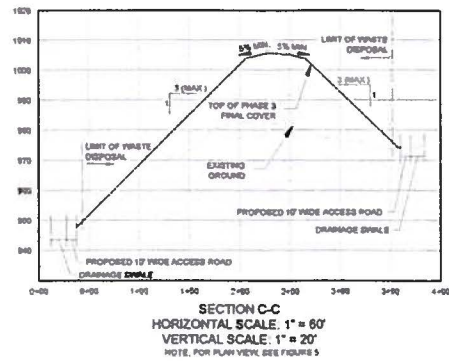
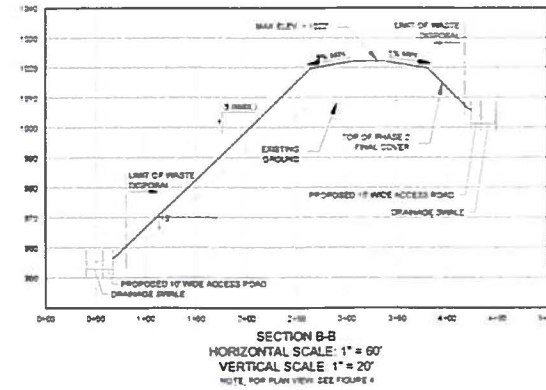
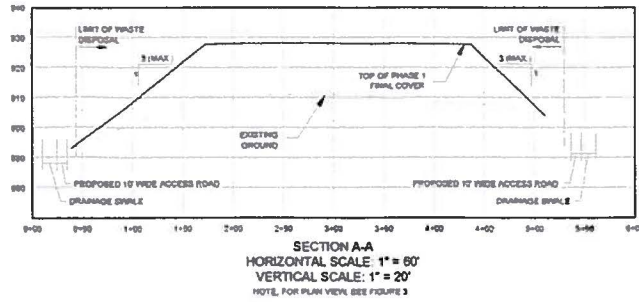


Figure 8. Cross Sections 1

NOTE
 SEE FIGURE 7 FOR TYPICAL CROSS-SECTION OF PERIMETER ACCESS ROAD AND SWALE

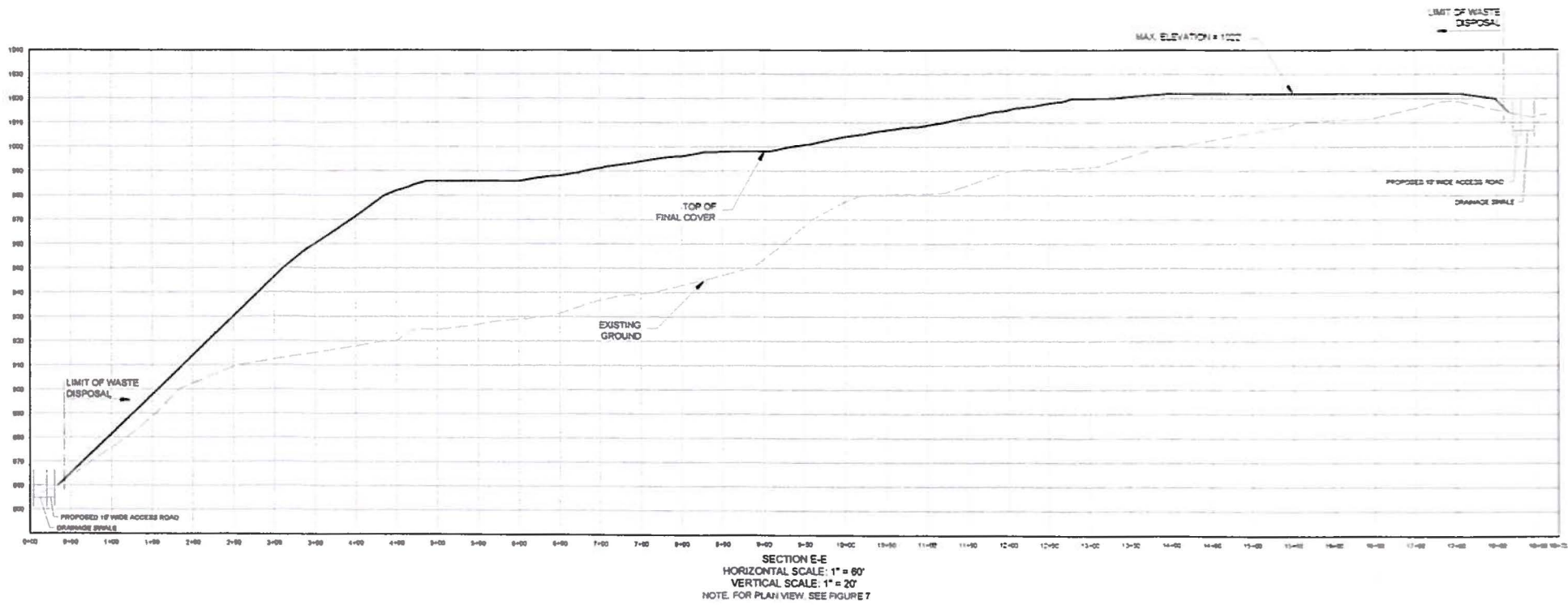


Figure 9. Cross Section 2

10/11
SEE FIGURE 7 FOR TYPICAL CROSS-SECTION OF PERIMETER ACCESS ROAD AND DITCH

4. OPERATIONAL ASSESSMENT

The Landfill is operated in accordance with HAR 11-58.1-15, *Municipal solid waste landfills – operating criteria*. Landfill operating procedures are further described in the Lanai Landfill Operations Plan (see Appendix A), which incorporates the requirements listed in Attachment P-3 of the Facility Operating Permit. The sections below assess current operating practices at the Landfill and provide additional recommendations, where appropriate.

4.1 Personnel

Landfill personnel include the following:

- 1-Solid Waste Superintendent (responsible for all County Landfills)
- Operation Supervisor (in charge of Hana, Lanai, and Molokai Landfills)
- 1-Worksite Supervisor or Equipment Operator II
- 1-Landfill Attendant
- 1-Equipment Operator

4.1.1 Training

The County provides the following training to Landfill personnel:

- Hazardous and Polychlorinated Biphenyls (PCB) waste identification (Level I)
- Management of Landfill Operations (MOLCO) training for managers
- Safety Training (First Aid, Cardiopulmonary Resuscitation {CPR}, Automated External Defibrillator {AED})
- Sexual harassment training
- Operator training
- Asbestos handling
- Technical training (sub-surface fires)
- Commercial Driver's License (CDL) Training
- Contents of the Landfill's Operations Plan
- Storm Water Pollution Control Plan and Storm Water Sampling Procedures

The safety training records are kept with the Safety Specialist with certificates issued at the landfill. Other training records are kept on site at the landfill office.

4.2 Equipment

Presently, Lanai Landfill has or is in the process of obtaining the following equipment:

Table 4. Equipment List

Equipment	Comments
Caterpillar D7 bulldozer	Purchased in 2006 in response to the Settlement Agreement
Caterpillar D7 bulldozer	May need replacement
14 Yard Dump Truck	To be acquired
Caterpillar 821E Loader	Planned for relocation from Central Maui Landfill

Equipment maintenance and service schedules are discussed in the Operations Plan (see Appendix A).

4.3 Cover Materials

In accordance with HAR 11-58.1-15(b)(1), disposed solid waste is covered with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.

Daily cover material from different areas of the island is transported to the Landfill by Lanai Company. Independent contractors may also bring excess soil from excavation projects to the Landfill for use as cover material. When these projects are completed on short timelines, cover material is hauled in and excess cover material is stockpiled in bulk at the Landfill. Landfill cover material is applied daily to the active face by on-site staff members.

Presently, an agreement exists between Lanai Company and the County as it relates to the furnishing of cover soils at no charge for the total life of the Landfill. The County is responsible for the hauling.

Sufficient stockpiles of daily cover material are kept at the Landfill to supply the needs of the Landfill for a minimum of 14 days, and not greater than approximately 30 days. Cover stockpiles are kept as close to the active face as feasible. Stockpile areas are graded to provide stormwater control and minimize mud and sediment generation. The elevation of the stockpiled soil will not exceed the permitted final Landfill elevation.

A demonstration program of using tarps as alternative soil cover (ADC) had been undertaken at Lanai Landfill from July 6, 2010 to December 31, 2010 to prove that tarp can be used for two consecutive days per week to control disease, vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment. COM received an approval letter dated May 25, 2011 to continue tarp use for two consecutive days at the landfill. A demonstration period was extended for another three months to evaluate using the tarp for four successive days per week, beginning from July 1, 2011 to September 30, 2011. COM plans to request for the continued use of tarp as ADC.

Demonstration projects using mulch as ADC are currently underway at two other County facilities, Central Maui Landfill and Molokai Landfill.

Soil and crusher waste materials are utilized for intermediate cover. Intermediate cover is about 12 inches thick and is generally applied on all areas where no additional waste placement is expected within a period of three weeks or more.

No final cover has yet been installed at the Landfill.

4.4 Vector Control

Currently, the County does not have a contract with any outside vendors for pest control, but relies on assistance from the State Vector Section when necessary. Landfill operations personnel have not identified any problems with pests or birds. However, birds are cited in the alternative soil cover (ADC) demonstration program report. Visual inspections are conducted routinely to confirm that the tarp performs well and remain in good condition. Tires are used to anchor the tarp in place to make sure that the tarp covers all the waste and there is no exposed waste to attract the bird.

4.5 Landfill Gas Control

Four subsurface gas probes were previously installed at the Landfill (see approximate locations on Figure 2). Three of these probes are located at or near the Landfill perimeter, and one is inside the active landfill area. A program for monitoring of subsurface landfill gas migration is included in the Operations Plan (see Appendix A).

4.6 Stormwater and Erosion Control

4.6.1 Stormwater Controls

Stormwater drainage structures have been designed, constructed, and maintained to ensure integrity of the drainage structures and so as to prevent erosion at the Landfill. All structures have been designed to prevent run-on and control runoff from a 25-year, 24-hour storm event.

The main components of the Landfill's stormwater drainage system include a perimeter swale and detention/sedimentation basin. The perimeter swale is a shallow v-shaped swale with a width of 15 feet and center depth of less than a foot. The swale intercepts run-on onto the Landfill from Kaunalapau Highway and collects runoff from the Landfill. The swale discharges into a detention/sedimentation basin, which has a 24-inch standpipe outlet structure with its inlet set about five feet above the basin floor. An overflow spillway is located at the northwest corner of the detention/sedimentation basin. Both basin outlets discharge to Kalamai Gulch, to the north.

Temporary stormwater controls on the surface of the Landfill will be installed with each phase of filling. Final, permanent stormwater controls on the surface of the Landfill will be installed with the final cover at closure of the Landfill.

The sedimentation/detention basin is inspected monthly. In accordance with the Storm Water Pollution Control Plan (SWPCP), the basin is cleaned out once sediment reaches one-third of the basin's storage depth. Routes for equipment to access the basin for maintenance are shown on the fill phasing plans.

In 2008, the County contracted M&M Tanks, Inc. to upgrade the drainage system, as part of the September 2006 Settlement Agreement. Upgrades included clearing vegetation and replacing the existing cement-treated base (CTB) swale with a concrete swale, in areas where the CTB swale had deteriorated. Repairs also included the rock-lined swale outlets and detention basin overflow spillway. The repairs were completed in June 2009.

4.6.2 Erosion

Due to the steepness of the Landfill terrain, erosion control is a key concern. Stormwater control structures are designed to collect surface runoff from the Landfill and filter out sediments before runoff is discharged off-site. All erosion and sediment control structures are regularly cleaned and maintained so that they can carry out their function unimpeded. Erosion control mats and riprap check dams are installed to reduce the velocity of stormwater flow. Transitional areas adjacent to the perimeter swale are reinforced with erosion control matting or gravel, as appropriate. The site entrance is paved. Slopes steeper than 3H:1V are stabilized with vegetation or geogrid, and maximum landfilling slopes are 3H:1V. An access road is located parallel to the perimeter swale, so that the swale will not be needed to be used for vehicle access. The access road also provides a relatively flat transition area to reduce the velocity of sheet flow entering the perimeter swale from the Landfill. Regrading is performed on any areas of daily or intermediate cover showing evidence of erosion.

Proper grading, shaping, and care of Landfill slopes, with particular attention to planting and maintaining a vegetative cover, is the most important aspect of erosion control on the Landfill. Efforts to control erosion on intermediate slopes may include establishing vegetation and placing siltation barriers (hay bales and/or siltation fencing). Surface slopes are graded so that channeling of water is minimized, unless provisions are made to prevent surface scouring, such as lining channels with stone.

Another important aspect of maintenance for the prevention of siltation is the upkeep of perimeter swales and, where needed, the placement and replenishment of siltation fencing. The detrimental effects of erosion can be prevented by maintaining all erosion control structures so that they can carry out their function unimpeded. Landfilled areas which are inactive will be seeded to encourage the growth of vegetation.

4.7 Access Control

Landfill operating hours are Tuesday through Saturday, 7:00 am - 3:30 pm. The Landfill is closed on Mondays, Sundays, and holidays. The Landfill's entrance gate is locked at the end of the day. The northern site perimeter is secured by natural terrain (Kalamaiki Gulch) and southern and eastern perimeters by fencing. There is no fence on the western or northern boundaries of the Landfill, but the steep terrain limits access. Landfill operations personnel have not noted any site use by recreational vehicles or other unauthorized vehicles.

4.8 Liquids Control

Landfill procedures are consistent with DOH regulations, whereby the disposal of commercial loads containing free-flowing liquids is not permitted. However, semi-solid liquids can be permitted if the liquids pass a paint filter test given by Landfill staff.

In addition, commercial loads containing liquids may be allowed if the containers can be purchased over-the-counter by a resident. Such loads require pre-scheduled arrangements with on-site staff to minimize the localized dumping of liquids in one particular cell of the Landfill. Landfill staff limits the number of such loads which may be received in one day.

4.9 Groundwater Monitoring

The Landfill is exempt from requirements of HAR 11-58.1-16, Municipal solid waste landfills -- ground water protection under the Small Landfill Exemption (see Appendix C).

The DOH has expressed flexibility in approving groundwater alternative monitoring requirements in place of a typical groundwater monitoring network. As an alternative to an expensive groundwater monitoring well network, the DOH has indicated their willingness to allow the use of moisture sensors within and beneath the waste at three selected locations within the landfill in place of monitoring wells.

4.10 Leachate Management

The site is unlined, and no leachate is collected. No leachate breakouts have been noted.

Actions to be taken by Landfill personnel to monitor the leachate breakouts and groundwater conditions are described in details in the Operations Plan (see Appendix A).

4.11 Litter Control

Landfill personnel control windblown litter using the following general procedures:

- Daily cells are built tightly by compacting trash consistently and uniformly.
- One on-site litter screen is placed downwind corner of the landfill parcel to catch anything from leaving site as well as downwind of working face.
- Confirm that on-site litter screen is in good condition and has no big holes that windblown litter can pass through.
- The area of the active landfill face is minimized.
- Employees regularly pick up trash in and around the Landfill site.
- Windblown litter should be collected and properly disposed at the end of each day.

4.12 Hazardous/ Banned Materials Exclusion

The Landfill does not accept for disposal any regulated hazardous wastes as defined in federal regulations at 40 CFR Part 261 or any PCB wastes as defined in 40 CFR Part 761. Landfill personnel make every practicable effort to prevent hazardous or unacceptable wastes from being disposed at the Landfill, by incorporating staff training, proper identification of materials, and enforcement of regulations.

Procedures for inspecting and managing hazardous or banned wastes are discussed in the Operations Plan (see Appendix A).

The following items are banned from disposal at the Landfill, and listed on a sign posted near the Landfill entrance:

- Agricultural wastes
- Asbestos (by appointment only)
- Bulk liquids
- Commercial construction and demolition debris
- Dead animals over 70 pounds
- Drums with liquids
- Untreated infectious waste
- Large appliances (white goods)
- Self-hauled yard trimmings

- Un-flattened cardboard boxes
- Vehicle batteries, tires
- Vehicles

The following materials are also banned from disposal, in accordance with federal and state regulations:

- Regulated hazardous waste
- PCB waste
- Commercial loads with greater than 75% green waste
- Residential loads with greater than 50% green waste
- Compressed gas tanks
- Radioactive waste

The Landfill currently accepts some types of special waste, including asbestos, animal carcasses under 70 pounds, contaminated foods, alcohol, and sewage wet well grease. Special wastes are pre-approved before the material is delivered to the Landfill. Landfill personnel maintain written documentation and implement specific handling procedures for each type of special waste. All records of the acceptance of special waste are kept on file at the site.

4.13 Emergency Operations

For any major or large spills, County personnel will call 911, notify the Solid Waste Superintendent (Tia Stupplebeen), and notify DOH. If necessary, people may be directed to evacuate the site and relocate upwind of the spill. Since most of the site is permeable (soil), spills may infiltrate the ground and the soil may need to be treated. If a spill is small and remediation is straightforward, the soil may be treated by County personnel under the guidance of in-house personnel or outside consultants. Larger spills will require an outside vendor to treat the soil and/or clean the spill.

The County uses internal reports to document emergencies. There have been no emergency reports specific to the Landfill. No fires have been observed at the Landfill.

4.14 Recordkeeping and Reporting

The County submits Annual Operating Reports, which include estimated disposal tonnages, to the County administration and DOH by July 31 of each year, as required. Estimated disposal tonnages are based on population estimates from the Maui County Data Book, because the Landfill does not have a scale.

The Operations Plan (see Appendix A) contains a list of records that are kept and retained at the Landfill site in accordance with local, state, and federal requirements. These include plans, reports, inspection logs, and other data related to the operation of the Landfill.

5. WASTE DIVERSION & RECYCLING

5.1 Current and Planned Activities

The Landfill does not compost green waste on site. No public composting facilities are available on the island, and so green waste delivered to the site is currently landfilled. Landfill personnel do not have the resources to provide recycling education or outreach to residents.

There is currently no curbside recycling pickup on Lanai, though there is a redemption center for bottles and cans in Lanai City as well as a gasoline filling station that recycles used motor oil.

A planned recycling facility is being developed in Lanai City by Tri-Isle Resource Conservation & Development Council, Inc. The facility will accept cardboard, newspaper, glass, aluminum, and plastic. Landfill users attempting to dispose recyclables or green waste at the Landfill will be directed to this facility or other appropriate facilities.

The County in partnership with Castle & Cooke provides Community Work Day Program at Lanai Recycling and Redemption Center to collect residential appliances, vehicle batteries, tires, small scrap metals, and related materials.

The County ISWMP recommends the following:

- Developing a better recycling facility at the Landfill site, including roll-off containers.
- Implementing curbside recycling and shipping the collected materials to a processor on Oahu or Maui. This collection would include paper, aluminum/tin, and #1 and #2 plastics. According to the ISWMP, the County currently collects household waste using an automated side loader and could use the same vehicle to collect recyclables every other week.
- Evaluating standby options for the Landfill, while maintaining and improving recycling collection and processing, including event-based collection of household hazardous waste (HHW).
- Implementing green waste collection by providing a second cart to the residents and another collection route for the collection of green waste. Containers for green waste drop-off should also be provided at the Landfill.
- Implementing compost education for Lanai residents.
- Implementing a pilot program for food waste collection. The ISWMP recommends that the Lanai Company provide equipment to process food waste collected by the County. The processed material would then be composted.

Due to the site's location, collection of recyclables at the site may not be practical. A recycling center is being developed in Lanai City, and once it begins operating, Landfill users attempting to dispose recyclables at the Landfill will be directed to this facility. The County received \$200,000 in FY08 funding to support the development of the recycling center.

5.2 Recommendations

Because of the lack of public composting options on Lanai, and in accordance with the ISWMP recommendation, we recommend that the County consider developing a green waste composting area at the Landfill site. This would also allow the Landfill to comply with 11-58.1-65(b), which requires solid waste disposal facilities to have a plan to ban or require source separation of green waste from entering the disposal

facility. If diversion of 75% of all commercially generated green waste and 50% of all residential green waste is not achieved, all green waste must be banned from the facility. A green waste processor will need to be identified and contracted before green waste collection can be implemented at the Landfill. The County is currently investigating potential processors.

6. LANDFILL CLOSURE & POST-CLOSURE PLAN

The Landfill will follow the procedures outlined in state regulations HAR 11-58.1-17, *Closure and Post-Closure Care*, for its closure and post-closure period. These procedures are described in the Lanai Landfill Closure/Post-Closure Plan (see Appendix B), which follows the requirements listed in Attachment P-4 of the Facility Operating Permit.

7. REFERENCES

1. A-Mehr, Inc., 2007. County of Maui Integrated Solid Waste Management Plan, Technical Memorandum, Task 4, Landfill Capacity and Siting.
2. Gershman, Brickner & Bratton, Inc., 2009 (final). Maui County Integrated Solid Waste Management Plan.
3. Harding Lawson Associates, 1994. Operations Manual, Lanai Sanitary Landfill.
4. R.M. Towill Corporation, 2007. Public Facilities Assessment Update, County of Maui.

8. LIMITATIONS

This document was prepared solely for the County of Maui Department of Environmental Management in accordance with professional standards at the time the services were performed and in accordance with the contract between the County and Brown and Caldwell dated June 27, 2008 and contract amendment dated November 3, 2008. This document is governed by the specific scope of work authorized by County, and is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by the County and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

APPENDIX A

Landfill Operations Plan (Bound Separately)

APPENDIX B

Landfill Closure/Post-Closure Plan (Bound Separately)

**FINAL
APPENDIX B
LANAI LANDFILL
CLOSURE AND POST-CLOSURE PLAN**



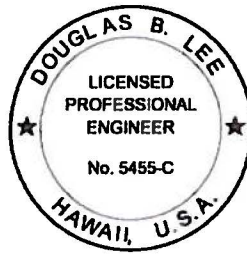
Prepared for
County of Maui
Department of Environmental Management
Solid Waste Division
December 2011

BROWN AND CALDWELL

1955 Main Street, Suite 200
Wailuku, HI 96793

FINAL
APPENDIX B
LANAI LANDFILL
CLOSURE AND POST-CLOSURE PLAN

Prepared for
County of Maui
Department of Environmental Management
Solid Waste Division
December 2011



A handwritten signature in black ink, appearing to read "Douglas B. Lee".

Douglas B. Lee, P.E.
Brown and Caldwell

This work was prepared by me or under my supervision.

BROWN AND CALDWELL

1955 Main Street, Suite 200
Wailuku, HI 96793

TABLE OF CONTENTS

LIST OF FIGURES.....	II
LIST OF ACRONYMS.....	III
HISTORY OF REVISIONS.....	IV
1. INTRODUCTION.....	1-1
1.1 Purpose and Objectives.....	1-1
1.2 Applicable Regulations.....	1-1
2. SITE DESCRIPTION.....	2-1
2.1 Location.....	2-1
2.2 Seismic Impact Zone.....	2-1
2.3 Buffer Zone to Public Areas.....	2-1
3. CLOSURE PLAN.....	3-1
3.1 Closure Procedure.....	3-1
3.2 Final Cover Design.....	3-1
3.2.1 Design Criteria.....	3-1
3.2.2 Soil Borrow Sources.....	3-2
3.2.3 Construction and Testing.....	3-2
3.2.4 Maintenance of Final Cover.....	3-3
3.3 Maximum Closure Area.....	3-3
3.4 Waste Inventory.....	3-3
3.5 Contaminant Release Log.....	3-3
3.6 Closure Schedule.....	3-3
3.7 Notification Requirements.....	3-4
4. POST-CLOSURE PLAN.....	4-1
4.1 Objective.....	4-1
4.2 Monitoring and Maintenance.....	4-1
4.2.1 Final Cover System.....	4-1
4.2.2 Surface Water Controls.....	4-2
4.2.3 Groundwater Monitoring.....	4-2
4.2.4 Landfill Gas Monitoring.....	4-3
4.2.5 Records and Reporting.....	4-3
4.3 Post-Closure Contact.....	4-3
4.4 Post-Closure Land Use.....	4-3
5. FINANCIAL ASSURANCE.....	5-1
5.1 Objective.....	5-1
5.2 Closure Costs.....	5-1
5.3 Post-Closure Costs.....	5-1

6. REFERENCES6-1

7. LIMITATIONS7-1

APPENDIX A

 Closure and Post-Closure Cost Estimate A-1

APPENDIX B

 Site Inspection Form (blank) B-1

LIST OF FIGURES

Figure 1. Site Location Map2-2

Figure 2. Existing Site Plan.2-3

Figure 3. Detail of Final Cover System.....3-2

LIST OF ACRONYMS

AMSL	above mean sea level
CFR	Code of Federal Regulations
CQA	construction quality assurance
cy	cubic yards
DOH	Department of Health
HAR	Hawaii Administrative Rules
LEL	lower explosive limit
LFG	landfill gas
NGVD	National Geodetic Vertical Datum
Plan	Closure and Post-Closure Plan
TMK	tax map key
tpd	tons per day
USDA-SCS	U.S. Department of Agriculture Soil Conservation Service
USGS	U.S. Geological Survey

HISTORY OF REVISIONS

Changes to this Plan must be certified by a professional engineer with at least 5 years' experience designing landfills, who is licensed in the State of Hawaii.

Date	Revision	Plan Sections
12/07/11	Issuance of Final Closure and Post-Closure Plan	All

1. INTRODUCTION

1.1 Purpose and Objectives

This Final Closure and Post-Closure Plan (Plan) has been developed for the Lanai Landfill (the Landfill) located on the Island of Lanai in Maui County, Hawaii. This Plan has been prepared in accordance with the requirements set forth in Hawaii Administrative Rules (HAR) Title 11, Chapter 58.1, Solid Waste Management Control, and in the Landfill's Operating Permit, issued by the Hawaii State Department of Health (DOH). The Plan describes the closure design for the Landfill and the procedures for monitoring and maintaining the Landfill during the post-closure period.

This Plan is updated every five years and whenever Landfill plans are updated or changed. Two years prior to the final receipt of waste at the Landfill, this Plan shall be finalized, including:

- Detailed engineering drawings, plans, and specifications for the construction of closure cap, surface water improvements, and other elements of final closure.
- Maintenance and monitoring requirements based on HAR 11-58.1-17 and the closure design and construction.

The DOH shall review and approve the finalized Plan prior to closure.

1.2 Applicable Regulations

The Plan is in conformance with HAR 11-58.1-17, "Closure and Post-Closure Care," HAR 11-58.1-18, "Financial Assurance," and Attachment P-4 of the DOH Solid Waste Permit Application.

2. SITE DESCRIPTION

2.1 Location

The Landfill is an unlined sanitary landfill located on the southwestern side of the island of Lanai, approximately four miles southwest of Lanai City and one mile northwest of Lanai Airport, as shown on Figure 1, Site Location Map.

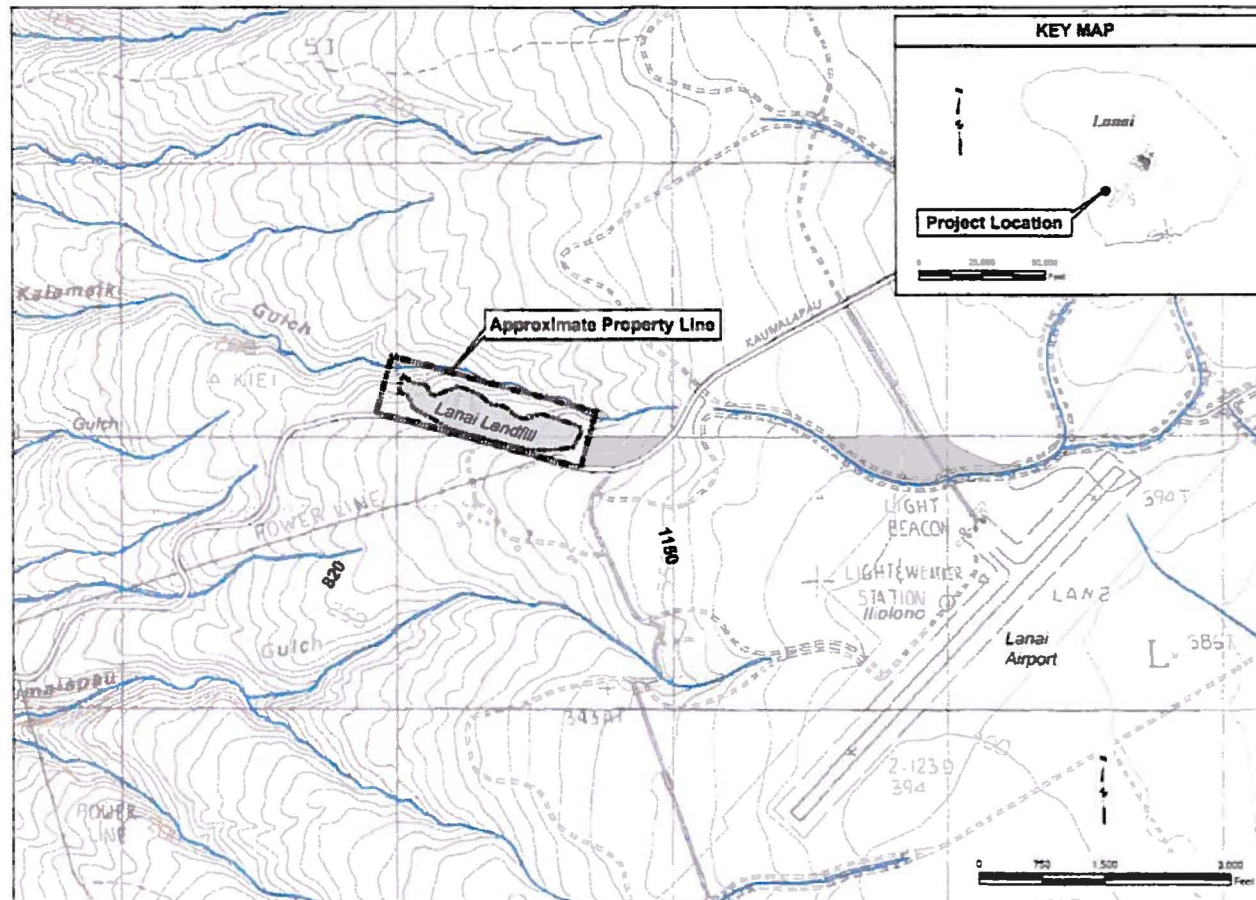
The Landfill is situated between Kaunalapau Highway on the south and Kalamaki Gulch on the north. Open range areas border the site on the east and west. The total property area of the site is 35.7 acres, of which 17.44 acres are covered by the active Landfill. The majority of the Landfill is defined by Tax Map Key (TMK) 4-9-02:01, Lot 2, which is owned by the County of Maui (the County). Adjacent parcels are owned by Castle and Cooke or one of their subsidiaries, with the exception of Kaunalapau Highway, which is owned and maintained by the State of Hawaii. The Landfill is operated by the County, and has been in operation since 1969.

2.2 Seismic Impact Zone

Because the Island of Lanai is located in a seismic impact zone (USGS, 1998), State solid waste regulations (HAR 11-58.1-13, Municipal solid waste landfills – site analysis) require that detailed static and seismic stability analysis of the final cover design be conducted prior to installing final cover on any areas of the site. This analysis shall be included with the final Closure and Post-Closure Plan that shall be submitted to the DOH for approval prior to closure construction.

2.3 Buffer Zone to Public Areas

The County minimizes impacts from litter, vectors, and odors in an impact buffer area between the active landfill area and the property boundary (see Figure 2, Existing Site Plan). The buffer zone includes the adjacent portion of Kaunalapau Highway.



Source: U.S.G.S. Topographic Map, Lanai South, Hawaii, Provisional Edition 1984
Note: Contour elevations are in meters with English units on select contours.

Figure 1. Site Location Map

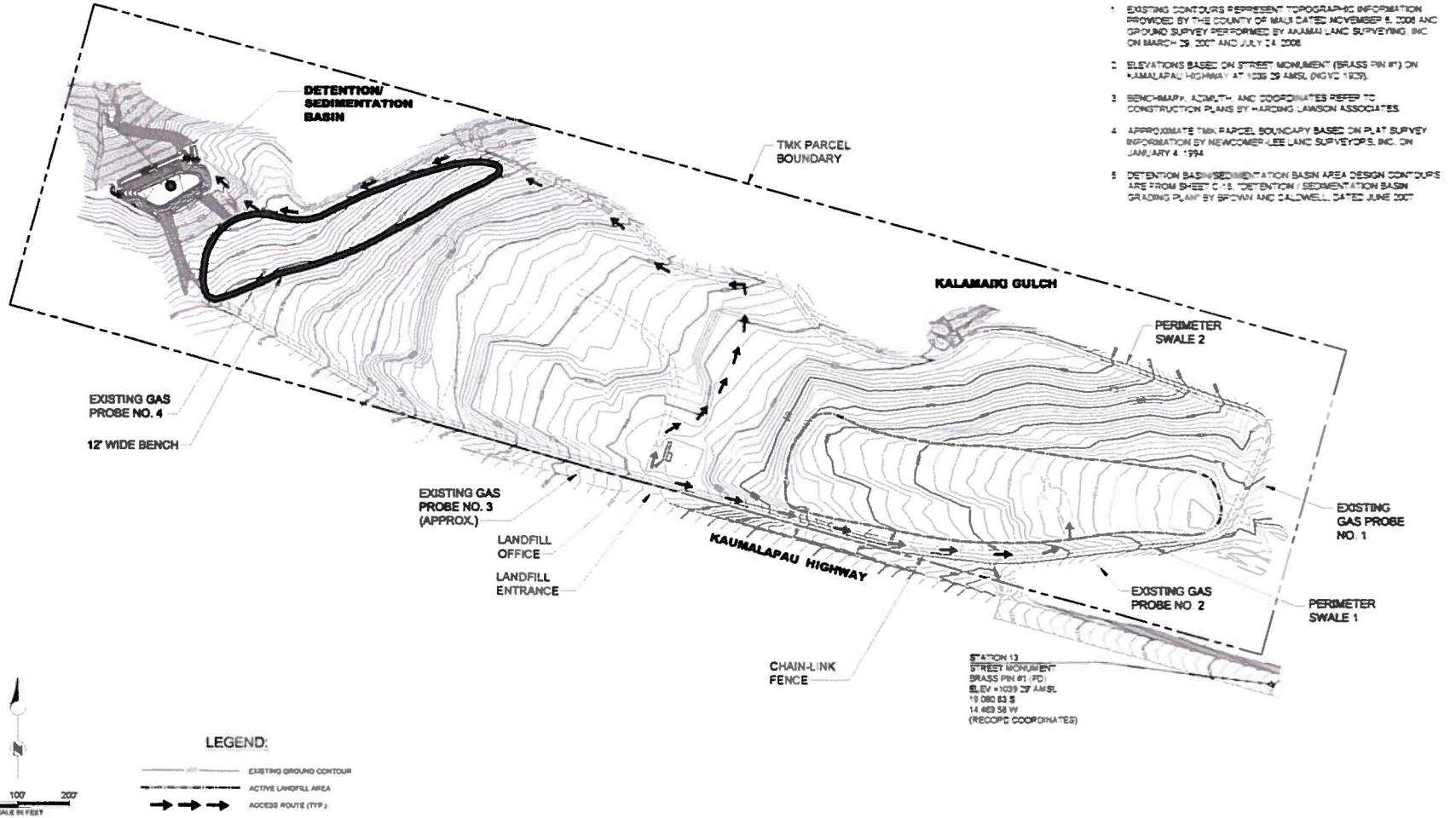


Figure 2. Existing Site Plan

3. CLOSURE PLAN

The Closure Plan identifies the necessary steps and actions the County of Maui will take to ensure that the Lanai Landfill is closed in compliance with HAR 11-58.1-17 and 11-58.1-18. The closure objective for the facility is to minimize potential threats to human health and the environment. This Closure Plan will be updated and modified as required throughout the active life of the Landfill.

There are three primary purposes of landfill closure:

- To reduce storm water infiltration into the Landfill mass by promoting runoff and transpiration, thereby reducing or eliminating leachate generation;
- To prevent the buildup and uncontrolled release of gas generated as a result of waste material decomposition within the Landfill; and
- To prevent exposure of waste matter to the environment and prevent contact with vectors.

3.1 Closure Procedure

When the Landfill ceases or becomes unable to accept solid waste under the conditions of its permit, closure of the Landfill will be conducted in accordance with State regulations, found at HAR 11-58.1-17. The steps necessary to close the Landfill at any point during its active life are outlined below.

- Submitting a Closure Notification to the DOH.
- Submitting a Final Closure/Post-Closure Plan to the DOH.
- Completing the installation of the final cover (final cover may be placed over areas of the Landfill as they reach final grade).
- Certification by an independent, licensed Professional Engineer in the state of Hawaii that closure has been completed in accordance with the approved Final Closure/Post-Closure Plan.
- Placing a notation on the property deed stating that the land has been used as a landfill.

The Operator will perform numerous tasks to satisfy the requirements for closure. Some of the tasks are a continuation of the ongoing maintenance program at the Landfill.

In addition to final cover placement, landfill closure also involves completing any remaining components of the storm water management system, erosion controls and sedimentation controls, and the installation of a landfill gas control system, if needed.

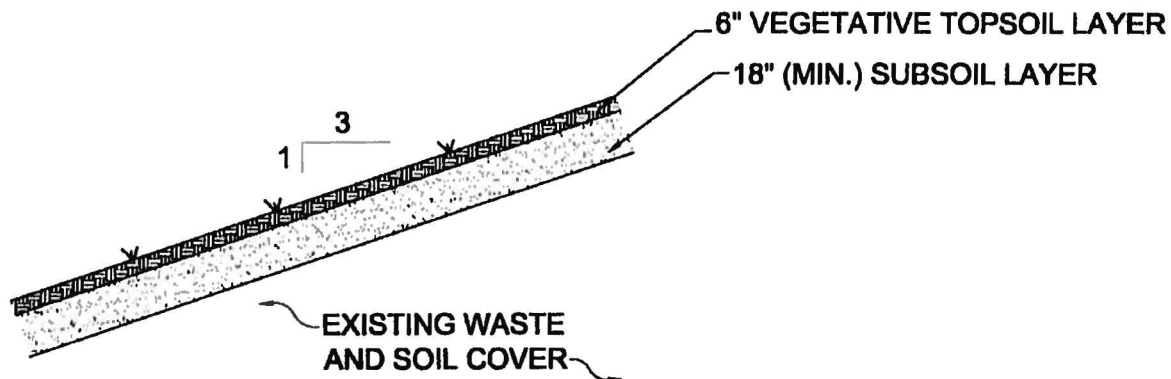
3.2 Final Cover Design

The final cover is designed to divert precipitation from completed Landfill areas, facilitate the proper control of landfill gases, if any, and to isolate waste materials from the natural surrounding environment, while minimizing erosion and accommodating settlement or subsidence.

3.2.1 Design Criteria

The final cover system is designed to minimize infiltration and erosion. This is accomplished by utilizing a multi-layered cover comprised of an erosion layer underlain by an infiltration layer. A conceptual cross-sectional detail of the final cover system is shown on Figure 3. In accordance with HAR 11-58.1-17, the lower, or subsoil layer must be a minimum of 18 inches of earthen material and have a relatively low

permeability to minimize infiltration. The upper, or vegetative topsoil layer, consists of a minimum of 6 inches of earthen material capable of sustaining vegetative growth to minimize erosion of the final cover. Grasses suitable for the local climate will be selected for planting on the vegetative layer. Grasses with shallow root zones will be selected to protect the integrity of the final cover. An alternate final cover design complying with State and Federal regulations in place at the time of final cover construction may be used in lieu of the design shown on Figure 3, as approved by the DOH.



2' FINAL COVER CROSS SECTION

NO SCALE

Figure 3. Detail of Final Cover System

3.2.2 Soil Borrow Sources

According to the 1994 Operations Manual, the surface soil near the site is classified as Uwala silty clay loam (USDA-SCS, 1972). Soil observed in on-site test pits and borings appeared to be reddish brown elastic silt, as classified by the United Soil Classification System. It is unlikely that this material will have a very low permeability. If a low-permeability material from an off-site source is not available, a geomembrane material approved by the DOH may be used in the final cover for the subsoil layer. The on-site soils appear to be adequate for sustaining vegetative growth, and may be amended with compost or fertilizer if needed for the final cover. Prior to submitting the final closure design for the Landfill, the available materials will be tested by a geotechnical laboratory and potential borrow sites identified to determine if the materials are suitable.

3.2.3 Construction and Testing

Before the final cover can be placed, the Landfill surface must be properly graded and compacted to provide a suitable foundation. The Landfill surface will be cleared of any vegetation and the existing interim cover will be compacted and prepared to form a smooth, even surface. The final cover soil layers will then be placed and compacted.

The final cover will be constructed according to plans and specifications, which will include construction quality assurance (CQA) procedures. These procedures include requirements for subgrade preparation, sampling, testing, placement, and compaction of the subsoil layer. Soils testing will be performed in two

phases: (1) laboratory testing on samples from the borrow sites and (2) field testing on the in-place cover material. A CQA plan will be prepared and submitted to the DOH prior to construction of the final cover.

3.2.4 Maintenance of Final Cover

Areas that have received final cover will be maintained to prevent erosion and ensure the integrity of the final cover. The final cover system will be repaired immediately upon the detection of any failure which may result in the release of pollutants to the environment and will be maintained and repaired during the active life of the Landfill, the closure period, and the post-closure period. In accordance with HAR 11-58.1-17, vegetative cover will be maintained for a minimum of one year following the closure of the Landfill.

3.3 Maximum Closure Area

The final cover system will be constructed over the entire waste disposal area, so the maximum final cover area will be the same as the waste disposal area, which is approximately 17.44 acres (plan area). This area is shown on Figure 2. The final cover may be installed in stages, as areas of the Landfill site reach final grades. An estimated fill phasing and final cover installation sequence is included in the final Lanai Landfill Master Plan, dated December 2011.

3.4 Waste Inventory

The waste filling area is limited by the concrete drainage swale surrounding the Landfill. The anticipated maximum landfilling elevation is approximately 1025 feet above mean sea level (AMSL). Plans showing the anticipated landfilling sequence are included in the final Lanai Landfill Master Plan, dated December 2011. According to these fill plans, the maximum amount of waste on site will be at the time of final closure, when the approximate volume will be approximately 395,000 cubic yards (cy), and the approximate weight will be 237,000 tons, assuming an in-place density of 0.6 ton/cy.

3.5 Contaminant Release Log

The Final Closure and Post-Closure Plan will include a contaminant release log that represents the life of the site, including results of any environmental sampling at the site. There have been no contaminant releases at the site as of March 2009.

3.6 Closure Schedule

The Landfill will continue to operate until the final grades shown in the Lanai Landfill Master Plan are achieved. Upon reaching capacity, the Landfill will be closed for receipt of additional wastes. The County shall begin closure activities within 30 days of final receipt of waste, unless the DOH grants a time extension under HAR 11.58-1.17(a)(6). Prior to beginning closure operations, a notice of intent to close the Landfill will be placed in the operating record and the DOH will be notified.

Closure activities shall be completed within 180 days after closure begins, unless the DOH grants a time extension under HAR 11.58-1.17(a)(7). This period includes a two-month period for refuse grading, two weeks for landfill gas control system installation (if needed), and three months for landfill final cover system placement.

Following the certification of closure construction, the County will implement the post-closure care as provided in the Post-Closure Plan (see Section 4).

3.7 Notification Requirements

Throughout the life of the landfill, the County of Maui will maintain the Closure Plan in the Landfill's operating record and will inform the DOH when the following items have been modified or added to the operating record:

- This Closure Plan,
- Notice of intent to close the Landfill, and
- Closure certification(s) performed by a licensed Professional Engineer.

A Professional Engineer licensed in the State of Hawaii shall supervise closure construction, and upon completion, submit a summary report to the DOH certifying that construction conforms to the approved plans and specifications. The report shall include:

- A construction quality control program for the installation of the final cover,
- The quality assurance/ quality control testing procedures and laboratory analyses, and
- Engineer's certification of construction.

In addition, the County of Maui will submit a notation on the deed to the landfill property that the property has been previously used as a landfill facility. The DOH Chief of the Solid and Hazardous Waste Branch will be notified when this notation has been placed on the deed and in the Landfill's operating record.

4. POST-CLOSURE PLAN

4.1 Objective

This chapter describes the maintenance and monitoring procedures required for post-closure care of the Landfill. The post-closure period will begin when the DOH issues a written determination that the closure of the facility has been completed in accordance with the terms and conditions of the Facility Operating Permit. In accordance with 40 Code of Federal Regulations (CFR) Part 258.61, post-closure care must be conducted for 30 years. However, the post-closure care period may be reduced if the County can demonstrate that the reduced period is sufficient to protect human health and the environment and is approved by the DOH. Components of the Landfill closure that will require maintenance and monitoring include the final cover, drainage control system, and landfill gas (LFG) monitoring system.

The County will provide post-closure administration and operations for the Landfill as directed by DOH. During the post-closure period, the following actions will be performed:

- The final cover will be routinely inspected to ascertain its condition and continued function. Corrective action must be performed if required, including the cleaning of diversion berms, perimeter swales and side slope channels, re-seeding and fertilizing bare spots in the vegetative cover, and repairing any breaches that may occur in the cover.
- The landfill gas monitoring program must continue during the post-closure period.
- Access roads for the Landfill must be maintained to assure unimpeded access to, around, and on the closed landfill.
- Permanent benchmarks and survey control monuments will be established and maintained, and marks establishing the outermost limits of waste deposition areas will be installed.

4.2 Monitoring and Maintenance

Post-closure maintenance and monitoring activities will be performed as required to maintain the long-term integrity of the closed landfill and protect public health. Because of the remote location of the landfill relative to the population center of the island, the arid climate, and the lack of a threat to the current potable water supply, site inspections of the closed landfill may be conducted annually after an initial period of quarterly inspections and at the discretion of solid waste division personnel following major events (i.e. ten-year storms, earthquakes, etc.) that could affect the integrity of the closed landfill. Reports will be filed following each inspection.

The frequency and responsibilities of post-closure monitoring and maintenance activities will be evaluated every five years until monitoring activities are no longer required to protect public health and the environment. The DOH may periodically require revisions to the Post-Closure Plan.

This section includes a description of the post-closure monitoring and maintenance activities and the frequency at which these activities will be performed.

4.2.1 Final Cover System

Maintenance of the final cover system will be performed quarterly and will include removing trees and other plants with deep root systems. This maintenance activity may be contracted out to a landscape company. Areas disturbed by the removal operations will be re-graded and re-vegetated.

The final cover will be planted with vegetation appropriate to the area. This vegetative cover will require periodic mowing to inhibit the growth of volunteer species that could penetrate and damage the final cover. If during site inspections, the upper 6 inches of the cover appears to be eroding and/or the vegetation disappearing, the cover will be replaced, re-graded, and re-vegetated.

As refuse degrades within the landfill, settlement may occur, which may create cracks or openings in the landfill cover or create ponding of surface water. If settlement becomes evident, the cover will be rebuilt, re-graded and/or re-vegetated as needed, in accordance with the closure plans and specifications.

Visual inspections for differential settlement, subsidence, erosion, and vegetation stress will be performed on a quarterly basis for the first year following closure. Inspections will also take place following a significant rainfall event, which is defined as a storm which meets or exceeds the design storm identified in the Closure Plan. Visual observations will be recorded on inspection forms which will be used for reporting purposes; a sample final cover inspection form is included in Appendix B. Maintenance or repairs identified during the inspections will be performed within 90 days.

4.2.2 Surface Water Controls

Inspection and maintenance of the surface water drainage system will ensure that surface water is properly diverted away from the landfill and that it does not contribute to leachate production. The drainage control system may contain vegetated ditches or swales and stone-lined letdown channels as needed to convey surface water from the final cover. A final design will be developed and provided to the DOH prior to landfill closure.

The drainage control system will be inspected quarterly. Because the final cover and the drainage system are closely related, visual inspections for the drainage control system can be done simultaneously with the final cover inspections. Stormwater control structures will be inspected annually and following major storm events (as determined by County Solid Waste Division personnel). If erosion occurs in vegetated areas, repairs will be made as needed by regrading or reshaping the area, adding soil if necessary, and re-seeding the area. Vulnerable areas may need additional erosion control, such as erosion control fabrics or rip-rap. The deposition of solids or debris may prevent channels from effectively conveying surface water so, they may require periodic cleaning.

Items that will be noted during the surface water control inspection include: erosion, excessive differential settlement or ponding, blockage, overtopping, sediment buildup, debris, weeds, washout, dislodged riprap, and other problems. Portions of the system that are in need of repair or maintenance will be noted and the work will be performed within 90 days. Anticipated maintenance or repair items include removal of sediments or debris, cleaning of culverts and letdown channels, and re-grading swales. Maintenance of access roads may require repair of any potholes and ruts that are noted during the visual inspections. These will also be repaired within 90 days.

4.2.3 Groundwater Monitoring

The Landfill is operated under a Small Landfill Exemption, which applies to facilities with a waste intake of less than 20 tons per day (tpd). The Small Landfill Exemption exempts the Landfill from requirements of HAR 11-58.1-14, Municipal solid waste landfills – design criteria, and HAR 11-58.1-16, Municipal solid waste landfills -- groundwater protection. Therefore, no groundwater monitoring is performed at the Landfill site.

The DOH has expressed flexibility in approving groundwater alternative monitoring requirements in place of a typical groundwater monitoring network. As an alternative to an expensive groundwater monitoring well network, the DOH has indicated their willingness to allow the use of moisture sensors within and beneath the waste at three selected locations within the landfill in place of monitoring wells.

4.2.4 Landfill Gas Monitoring

Regulations under HAR 11-58.15, Municipal solid waste landfills -- operating criteria establish allowable limits for concentrations of LFG at the Landfill boundary and within structures on the Landfill. These are 5% and 1.25% methane (the lower explosive limit {LEL} and 25% LEL), respectively. Because there are no structures on the Landfill property where LFG can accumulate, the criteria for methane in facility structures is not applicable. Four LFG probes are in place at the Landfill, and LFG quarterly monitoring will be performed during the post-closure period, in the same manner as during the Landfill's active life, until it is established that the potential for LFG migration no longer poses a threat. The results will be reported on the form provided in the Landfill's Operations Plan.

During the post-closure period, the LFG probes will be routinely inspected, and any defects that are observed during the inspection will be expediently addressed. Probes or protective outer casings that have been damaged will be repaired. If a probe has been damaged so severely that is rendered useless, it will be abandoned and replaced.

4.2.5 Records and Reporting

All records of post-closure site inspections will be kept on file at the Central Maui Landfill office.

4.3 Post-Closure Contact

The contact person for the facility during the post-closure period will be updated prior to beginning closure activities. Currently, the contact person is:

Mr. Tracy Takamine
Chief, Solid Waste Division
County of Maui
2200 Main Street
One Main Plaza, Suite 225
Wailuku, HI 96793
Telephone: (808) 270-7875

4.4 Post-Closure Land Use

State regulations require that post-closure use of the property shall not disturb the integrity of the final cover or any other components of the containment system, or the function of the monitoring systems, unless the owner or operator demonstrates that disturbance of the final cover or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.

It is not expected that the surrounding land will be developed, nor is it intended that the Landfill site be used for any specific purpose during the post-closure period. A notation will be placed on the deed that will state that the land was previously used as a landfill.

5. FINANCIAL ASSURANCE

5.1 Objective

In accordance with HAR 11-58.1-18, this section provides cost estimates for closure and post-closure care. The County shall maintain and update this information on an annual basis.

The County has primary responsibility for payment of closure costs. Capital costs for final cover construction are estimated to be approximately \$8.1 million (in 2011 dollars). Post-closure care of the Landfill is estimated to cost approximately \$85,540 per year. A detailed cost breakdown is presented in Appendix A. The County will provide financial assurance mechanisms prior to the installation of any final cover, as required by HAR 11-58.1-18.

5.2 Closure Costs

Closure costs will include installation of the final cover system and surface water control structures. The total estimated closure cost is approximately \$8,067,100. For a more detailed cost estimate, see Appendix A.

5.3 Post-Closure Costs

Post-closure monitoring and maintenance of the Landfill will involve the costs associated with maintaining the surface of the Landfill and conducting the environmental monitoring programs. The costs are based on an assumed post-closure period of 30 years. A summary of the post-closure costs is provided below. A more detailed cost estimate is provided in Appendix A.

Post-Closure Costs

Maintenance	\$74,065
Soil Gas Monitoring	<u>\$860</u>
ANNUAL POST-CLOSURE SUBTOTAL	\$74,925
Sales tax, 4.16%	\$3,121
Contingencies, 10%	<u>\$7,493</u>
ANNUAL POST-CLOSURE TOTAL	\$85,539
POST-CLOSURE TOTAL OVER 30 YEARS	\$2,566,170

6. REFERENCES

1. Harding Lawson Associates, 1994. *Operations Manual, Lanai Sanitary Landfill*.
2. U.S. Department of Agriculture Soil Conservation Service (USDA-SCS), 1972. *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*.
3. U.S. Geological Survey (USGS), 1998. *Seismic Hazard Maps for Hawaii*.

7. LIMITATIONS

This document was prepared solely for the County of Maui Department of Environmental Management in accordance with professional standards at the time the services were performed and in accordance with the contract between the County and Brown and Caldwell dated June 27, 2008 and contract amendment dated November 3, 2008. This document is governed by the specific scope of work authorized by County, and is not intended to be relied upon by any other party except for regulatory authorities contemplated by the scope of work. We have relied on information or instructions provided by the County and other parties and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

APPENDIX A

Closure and Post-Closure Cost Estimate

Appendix A
LANAI LANDFILL
LANAI, HAWAII
ESTIMATED CLOSURE/POST-CLOSURE COST SUMMARY
DECEMBER 2011

The following closure costs are associated with final capping of the Lanai Sanitary Landfill. The total plan area requiring final cap construction is approximately 17.5 acres, based on the December 2011 Master Plan prepared by Brown and Caldwell. The post-closure cost estimate assumes a post-closure period of thirty (30) years. All costs are given in 2011 dollars.

CLOSURE COSTS

Item	Unit	Unit cost	Quantity	Total cost
Design, Bid documents, and Construction management	AC	\$ 5,300	17.5	\$ 92,750
Contractor's Health & Safety Plan	LS	\$ 74,300	1	\$ 74,300
Site Preparation	LS	\$ 148,500	1	\$ 148,500
Temporary and environmental controls	LS	\$ 44,600	1	\$ 44,600
	SUBTOTAL			\$ 360,150
<u>18" clay layer</u>				
Material FOB site	CY	\$ 35.00	48,400	\$ 1,694,000
Place and compact	CY	\$ 13.00	48,400	\$ 629,200
field testing	LS	\$ 37,200	1	\$ 37,200
	SUBTOTAL			\$ 2,360,400
<u>6" vegetative layer</u>				
Material FOB site	CY	\$ 21.50	16,133	\$ 346,867
Place and compact	CY	\$ 10.60	16,133	\$ 171,013
	SUBTOTAL			\$ 517,880
<u>Erosion control</u>				
Hydroseed/ mulch	AC	\$ 35,000	17.5	\$ 612,500
Erosion control matting	SF	\$ 1.06	871,200	\$ 923,472
	SUBTOTAL			\$ 1,535,972
Temporary Irrigation	LS	\$ 159,200	1	\$ 159,200
	TOTAL			\$ 4,774,402
Contractor's field management, 5%				\$ 238,720
Contractor's overhead and profit, 18%				\$ 859,392
Area allowance, 25%				\$ 1,193,601
	CLOSURE SUBTOTAL			\$ 7,066,115
Sales tax, 4.166%				\$ 294,374
Contingencies, 10%				\$ 706,611
	CLOSURE TOTAL			\$ 8,067,101

Appendix A
LANAI LANDFILL
LANAI, HAWAII
ESTIMATED CLOSURE/POST-CLOSURE COST SUMMARY
DECEMBER 2011

ANNUAL POST-CLOSURE COSTS

Item	Unit	Unit cost	Quantity	Total cost
<u>Maintenance</u>				
Mowing	AC	\$ 220	17.5	\$ 3,850
Soil for erosion repairs	CY	\$ 21.5	10	\$ 215
Hydroseed/ mulch	AC	\$ 35,000	2	\$ 70,000
SUBTOTAL				\$ 74,065
<u>Soil Gas Monitoring</u>				
Field analysis costs	EA	\$ 215.00	4	\$ 860
SUBTOTAL				\$ 860
ANNUAL POST-CLOSURE SUBTOTAL				\$ 74,925
Sales tax, 4.166%				\$ 3,121
Contingencies, 10%				\$ 7,493
ANNUAL POST-CLOSURE TOTAL				\$ 85,539
POST-CLOSURE TOTAL OVER 30 YEARS				\$ 2,566,166
TOTAL CLOSURE and POST-CLOSURE COSTS				\$ 10,633,267

APPENDIX B

Site Inspection Form (blank)



Lana'i Landfill Final Cover Inspection Record

Date _____ Day _____ Time _____

Personnel on duty: _____

Attendant (responsible for recording operations): _____

Attendant's Signature

Erosion Control

Is there any evidence of erosion of perimeter road?	Yes	No
Approximate sediment depth in detention basin:	_____	inches
If greater than 1/3 basin depth, was basin cleaned out?	Yes	No
Approximate sediment depth in perimeter swales:	_____	inches
If greater than 3 inches, were swales cleaned out?	Yes	No
Are other stormwater control channels functioning as designed?	Yes	No
Was there evidence of erosion on any vegetated cover areas?	Yes	No
Was there evidence of erosion on any non-vegetated areas?	Yes	No

Settlement

Is there any differential settlement within the final cover area?	Yes	No
Is there any ponding within the final cover area?	Yes	No

Additional comments/ Unusual observations:

Repairs/ actions needed (to be completed within 90 days):

APPENDIX C

Application for Small Landfill Exemption

DEPARTMENT OF HEALTH
APPLICATION FOR THE SMALL LANDFILL EXEMPTION

Instructions for the
Application for the Small Landfill Exemption
(Less than 20 Tons of Municipal Solid Waste
Daily, Annual Average)

Owners or operators of new, existing, and lateral expansions of small Municipal Solid Waste Landfill (MSWLF) units that dispose of less than 20 tons of municipal solid waste daily in the small MSWLF unit based on an annual average may be exempt from Subparts D, Design Criteria, of the federal regulations 40 CFR 258, "Criteria for Municipal Solid Waste Landfills". The exemption exists so long as the facility serves a community that has no practicable waste management alternatives, and the facility is located in an area that receives less than or equal to 25 inches of annual average precipitation. Requests for exemptions under subsection 9(f) of this section may be approved by the Director of the Department of Health, upon demonstration of compliance with these criteria. An exemption request may be denied by the Director, if it is determined that granting the exemption could result in a substantial threat of ground-water contamination, based upon information made available from the applicant or agency files.

Please note, facilities which have an approved "Small Landfill Exemption" will still have to comply with the location standards, the operating criteria, ground-water monitoring and corrective action, closure and post-closure care requirements, and the financial assurance requirements appropriate to these activities.

Part A – General Data

Once an application has been submitted with all of the attachments, it is considered to be technically complete. At that time, the Department of Health will have 180 days to complete a review of the request. A written response will be prepared by the DOH accepting or denying the request. Denials shall be accompanied with the reasons for the denial.

Facility is either existing or proposed

If the facility is existing, give the date that the facility was established. In addition, give an estimate as to what percentage of the landfill area will remain open after the effective date of EPA's Subtitle D (October 9, 1993). Please describe what percentage of the sectors will remain unused and will receive waste after October 9, 1993. Provide a drawing of the facility, to a reasonable scale, identifying the nearby surroundings, and with a north arrow. For existing landfills, identify the open and closed areas. References may be made to requested information already on file with the Department.

If the facility is proposed, then please give the date on which the permit application was or will be sent to the Department of Health for review.

Part B – Attachments

Three attachments must be submitted along with this application. Failure to submit any of the required attachments will render this application incomplete. They are as follows:

1. Annual Average Tonnage Report, Attachment 1;
2. Waste Management Alternatives Report, Attachment 2; and
3. Annual Average Precipitation Report, Attachment 3.

These attachments must be completed in order for processing of the exemption to commence.

STATE OF HAWAII
DEPARTMENT OF HEALTH
APPLICATION FOR THE SMALL LANDFILL EXEMPTION

PART A – GENERAL DATA

Failure to complete all entries and provide all necessary attachments will delay processing the application. Please type or print in black ink.

Permit No.: LE-0009-10

TYPE OF FACILITY

Facility is either (mark one): and Existing facility or
 a proposed facility

Applicant is a (check one): County Other

Owner of Facility: County of Maui, Solid Waste Division

Operator of Facility: County of Maui, Solid Waste Division

Applicant or Site Name: Lanai Sanitary Landfill

Mailing Address: 2200 Main St., Suite 225, Wailuku, Maui, Hawaii 96793

Contact: Mr. Tracy Takamine

Phone No. (808) 270-7881

SITE INFORMATION

Physical location: Kaumalapau Highway, Lanai County: Maui

Geographic Coordinates (if known): 20°48'N/156°58'W

PERMITS AND LICENSES

List any other existing permits or licenses issued by this or any government agency, whether local, state, or federal, which pertain to this facility, for example: a demonstration of compliance from the National Pollution Discharge Elimination System (under the Clean Water Act, §402, as amended).

- 1) A Permit Application for Solid Waste Management Facility
- 2) Extension of Notice of General Permit Coverage (NGPC) for storm water runoff associated with industrial related activities, File No. R50A625 until the new NGPC is completely issued.

- 3) Notice of General Permit Coverage (NGPC) for storm water runoff associated with construction activities, File No R10C914.

(Attach additional sheet if necessary)

SITE OPERATIONS AND SPECIFICATIONS

The following information shall be provided:

- Facility is: 17.44 acres in size based on the edge of the perimeter swales right next to the landfill perimeter access road.
- Approximate percentage of total permitted landfill area remaining open after October 9, 1993: 100
- Approximate percentage of total permitted landfill area remaining unused after October 9, 1993: 0
- Facility will service approximately: 3,000 persons.
- Facility will receive an average of approximately: 8.9 tons per day of municipal waste based on Annual Operating Report FY 11.
- Facility's estimated life is approximately: 27 years from the date of this application. Note: This is based on airspace utilization rate of 13,400 CY/YR, taken from Technical Memorandum "Task 4, Landfill Capacity and Siting" by A-Mehr, Inc. dated June 2007 and the remaining airspace of 368,678 CY as shown on Annual Operating Report FY 11.
- Provide a drawing of the facility, to a reasonable scale, identifying the nearby surroundings, and with a north arrow. For existing landfills, identify open and closed areas. (See Figure 1 – Lanai Landfill Facility Site Plan)

PART B – ATTACHMENTS

The following attachments are required by the Department of Health. These attachments must be submitted along with this application; failure to submit any of the required attachments will render this application incomplete.

1. Annual Average Tonnage Report
2. Waste Management Alternatives Report
3. Annual Average Precipitation Report

ATTACHMENT 1 – Annual Average Tonnage Report

Instruction

It is recognized that there are many instances in the operation of landfills where scales cannot be used to determine the weight of the materials that the landfill receives. In these cases, provide a discussion on how to average tonnage was determined using such information as loads delivered per day, and densities for various waste materials. Daily cell volumes and estimated densities may also be used provided they are supported by a discussion of the estimation method.

If the facility handles greater than 20 tons/day/average year, then an appropriate description of the methods to be in place to limit the waste to less than 20 tons/day/average should be included. This could, perhaps, mean the use of a community compost center, recycling center, or diversion of specific waste streams.

Response

The annual average tonnage report below is based upon the most current Lanai Landfill annual operating report (July 1, 2010 to June 30, 2011).

According to the Landfill operator, the types of solid waste received are as follows:

1. Commercially Hauled Waste
Commercially hauled waste and green waste were received from 26 commercial customers, a 25% increase over last year, which included: four state agencies, construction and engineering companies, a restaurant, store, communication companies, oil company, service station, the local waste hauler, and Lanai Company. Lanai Waste Removal and Lanai Company continue to be the largest customers as in previous year.
2. Residential (County-hauled)
The County provides once a week pick-up for 651 residential accounts, down 2%, reversing last year's 3% increase, and continuing the downward trend of the previous two years.
3. Residential Self-haul
Lanai Landfill serves an island which has seen a decrease in population due to lay-off. Assume the same proportion of decrease in households as for residential customers, the number of occupied households then has decreased from 841 to 824.

4. Special Waste
0.76 tons of asbestos was received this year.

5. Recoverable Waste
16.62 tons of green waste hauled by commercial customers and small amounts from residents were received for a total of an estimated 20 tons

Table 1 – Annual Average Tonnage Report – July 1, 20010 to June 30, 2011

Name of Landfill: Lanai Sanitary Landfill

Permit No.: LF-0009-10

Waste Type	Tonnage	Distribution
Municipal Solid Waste (MSW) from Commercial Sources	2,005.2	62.03%
MSW: Residential – County refuse trucks	936.6	28.97%
MSW: Residential (824-651=173) HH x 60 lbs x 52 weeks	269.9	8.35%
Special Waste	0.8	0.02%
Recoverable Waste (Green waste)	20.0	0.63%
TOTAL	3,232.5	100%
Average Tonnage of Solid Waste Received : 3,232.5 tons per year = 8.9 tons per day		

Note: HH = household

Since all wastes are mixed together, one density was used to calculate the volume of waste landfilled. The average density of mixed waste was assumed to be 600 lbs per cubic yard (lbs/CY). The total waste volume is therefore [3,232.5 tons] x [2,000 lbs/ton] ÷ [600 lbs/CY] = 10,775 CY. Add 25% for soil cover volume = 10,775 x 0.25 = 2,694 CY for a total of 13,469 CY.

ATTACHMENT 2 – Waste Management Alternatives Report

INSTRUCTIONS FOR REPORT

This report should include an appropriate demonstration that either:

- a) Additional costs of available alternatives are estimated to exceed 1 percent of the community's budget for all public services; or
- b) Haul distance to alternative sites are unreasonably long; or
- c) All other alternatives are not feasible to implement, given the community location and economic condition.

The Preamble to EPA's Subtitle D defines the term "practicable waste management alternative" to mean another landfill transfer station, materials or resource recovery facility that may serve a reasonable substitute for the MSWLF facility currently employed for disposal.

If demonstration **a)** is chosen, documentation should be submitted to demonstrate that the additional costs of available alternates are estimated to exceed 1 percent of the community's budget for all public serves. This can include a statement prepared by the community that a chosen alternative exceeds the community's budget by 1 percent.

If demonstration **b)** is chosen, the applicant should make a statement on what the anticipated haul distance would be to another permitted facility and what is this economic implication of this long haul distance to the community served.

If demonstration **c)** is chosen, the applicant should make a statement on what alternatives have been considered and why they are not feasible to implement.

Response

The Applicant has chosen to demonstrate that the haul distance to alternative solid waste disposal sites are unreasonably long (Demonstration B).

The closest, permitted, alternative landfill is the Central Maui Landfill located on Maui. The approximate distance from Lanai Sanitary Landfill to Central Maui Landfill is 7.5 miles of on-land travel. Although the distance is not great, transport between the landfills requires the use of a barge to cross Auau Channel.

A Practicable Disposal Alternative analysis was performed for Lanai Sanitary Landfill in 1994 by Harding Lawson Associates for the Landfill's original Small Community Exemption application. The 1994 analysis concluded the cost to transfer solid waste from Lanai Sanitary Landfill to Central Maui Landfill would cost \$339 to \$372 per ton (accounting for inflation, the cost today could exceed \$800 per ton) and was not considered economical. The alternative also requires the development of a transfer station at the Lanai Sanitary Landfill site, purchasing transfer vehicles to transport solid waste, transfer to Maui by barge, and additional transport from the point of unloading to the Central Maui Landfill.

A copy of the 1994 Practicable Disposal Alternative analysis is provided as Appendix A.

ATTACHMENT 3 – Annual Average Precipitation Report

1. Location on Rainfall Isohyet Map

This demonstration is based on the use of rainfall isohyet maps. If the landfill is located clearly outside of the 25” precipitation line, then mark an “X” in the appropriate location of the facility on the Map. Rainfall isohyet maps are available through the State Department of Land and Natural Resources.

Response: See Figure 2 – Average Annual Rainfall Isohyetal Map.

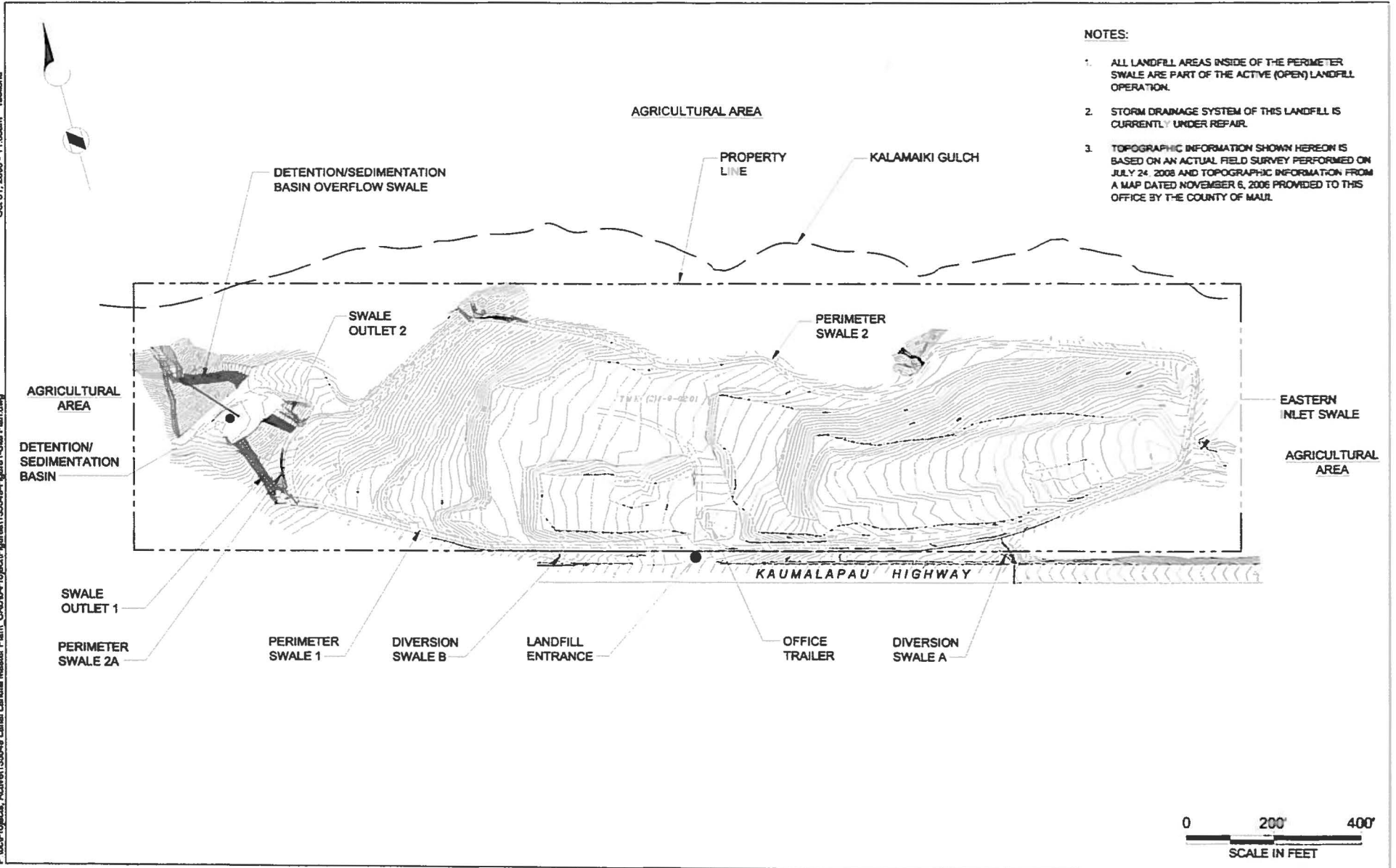
or

2. Input rainfall data for a thirty year period

If the landfill is located along the 25-inch precipitation line or if there is some question as to whether the annual average amount of rainfall received is less than 25 inches, then available data for the last thirty years must be submitted to the Department. It should be prepared in such a format to demonstrate that the annual average over a thirty year period does not exceed 25 inches. The location, owner and operator, and type of recording station should be included within this report.

Oct 31, 2008 - 11:05am realbra

P:\Use\Projects_Active\135649 Lanai Landfill Master Plan_CADD\0-Project\Figures\Figure 1-Site Plan.dwg



NOTES:

1. ALL LANDFILL AREAS INSIDE OF THE PERIMETER SWALE ARE PART OF THE ACTIVE (OPEN) LANDFILL OPERATION.
2. STORM DRAINAGE SYSTEM OF THIS LANDFILL IS CURRENTLY UNDER REPAIR.
3. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON JULY 24, 2008 AND TOPOGRAPHIC INFORMATION FROM A MAP DATED NOVEMBER 6, 2006 PROVIDED TO THIS OFFICE BY THE COUNTY OF MAUI.

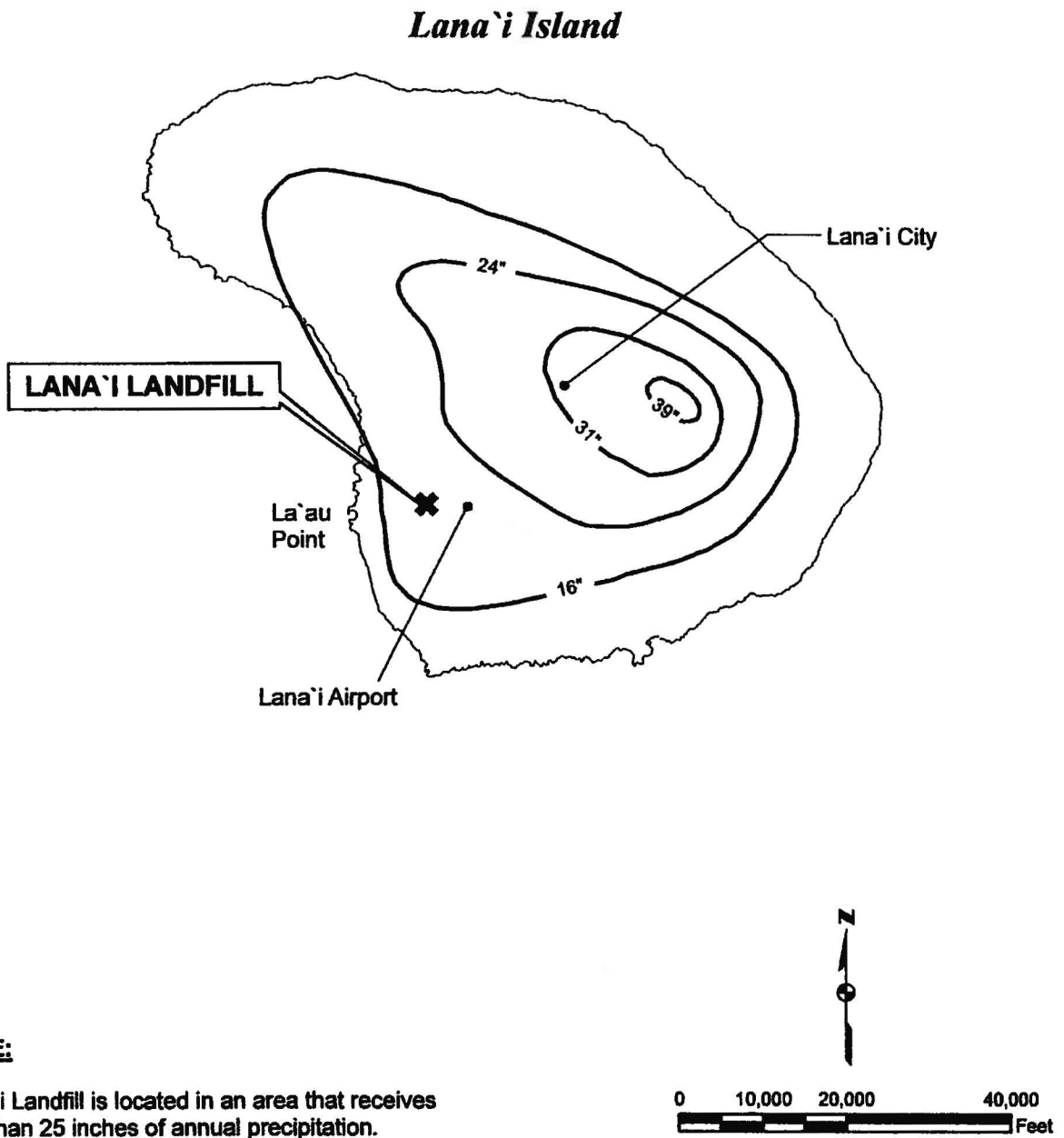


BROWN AND CALDWELL

**FIGURE 1
LANAI LANDFILL FACILITY SITE PLAN**

SOURCE:

Giambelluca, T.W., et.al., 1986.
Rainfall Atlas of Hawaii.
Report R76. Water Resources Research Center,
University of Hawaii, June.



Map Document: (P:\bc\Projects_Active\135549_Lana'i Landfill Master Plan\GIS\mxd\Lana'i Rainfall.mxd)
10/29/2008 - 9:32:48 AM

**BROWN AND
CALDWELL**

Figure 2
Average Annual Rainfall Isohyetal Map
Lana'i Hawaii

APPENDIX A

**1994 Practicable Disposal Alternative Analysis by Harding Lawson
Associates**

CONTENTS

1.0	INTRODUCTION	B-A-1
2.0	DISPOSAL ALTERNATIVES	B-A-3
2.1	Alternative 1A Disposal at Central Landfill Using Tractor Trailers	B-A-3
2.1.1	Transfer Station	B-A-3
2.1.2	Land Transportation	B-A-4
2.1.3	Barge Transportation	B-A-5
2.1.4	Disposal at Central Landfill	B-A-5
2.2	Alternative 1B - Disposal at Central Landfill Using Shipping Containers	B-A-6
2.3	Alternative 2 - Incineration of Refuse at H-Power	B-A-7
2.3.1	Transfer Station	B-A-7
2.3.2	Land Transportation	B-A-7
2.3.3	Barge Transportation	B-A-8
2.3.4	Incineration at H-Power	B-A-8
2.4	Alternative 3A - Disposal of Refuse in a New Lanai Landfill	B-A-8
2.5	Alternative 3B - Disposal of Refuse in the Existing Lanai Landfill	B-A-9
3.0	COMPARISON OF DISPOSAL ALTERNATIVES	B-A-10

TABLES

B-A-1	Cost Analysis for Central Landfill Alternative 1A
B-A-2	Cost Analysis for Central Landfill Alternative 1B
B-A-3	Cost Analysis for H-Power Alternative
B-A-4	Cost Analysis for New Landfill Alternative
B-A-5	Continue Operation at Existing Landfill Alternative

1.0 INTRODUCTION

The Lanai Landfill would be exempted from requirements included in Subpart D—Design Criteria, and qualify for a two-year extension of the effective date for all requirements of RCRA Subtitle D if it qualifies for a small community exemption. (The extended effective date is October 9, 1995.) In order to qualify for this exemption a landfill must meet the following criteria:

- Must receive less than 20 tons per day (tpd) of refuse.
- Have no evidence of contributing to groundwater contamination.
- Receive 25 inches or less of precipitation.
- Serve an area where no practicable disposal alternatives exist.

The island of Lanai meets the first requirement, as the current disposal rate is estimated at 17 tpd. It is projected that the planned implementation of waste diversion programs will decrease the amount of waste landfilled in the coming years. In reference to the second requirement, possible adverse impacts to groundwater use due to the landfill are minimal because the groundwater beneath the proposed site is brackish and is unfit for human consumption or agricultural use.* This basal unconfined aquifer is hydrologically downgradient of the high-level body aquifer from which Lanai's domestic and agricultural water supply is obtained. There is no evidence of groundwater contamination. The site meets the third criterion since the mean annual rainfall for the area of the proposed facility site is 15 inches. Thus, the remaining criterion, requiring study for the qualification for a small community exemption determination, is whether there are practicable disposal alternatives to landfilling.

* Yuen, George A.L. and Associates (Yuen). 1990. *Water resources protection plan*. State of Hawaii, Department of Land and Natural Resources, vols. I and II.

The following alternatives will be evaluated as practicable disposal alternatives to landfilling:

- Alternative 1A - Construct a transfer station on Lanai and transport waste off-island, disposing of the refuse at Central Landfill on Maui. Tractor trailer units would be used.
- Alternative 1B - Identical to Alternative 1A except shipping containers would be used.
- Alternative 2 - Incinerate the refuse at H-Power on Oahu.
- Alternative 3A - Landfill refuse at a new Lanai Landfill.
- Alternative 3B - Landfill refuse at the existing Lanai Landfill.

For simplicity, costs for the waste diversion processes and costs for closure and postclosure monitoring of the existing landfill are not included in the following disposal cost analysis because costs would be similar for each alternative.

2.0 DISPOSAL ALTERNATIVES

2.1 Alternative 1A Disposal at Central Landfill Using Tractor Trailers

Under the Central Landfill alternative, a transfer station would be built on Lanai, where County collection vehicles, commercial handlers and citizens can drop off refuse and County employees can prepare the refuse for transport off-island. At the transfer station, refuse would be compacted and loaded into closed-top trailers, transported to Kaumalapau Harbor, shipped to Kahului Harbor, and driven to the Central Landfill. The refuse would then be emptied from the trailers at the landfill, and the empty trailers transported back to Lanai.

2.1.1 Transfer Station

The transfer station design for this alternative is a closed-top transfer trailer system. Each 75-cy trailer theoretically can hold 18.75 tons of refuse, assuming a density of 500 lb/cy. For this analysis it is assumed that a trailer can accommodate approximately 17 tons of refuse, the projected daily waste load. The limiting factor in the quantity of refuse transported per trailer is the allowable highway load limit; therefore, additional compaction would not provide any benefits from a transport cost standpoint. The refuse would be compacted to control odor and vectors. The shipping cost of a typical trailer is approximately three times that of a container because it is not possible to stack trailers, and trailers have a larger volume and tare weight than containers. Assuming a daily waste generation rate of 17 tpd and one barge trip per week, 21 trailers will be required. This will allow for capacity at the transfer station while refuse is being shipped to Maui and to allow for a two-week turnaround time on the return trip to Lanai.

A retaining wall with concrete tipping floor is the current transfer station design. The tipping floor design would accommodate County refuse trucks, commercial haulers,

and citizen deliveries. The tipping floor design would also accommodate peak refuse loads and allow for the screening of household hazardous waste. A backhoe would be used to load waste into the steel hopper where the waste is then compacted into the trailer. The transfer station design, however, does not incorporate design measures for the potential for wind-blown refuse.

The design of the transfer station may also include a truck scale, scale house, maintenance building, and other supporting structures (i.e., access roads), depending on the needs of the County. However, these items would be similar to those for the other alternatives, and are not included in the cost analysis. Operational costs, such as labor, utilities, fuel and oil, and maintenance are considered in the cost analysis as these will vary under each alternative. Table B--A-1 shows the estimated capital and operational costs for a transfer station. The operational costs, particularly labor costs for the transfer station, are estimated to be similar to that of the existing landfill, whereby a spotter and an equipment operator would be operating the transfer station. Additional operational costs include fuel and oil, and utilities. Maintenance for the transfer station is expected to be higher than the existing landfill maintenance costs to accommodate additional equipment, specifically the transfer trailers.

2.1.2 Land Transportation

Land transportation between the transfer station and the harbor for off-island transfer will be provided by County employees. The distance between the proposed transfer station on Lanai and Kaumalapau Harbor is approximately 2.5 miles. The distance between Kahului Harbor and Central Landfill is approximately 5 miles. One tractor will be

purchased for both the Lanai and Maui operations. If the tractor were to require maintenance or repair, another tractor could be rented on a temporary basis.

The estimated cost associated with land transportation is shown on Table B—A-1. In addition to the capital costs of purchasing trailers and tractors, fuel and oil, maintenance and labor are also included.

2.1.3 Barge Transportation

Interisland transportation will be contracted out to an independent barging company. Barge transportation services consists of loading refuse-filled trailers onto the barge, transporting them to Kahului Harbor, unloading them from the barge, loading the empty trailers onto the barge, returning empty trailers back to Kaunapali Harbor. The route to and from Maui includes a stop at Honolulu Harbor. One round trip will take approximately two weeks. Estimated round trip cost for one trailer is \$3,850. Approximately seven full 75-cy trailers will be barged from Lanai every week. Currently, scheduled barge trips to Lanai occur once a week.

2.1.4 Disposal at Central Landfill

Disposal of Lanai's municipal solid waste at the Central Landfill may not incur direct tipping fees, but the associated cost of landfilling on Maui, as incurred by the County, needs to be included. The current fee at Central Landfill is \$17 per ton of refuse. However, the design of Phase III of the Central Landfill site is in the beginning stages and will be incorporating the RCRA Subtitle D requirements to comply with the new federal regulations. Compliance with RCRA Subtitle D will pose additional capital and operating costs over those currently associated with the existing landfill.

The Central Landfill design will include a low-permeable soil and a geomembrane liner system (composite liner), leachate collection and treatment system, groundwater and gas monitoring systems, and a gas venting and final cover systems at the time of closure. Because a detailed design of the landfill is not available, a rough estimate is provided that is based on similar landfills. An estimated future cost per ton of refuse for disposal is \$50. For the purposes of this cost analysis, both the current tipping fee of \$17 per ton and the estimated future cost of \$50 per ton were considered.

The total estimated capital cost of disposing Lanai's refuse at Central Landfill is \$1,875,000 (Table B-A-1). Assuming an interest rate of 7 percent over a 20-year life for the transfer station, a 10-year life for equipment, and a 7-year life for trailers and compactor, the capital cost per year is approximately \$320,800. The estimated operating costs are \$1,779,785 to \$1,984,550 per year, based on \$17/ton and \$50/ton tipping fees, respectively, which calculates a total cost of approximately \$339 to \$372 per ton of refuse for disposal at Central Landfill.

2.2 Alternative 1B - Disposal at Central Landfill Using Shipping Containers

This alternative is the same as 1A except that shipping containers will be used in place of the more standard transfer trailers. The shipping containers will also be treated as open-top trailers, whereby a backhoe is used to semicompact the refuse instead of a stationary compactor or with steel hopper. The use of containers will require a chassis and tractor instead of the tractor required for use with the trailers. This modification is made to reduce the shipping costs.

The containers are much less expensive than the trailers, but the life is assumed to be only three years versus seven years for the trailers. Twenty-foot containers would be

used and would accommodate approximately 12 tons of refuse. Using a waste generation rate of 17 tpd, approximately 30 containers will be needed, assuming weekly barging and a two-week turnaround time rate. The round trip cost for shipping one container would be approximately \$900.

The cost estimate for this alternative is presented in Table B-A-2. The total estimated capital cost of disposing Lanai's refuse at Central Landfill using shipping containers is \$870,000. Assuming an interest rate of 7 percent over a 20-year life for the transfer station, a 10-year life for equipment and a 3-year life for containers, the capital cost per year is approximately \$200,400. The estimated operating costs are \$1,004,460 to \$1,209,225, based on \$17/ton to \$50/ton tipping fee, respectively per year, which calculates a total cost of approximately \$195 to \$228 per ton of refuse for disposal.

2.3 Alternative 2 - Incineration of Refuse at H-Power

The H-Power alternative will require a transfer station on Lanai, barge transportation to and from Oahu, land transportation, and incineration at H-Power. Refuse will be hauled in containers. In the past, H-Power looked to the neighbor islands for refuse to burn. Recently, H-Power has been operating near capacity and, although they have not yet refused refuse from Lanai, establishing a contract with the City and County of Honolulu to accept Lanai's waste may be difficult. However, if statewide waste diversion programs become successful in reducing disposal quantities, H-Power may be willing to accept Lanai's waste.

2.3.1 Transfer Station

The transfer station for this alternative is the same as the design described in the Central Landfill Alternative 1B. The estimated cost for the transfer station is shown in

Table B—A-3. Twenty instead of 30 containers would be required because the turnaround time between Lanai and Oahu is one week.

2.3.2 Land Transportation

Land transportation between the transfer station and Kaunālapau Harbor will be provided by the County transfer station operators. Two chassis and one tractor will be purchased for Lanai. Land transportation between Honolulu Harbor and H-Power (approximately 44 miles round trip) will be contracted out. Two chassis will be purchased for use on Oahu. Two tractors will be rented from the contractor for land transportation on Oahu. The estimated cost for land transportation is listed in Table B—A-3.

2.3.3 Barge Transportation

Interisland transportation will be contracted out to an independent barging company similar to the Central Landfill alternative. The estimated cost of ocean freight per container load is \$440 per round trip.

2.3.4 Incineration at H-Power

As mentioned in Section 2.3, H-Power is currently operating at capacity, and acceptance of refuse by H-Power (City and County of Honolulu) is questionable. If H-Power does accept the refuse, a tipping fee of \$45 per ton will be charged. The tipping fee includes the disposal of the ash into a landfill on Oahu. This cost could increase in the future as regulations governing ash landfills become stricter.

The total estimated capital cost of incinerating Lanai's refuse at H-Power is \$670,000 (Table B—A-3). Assuming an interest rate of 7 percent per year over a 20-year period for the transfer station and over a 10-year period for equipment, the capital cost per year is approximately \$143,300. The estimated operating costs are \$1,039,140 per year,

which calculates a total cost of approximately \$191 per ton of refuse for incineration at H-Power.

2.4 Alternative 3A - Disposal of Refuse in a New Lanai Landfill

Disposing refuse in a landfill on Lanai will reduce land and ocean transportation, a significant expense for the previously described alternatives. Assuming the landfill will be constructed under the small community exemption, the landfill will be designed with a low-permeability soil liner and leachate collection system. The native soil available onsite will be used as the low-permeability soil liner.

Based on the preliminary landfill design criteria prepared for the County of Maui for the 4-acre quarry site, the estimated total initial cost is \$4,000,000 for the landfill construction when operation and maintenance expenses and a sinking fund for closure construction and postclosure monitoring are included, Alternative 3A is approximately \$118 per ton (Table B—A-4). This cost, like those presented for the other alternatives, does not include waste diversion programs, ancillary facilities, other supporting structures, and closure and postclosure monitoring activities at the existing landfill.

2.5 Alternative 3B - Disposal of Refuse in the Existing Lanai Landfill

Continued operation at the existing landfill would postpone the capital expense for the construction of a new facility, but would still require the expense of surface-water control systems, and operations. A groundwater monitoring system was also assumed to be required and included in the cost analysis. A cost estimate for this alternative is \$79 per ton (Table B—A-5).

3.0 COMPARISON OF DISPOSAL ALTERNATIVES

The estimated costs for the three alternatives presented are summarized below:

Alternative	Disposal Location	Capital Cost/Year	Total Operating Cost/Year	Sinking Fund/Year	Total Cost/Year	Cost/Ton
1A	Central Landfill	\$320,800	\$1,779,785 to \$1,984,550	NA	\$2,100,585 to \$2,305,350	\$339 to \$372
1B	Central Landfill	\$200,400	\$1,004,460 to \$1,209,225	NA	\$1,204,860 to \$1,409,625	\$195 to \$228
2	H-Power	\$143,300	\$1,039,140	NA	\$1,182,440	\$191
3A	New Lanai Landfill	\$378,000	\$200,000	\$150,000	\$728,000	\$118
3B	Existing Lanai Landfill	\$286,000	\$200,000	NA	\$486,000	\$79
Note:	Costs exclude waste diversion programs, ancillary facilities, and closure and postclosure activities at the existing landfill.					

Based on the economics, the most practical alternative would be to landfill the refuse on Lanai.

Table B-A-1. Cost Analysis for Central Landfill Alternative - 17 tpd Closed-Top Trailers (Alternative 1A)

Description/Item	Quantity	Unit Cost	Capital Cost	Capital Cost/Year	Operating Cost/Year	Total Cost/Year
Transfer Station						
Retaining Wall	1	\$200,000	\$200,000	\$18,900		\$18,900
Closed-Top Trailer (75 cy)*	30	65,000	1,365,000	253,300		253,300
Stationary Compactor w/Steel Hopper	1	100,000	100,000	18,600		18,600
Backhoe	1	50,000	50,000	7,200		7,200
Operation Expenses***	L.S.				\$150,000	150,000
Maintenance Expenses***	L.S.				100,000	<u>100,000</u>
Subtotal						\$548,000
Land Transportation						
Truck/Tractor	2	80,000	160,000	22,800		22,800
Fuel/Oil	4,500 mi	1.75/mi			8,000	8,000
Maintenance	2	2,000/unit			4,000	4,000
Drivers (Maui)	546 hrs	\$20/hr			10,900	<u>10,900</u>
Drivers (Lanai)	-----included in transfer station operating costs-----					
Subtotal						\$45,700
Barge Transportation (Depart Lanai once a week; round trip to Maui takes two weeks)						
Ocean Freight to Maui	364 trailers	\$2,850			\$1,037,400	1,047,400
Ocean Freight to Lanai	364 trailers	41,000			364,000	<u>364,000</u>
Subtotal						\$1,401,400
Dispose at Central Landfill						
Tipping Fee	6,205 tons	\$17 to 50/ton			\$105,485 to 310,250	\$105,485 to 310,250
TOTAL**						\$2,100,585 to 2,305,350
COST PER TON**						\$339 to \$372

tpd = tons per day.
*Seven-year life.

** Estimate excludes waste diversion programs, ancillary facilities, and existing landfill closure activities.
*** Based on costs provided by the County of Maui.

Table B-A-2. Cost Analysis for Central Landfill Alternative - 17 tpd Open-Top Containers (Alternative 1B)

Description/Item	Quantity	Unit Cost	Capital Cost	Capital Cost/Year	Operating Cost/Year	Total Cost/Year
Transfer Station						
Retaining Wall	1	\$200,000	\$200,000	\$18,900		\$18,900
Containers*	30	12,000	360,000	137,200		137,200
Backhoe	1	50,000	50,000	7,200		7,200
Operation Expenses***	L.S.				\$150,000	150,000
Maintenance Expenses***	L.S.				60,000	<u>60,000</u>
Subtotal						\$373,300
Land Transportation						
Chassis	4	25,000	100,000	14,300		14,300
Truck/Tractor	22	80,000	160,000	22,800		22,800
Fuel/Oil	6,500 mi	1.75/mi			11,375	11,375
Maintenance	6	2,000/unit			12,000	12,000
Drivers (Maui)	780 hrs	\$20/hr			15,600	<u>15,600</u>
Drivers (Lanai)	-----included in transfer station operating costs-----					
Subtotal						\$76,075
Barge Transportation (Depart Lanai once a week; round trip to Maui takes two weeks)						
Ocean Freight to Maui	520 containers	\$2,850	\$620		\$322,400	322,400
Ocean Freight to Lanai	520 containers	41,000	\$280		145,600	145,600
Storage Fee	5,200 cont-days		\$35		182,000	<u>182,000</u>
Subtotal						\$650,000
Dispose at Central Landfill						
Tipping Fee	6,205 tons	\$17 to 50/ton	\$17 to 50 ton		\$105,485 to 310,250	105,485 to 310,250
TOTAL**						\$1,204,860 to 1,409,625
COST PER TON**						\$195 to \$228

tpd = tons per day.
*Seven-year life.

** Estimate excludes waste diversion programs, ancillary facilities, and existing landfill closure activities.
*** Based on costs provided by the County of Maui.

Table B-A-3. Cost Analysis for H-Power Alternative

Description/Item	Quantity	Unit Cost	Capital Cost	Capital Cost/Year	Operating Cost/Year	Total Cost/Year
Transfer Station						
Retaining Wall	1	\$200,000	\$200,000	\$18,900		\$18,900
Containers*	20	12,000	360,000	137,200		137,200
Backhoe	1	50,000	50,000	7,200		7,200
Operation Expenses***	L.S.				\$150,000	150,000
Maintenance Expenses***	L.S.				60,000	<u>60,000</u>
Subtotal						\$327,600
Land Transportation						
Chassis	4	25,000	100,000	14,300		14,300
Tractors (purchase)	1	80,000	80,000	11,400		11,400
Tractors (rent)	2,280 hrs	\$50/hr			114,000	114,000
Drivers (Lanai)	-----included in transfer station operating costs-----					
Drivers (Oahu)	2,280 hrs	\$20/hr			45,600	<u>45,600</u>
Fuel/Oil	24,180 mi	1.75/mi			43,315	42,315
Maintenance	5	2,000/unit			10,000	<u>10,000</u>
Subtotal						\$76,075
Barge Transportation (Depart Lanai once a week; round trip to Oahu takes one week)						
Ocean Freight to Oahu	520 containers	\$360			\$187,200	187,200
Ocean Freight to Lanai	520 containers	\$80			41,600	41,600
Storage Fee	3,120 cont-days	\$35			109,200	<u>109,200</u>
Subtotal						
Incinerate at H-Power						
Tipping Fee	6,205 tons	\$45/ton			\$279,225 to 310,250	279,225 to 310,250
TOTAL COST/YEAR**						\$1,182,400
TOTAL COST/TON**						\$191

tpd = tons per day.
*Seven-year life.

** Estimate excludes waste diversion programs, ancillary facilities, and existing landfill closure activities.
*** Based on costs provided by the County of Maui.

Table B-A-4. Cost Analysis for New Landfill* Alternative

Description/Item	Quantity	Unit Cost	Capital Cost	Capital Recovery Cost/Year	Operating Cost/Year	Sinking Fund Cost/Year	Total Cost/Year
Landfill Construction	L.S. (4 acres)	4,000,000	4,000,000	378,000			378,000
Operation Expenses***	L.S.				160,000		160,000
Maintenance Expenses***	L.S.				40,000		40,000
Closure Construction	L.S. (4 acres)	700,000 present				66,000	66,000
30-Year Postclosure Monitoring	30 Years	10,000/year present				84,000	84,000
TOTAL COST/YEAR**							\$728,000
TOTAL COST/TON**							\$118

tpd = tons per day.
*Seven-year life.

** Estimate excludes waste diversion programs, ancillary facilities, and existing landfill closure activities.
*** Based on costs provided by the County of Maui.

Table B-A-5. Continue Operation at Existing Landfill* Alternative

Description/Item	Quantity	Unit Cost	Capital Cost	Capital Recovery Cost/Year	Operating Cost/Year	Total Cost/Year
Surface Water System Construction	L.S.	1,000,000	1,000,000	143,000		143,000
Groundwater Well Installation	L.S.	1,000,000	1,000,000	143,000		143,000
Operation Expenses***	L.S.				160,000	160,000
Maintenance Expenses***	L.S.				40,000	40,000
TOTAL COST/YEAR**						\$486,000
TOTAL COST/TON**						\$79
<p>tpd = tons per day. ** Estimate excludes waste diversion programs, ancillary facilities, and existing landfill closure activities.</p> <p>*Seven-year life. *** Based on costs provided by the County of Maui.</p>						

ALAN M. ARAKAWA
Mayor



DAVID TAYLOR, P.E.
Director

PAUL J. MEYER
Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793 2155
www.mauewater.org

August 1, 2014

Mr. Benjamin Sticka, Staff Planner
Department of Planning
County of Maui
250 South High Street
Wailuku, HI 96793

Re: TMK: (2) 4-9-002:001
Subject: Time Extension Request for State Special Use Permit
SUP 94/0005; SP 94-386

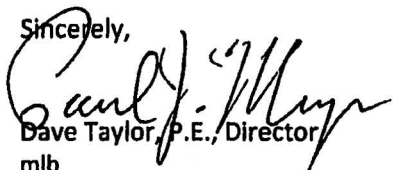
Dear Mr. Sticka:

Thank you for the opportunity to comment on this Time Extension Request. We understand that the applicant is requesting an extension for a period of ten years.

The island of Lana'i is served by the Lana'i Water Company, a privately owned water utility company regulated by the Public Utilities Commission. The Department of Water Supply has no objection should the time extension be granted.

Should you have any questions, please contact Water Resources Staff Planner Marti Buckner at marti.buckner@mauicounty.gov or 808-463-3104.

Sincerely,


Dave Taylor, P.E., Director
mlb

cc: engineering division, applicant

"By Water All Things Find Life"

EXHIBIT 8

Benjamin Sticka - Lanai Sanitary Landfill – Time Extension / SUP 94/0005 and SP 94-386

From: Paul Haake
To: Benjamin Sticka
Date: 7/29/2014 4:03 PM
Subject: Lanai Sanitary Landfill – Time Extension / SUP 94/0005 and SP 94-386

Hi Ben,

Provided are comments from FIRE regarding the referenced subject. Please feel free to call me if there are any questions or comments.

Thanks,

Paul

County of Maui
Department of Fire and Public Safety
Fire Prevention Bureau

313 Manea Place • Wailuku, Hawaii 96793
(808) 244-9161 • fax (808) 244-1363

July 29, 2014

Department of Planning
Attn: Benjamin T. Sticka, Staff Planner

Re: Lanai Sanitary Landfill – Time Extension
Kaunalapau, Lanai, Hawaii
SUP 94/0005 and SP 94-386
(2) 4-9-002: 001 (35.7 acres in Lanai)

EXHIBIT 9

Dear Ben:

Thank you for allowing The Department of Fire & Public Safety the opportunity to comment on this subject. At this time, our office provides the following comments:

- Our office has no comment in regards to the SUP & SP associated with this project's time extension.

If there are any questions or comments, please feel free to contact me at 244-9161 ext. 23.

Sincerely,

Paul Haake

Paul Haake
Captain, Fire Prevention Bureau
Dept. of Fire & Public Safety
Maui County

313 Manea Place Wailuku, HI 96793
244-9161 ext. 23
244-1363 fax



POLICE DEPARTMENT
COUNTY OF MAUI

ALAN M. ARAKAWA
 MAYOR

GARY A. YABUTA
 CHIEF OF POLICE

OUR REFERENCE
 YOUR REFERENCE

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

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

July 24, 2014

COUNTY OF MAUI
 DEPT. OF PLANNING - CURRENT

JUL 28 2014

RECEIVED

MEMORANDUM

TO : BENJAMIN T. STICKA, STAFF PLANNER
 DEPARTMENT OF PLANNING

FROM : GARY A. YABUTA, CHIEF OF POLICE

SUBJECT : PERMIT NO.: SUP 94-0005 and SP 94-386
 TMK : (2) 4-9-002: 001
 Project : Lanai Sanitary Landfill – Time Extension
 Applicant : Kurt Matsumoto, Chief Operating Officer

- No comments or recommendations to offer at this time.
- Refer to enclosed comments and/or recommendations.

Thank you for giving us the opportunity to comment on this project.

Assistant Chief Victor Ramos
 For: GARY A. YABUTA
 Chief of Police

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

July 21, 2014

GLEN A. UENO, P.E., P.L.S.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

RECEIVED

JUL 21 2014

DEPT. OF PLANNING
COUNTY OF MAUI

MEMO TO: WILLIAM R. SPENCE, PLANNING DIRECTOR

FROM: DAVID C. GOODE, DIRECTOR OF PUBLIC WORKS

SUBJECT: **LANAI SANITARY LANDFILL - TIME EXTENSION FOR STATE
SPECIAL USE PERMIT; TMK: (2) 4-9-002:001
SUP 94/0005**

We reviewed the subject time-extension request and have the following comment:

Comment from the Development Services Administration (DSA), Building Inspection Section:

1. There are numerous open building permit applications (see attached). There are no open Requests for Services.

If you have any questions regarding this memorandum, please call Rowena M. Dagdag-Andaya at 270-7845.

DCG:RMDA:da

Attachment

xc: Highways Division
Engineering Division

S:\DSA\Engr\CZM\Draft Comments\49002001_lanai_sanitary_landfill_time_ext.wpd

EXHIBIT //

DEVELOPMENT PERMITS

Owners Zoning Struct Establ Flags Geo Area Permits RFS Legal Parcel Attr

APN: 2490020010000 1007 N MIKI RD

C	M	Project #	Permit	Number	Appl Date	Issue Date	Status	Decision	Dec. Date	RD
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962003	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962002	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962007	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	GST PACWES	B	961698	03-OCT-1996	03-OCT-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MANELE WTP	B	961204	15-JUL-1996	15-JUL-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	960889	21-MAY-1996	21-MAY-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	960888	21-MAY-1996	21-MAY-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	960887	21-MAY-1996	21-MAY-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI VETE	B	960594	10-APR-1996	10-APR-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	960386	05-MAR-1996	05-MAR-1996	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODG	B	960261	05-FEB-1996	05-FEB-1996	DONE	A	25-JUN-1996	0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	952618	14-DEC-1995	14-DEC-1995	VOID	E	09-APR-1996	0
<input type="checkbox"/>	<input type="checkbox"/>	DOLE FOOD	B	952369	20-OCT-1995	20-OCT-1995	DONE	A	23-FEB-1999	0
<input type="checkbox"/>	<input type="checkbox"/>	DOLE FOOD	B	952370	20-OCT-1995	20-OCT-1995	DONE	A	23-FEB-1999	0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	1745	12-JUL-1995					0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	951726	23-JUN-1995	18-JUL-1995	EXPR			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	951724	23-JUN-1995	18-JUL-1995	OPEN			0

Highlight desired permit and select an option from the menu

Permit Docs

Copy/Move

Scope MS 17

Scope Description MISCELLANEOUS STRUCTURE

DEVELOPMENT PERMITS

Owners Zoning Struct Establ Flags Geo Area Permits RFS Legal Parcel Attr

APN: 2490020010000 1007 N MIKI RD

C	M	Project #	Permit	Number	Appl Date	Issue Date	Status	Decision	Dec. Date	RD
<input type="checkbox"/>	<input type="checkbox"/>	ADA INC	B	991420	11-AUG-1999	11-AUG-1999	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	NEXTEL-LAN	B	990094	19-JAN-1999	19-JAN-1999	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	NEXTEL-LAN	B	981727	06-OCT-1998	06-OCT-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI COMP	B	981341	04-AUG-1998	04-AUG-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI COMP	B	981342	04-AUG-1998	04-AUG-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI COMP	B	981343	04-AUG-1998	04-AUG-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	LANAILANDF	B	980870	02-JUN-1998	02-JUN-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN	B	980667	30-APR-1998	30-APR-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE STAB	B	980594	15-APR-1998	15-APR-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODG	B	980593	15-APR-1998	15-APR-1998	DONE	A	09-FEB-1999	0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI OIL CO	B	980177	06-FEB-1998	06-FEB-1998	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI OIL	B	971399	28-AUG-1997	28-AUG-1997	DONE	A	11-JAN-2000	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962009	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962008	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962006	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962005	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0
<input type="checkbox"/>	<input type="checkbox"/>	KOELE LODGE	B	962004	26-NOV-1996	26-NOV-1996	DONE	A	02-JAN-1997	0

Highlight desired permit and select an option from the menu

Permit Docs

Copy/Move

Scope MS 12

Scope Description ACCESSORY BLDG/STRUCTURE (NONHABITABLE)

DEVELOPMENT PERMITS

Owners Zoning Struct Establ Flags Geo Area Permits RFS Legal Parcel Attr

APN: 2490020010000 1007 N MIKI RD

C	M	Project #	Permit	Number	Appl Date	Issue Date	Status	Decision	Dec. Date	RD
<input type="checkbox"/>	<input type="checkbox"/>	VERIZON WIRELESS	B	20100363	09-OCT-2007	01-APR-2010	OPEN			4
<input type="checkbox"/>	<input type="checkbox"/>	BENCHES RETREAT	B	T20071367	21-MAY-2007		EXPR	E	26-JAN-2011	0
<input type="checkbox"/>	<input type="checkbox"/>	BENCHES RETREAT	B	T20071366	21-MAY-2007		EXPR	E	26-JAN-2011	0
<input type="checkbox"/>	<input type="checkbox"/>	LANAI ASPHALT PLANT	B	20061120	28-APR-2006	18-MAY-2006	DONE	A	13-DEC-2006	2
<input type="checkbox"/>	<input type="checkbox"/>	VERIZON WIRELESS	B	20061838	21-SEP-2005	21-AUG-2006	OPEN			4
<input type="checkbox"/>	<input type="checkbox"/>	VERIZON HAWAII LANAI	B	20061837	21-SEP-2005	21-AUG-2006	DONE	A	02-NOV-2006	4
<input type="checkbox"/>	<input type="checkbox"/>	MANELE BREAKER TANKS	B	20043225	21-SEP-2004	16-NOV-2004	DONE	A	09-JUL-2008	4
<input type="checkbox"/>	<input type="checkbox"/>	MANELE BREAKER TANKS	B	20043224	21-SEP-2004	16-NOV-2004	DONE	A	09-JUL-2008	4
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL #14	B	20031655	22-JUL-2003	19-AUG-2003	DONE	A	16-DEC-2003	2
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL #14	B	20031654	22-JUL-2003	19-AUG-2003	DONE	A	16-DEC-2003	2
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL #14	B	20031656	22-JUL-2003	19-AUG-2003	DONE	A	16-DEC-2003	2
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL #14	B	20031657	22-JUL-2003	19-AUG-2003	OPEN			2
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL #14	B	20031653	22-JUL-2003	19-AUG-2003	DONE	A	16-DEC-2003	3
<input type="checkbox"/>	<input type="checkbox"/>	LANAI TRUSS PLANT	B	20010640	12-APR-2001	12-APR-2001	DONE	A	16-SEP-2002	1
<input type="checkbox"/>	<input type="checkbox"/>	LANAI TRUSS PLANT	B	20010639	12-APR-2001	12-APR-2001	DONE	A	16-SEP-2002	1
<input type="checkbox"/>	<input type="checkbox"/>	LANAI TRUSS PLANT	B	20010641	12-APR-2001	12-APR-2001	DONE	A	16-SEP-2002	1
<input type="checkbox"/>	<input type="checkbox"/>	GTE WIRELE	B	20000075	13-JAN-2000	13-JAN-2000	OPEN			0

Highlight desired permit and select an option from the menu

Permit Docs

Copy/Move

Scope MS17

Scope Description MISCELLANEOUS STRUCTURE

DEVELOPMENT PERMITS

Owners Zoning Struct Establ Flags Geo Area Permits RFS Legal Parcel Attr

APN: 2490020010000 1007 N MIKI RD

C	M	Project #	Permit	Number	Appl Date	Issue Date	Status	Decision	Dec. Date	RD
<input type="checkbox"/>	<input type="checkbox"/>	VERIZON H12/LANAI CI	B	20130553	03-JUL-2012	22-MAY-2013	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	STABLES	B	20120803	27-JUN-2012	17-JUL-2012	OPEN			2
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL NO. 3A	B	20120963	13-JUN-2012	21-AUG-2012	DONE	A	18-APR-2013	2
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL NO. 3A	B	20120962	13-JUN-2012	21-AUG-2012	DONE	A	15-JAN-2014	3
<input type="checkbox"/>	<input type="checkbox"/>	LANAI WELL #15 PUMP	B	20111286	30-AUG-2011	23-NOV-2011	DONE	A	17-MAY-2012	3
<input type="checkbox"/>	<input type="checkbox"/>	LANAI LANDFILL (PV)	B	20120036	23-AUG-2011	12-JAN-2012	OPEN			5
<input type="checkbox"/>	<input type="checkbox"/>	AT&T	B	20110714	02-SEP-2010	22-JUL-2011	OPEN			3
<input type="checkbox"/>	<input type="checkbox"/>	HORSE STAGING AREA	B	20101342	09-AUG-2010	12-NOV-2010	DONE	A	16-JUN-2011	2
<input type="checkbox"/>	<input type="checkbox"/>	STABLES	B	20100504	29-MAR-2010	06-MAY-2010	DONE	A	08-FEB-2011	2
<input type="checkbox"/>	<input type="checkbox"/>	T-MOBILE WEST CORP/M	B	20110961	14-DEC-2009	12-SEP-2011	OPEN			4
<input type="checkbox"/>	<input type="checkbox"/>	T-MOBILE WEST CORP/M	B	20110953	14-DEC-2009	12-SEP-2011	OPEN			4
<input type="checkbox"/>	<input type="checkbox"/>	ICSD PUJ KILEA	B	20090653	29-JAN-2009	08-JUN-2009	DONE	A	19-JUL-2010	4
<input type="checkbox"/>	<input type="checkbox"/>	ICSD PUJ KILEA	B	20090652	29-JAN-2009	08-JUN-2009	DONE	A	19-JUL-2010	6
<input type="checkbox"/>	<input type="checkbox"/>	ICSD PUJ KILEA	B	20090651	29-JAN-2009	08-JUN-2009	DONE	A	19-JUL-2010	7
<input type="checkbox"/>	<input type="checkbox"/>	SPRINT	B	20090829	03-SEP-2008	20-JUL-2009	EXPR			2
<input type="checkbox"/>	<input type="checkbox"/>	VERIZON WIRELESS	B	20100364	15-APR-2008	01-APR-2010	OPEN			4
<input type="checkbox"/>	<input type="checkbox"/>	SUNPOWER TRACKER	B	20080993	15-NOV-2007	29-MAY-2008	DONE	A	22-DEC-2008	6

Highlight desired permit and select an option from the menu

Scope MS 17

Scope Description MISCELLANEOUS STRUCTURE

Permit Docs Copy/Move

DEVELOPMENT PERMITS

Owners Zoning Struct Establ Flags Geo Area **Permits** RFS Legal Parcel Attr

APN: 2490020010000 1007 N MIKI RD

C	M	Project #	Permit	Number	Appl Date	Issue Date	Status	Decision	Dec. Date	RD
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	T20140711	13-MAY-2014		OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	WAIIAKEAKUA COMMUNICA	B	20140379	10-JAN-2014	21-MAR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	WAIIAKEAKUA COMMUNICA	B	20140378	10-JAN-2014	21-MAR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	WAIIAKEAKUA COMMUNICA	B	20140377	10-JAN-2014	21-MAR-2014	OPEN			1
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140498	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140497	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140496	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140494	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140495	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140492	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140493	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140491	08-OCT-2013	14-APR-2014	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MIKI BASIN WAREHOUSE	B	20140490	08-OCT-2013	14-APR-2014	OPEN			1
<input type="checkbox"/>	<input type="checkbox"/>	LANAI ANIMAL RESCUE	B	T20131169	14-AUG-2013		OPEN			1
<input type="checkbox"/>	<input type="checkbox"/>	MAUI POLICE DEPARTME	B	20130892	02-NOV-2012	21-AUG-2013	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MAUI POLICE DEPARTME	B	20130891	02-NOV-2012	21-AUG-2013	OPEN			0
<input type="checkbox"/>	<input type="checkbox"/>	MAUI POLICE DEPARTME	B	20130890	02-NOV-2012	21-AUG-2013	OPEN			0

Highlight desired permit and select an option from the menu

Permit Docs

Copy/Move

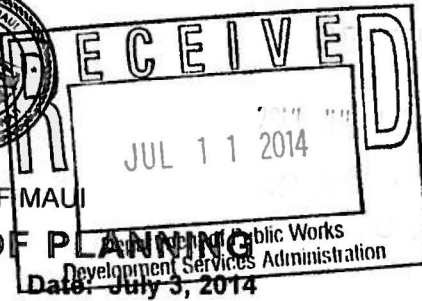
Scope MS 04

Scope Description MECHANICAL BUILDING

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



COUNTY OF MAUI

DEPARTMENT OF PLANNING

TRANSMITTAL

STATE AGENCIES	
X	Dept of Health, Maui (2)
X	DLNR-Planning (5)
X	DLNR-SHPD, Maui
X	Land Use Commission

COUNTY AGENCIES	
X	Dept of Public Works (3)
X	Dept of Water Supply
X	Fire & Public Safety
X	Police Department
FEDERAL AGENCIES	
X	Molokai-Lanai Soil & Water Conservation

PROJECT:	LANAI SANITARY LANDFILL – TIME EXTENSION
APPLICANT:	County of Maui, Department of Environmental Management, Solid Waste Division
STREET ADDRESS:	Kaumalapau, Lanai, HI
PROJECT DESCRIPTION:	Time Extension Request for State Special Use Permit (SP 94-386)
TMK:	(2) 4-9-002:001 (35.7 acres in Lanai)
	Kurt Matsumoto, Chief Operating Officer
PERMIT NOS.:	SUP 94/0005 and SP 94-386

TRANSMITTED TO YOU ARE THE FOLLOWING:

<input checked="" type="checkbox"/>	Letters and Project Description
-------------------------------------	---------------------------------

THESE ARE TRANSMITTED AS CHECKED BELOW:

<input checked="" type="checkbox"/>	For your Comment and Recommendation (previous comments were received in December 2004, January 2005, December 2007 and January 2008.
-------------------------------------	--

The Department of Environmental Management, Solid Waste Division, is requesting a time extension of a State Special Use Permit (SP 94-386) for a period of ten (10) years. Please identify any comments you would like the Department to propose as conditions of project approval. Also provide any previous comments, letters, etc. pertinent to this application. Submit your comments directly to me by **August 3, 2014**. If no comment, please sign the "No Comment" box and fax to (808) 270-1775.

Thank you for your time and assistance. For additional clarification, please contact me at benjamin.sticka@mauicounty.gov or at (808) 270-7520.

Sincerely,

BENJAMIN T. STICKA, Staff Planner

760

RUSH

Attachment

- xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
- Benjamin T. Sticka, Staff Planner (PDF)
- Elaine Baker, Department of Environmental Management
- Project File
- General File

BTS:ls

K:\WP_DOCS\PLANNING\SUP\1994\0005_Lanai Sanitary Landfill\Extension_2014\Agency_Trans.doc

DIRECTOR									
DEPUTY DIR.									
PERS.									
OSA									
ENGR.									
Hwy.									
SALES									
PLANNING									
INSPECTION									
SEC. SER.									
COMMENTS									
COPY									
FILE									

LANAI SANITARY LANDFILL
APPLICATION FOR TIME EXTENSION OF STATE SPECIAL PERMIT SP94-386

I. GENERAL INFORMATION:

Property Description

Tax Map Key: 4-9-02: portion of 1

Area: Approximately 10 acres of a 25 acre parcel permitted by SP94-386

Property Owner: Dole Food Company, Inc.

II. PROPERTY DESCRIPTION:

Lanai Landfill is the municipal solid waste landfill for the island of Lanai with its 3,193 residents and 1161 households (MDB 2003). It receives an average of eight tons per day of commercially hauled waste, County hauled waste from Lanai City residents, and self-hauled waste by the residents. Asbestos and bulky waste are also accepted. Liquid waste and hazardous waste are not accepted. Commercial green waste, hotel glass, and used motor oil are diverted from the landfill by recycling at other sites. The operation of the facility is in accordance with state regulations.

III. LAND USE CLASSIFICATIONS:

State Land Use District:	Agriculture
Lanai Community Plan:	Agriculture
County Zoning:	Agriculture
Special Management Area:	Outside of the SMA Boundary

IV. DESCRIPTION OF EXISTING ENVIRONMENT

1. Special Use Permit History

The 25 acres of this special permit area is adjacent to an approximately 10 acre parcel of land to the south, partially forming the south boundary of the Property. This approximately 10 acre parcel was the subject of a special permit petition under LUC Docket No. SP66-36, approved by the LUC on October 29, 1966, for establishment of the Lanai Sanitary Landfill. The Property was vacant when application was made for SP94-386 except for an approximately 5.7 acre portion on which landfill operations have encroached. The encroachment upon the approximately 5.7 acres occurred over a number of years subsequent to the approval of LUC Docket No. SP66-36. Most of the property permitted under SP94-386 remains open land adjacent to the gulch over which storm water is routed in a rip rap swale from the retention pond on the landfill.

III. DESCRIPTION OF EXISTING ENVIRONMENT (continued)

2. Subdivision

The properties of SP94-386 and SP66-36 have been consolidated with a buffer zone into a subdivision called "Lanai Landfill Subdivision" in Land Court with final subdivision approval granted on 9/14/95. Net area with an easement is 34.334 acres; gross area is 35.677 acres.

3. Neighboring Land Use

The Property is bounded to the north by Kalamaiiki Gulch and partially to the south by Kaunalapau Highway. Open vacant vegetated land lies to the west and east. Access to the parcel is from Kaunalapau Highway which runs between the harbor and Lanai City.

4. Topography and Soil Characteristics

The property slopes 2:1 to the Kalamaiiki Gulch from the landfill area which occupies the top of the slope and matches grade with Kaunalapau Highway. According to the U.S.D.A. Soil Survey, the four soil groups in the area are classed as moderate to severe. The Land Study Bureau's Detailed Land Classification System (with an 'A' being the best and 'E' being the worst) classifies the overall productivity rating of the property as 'D' or low productivity rating.

5. Maui County General Plan

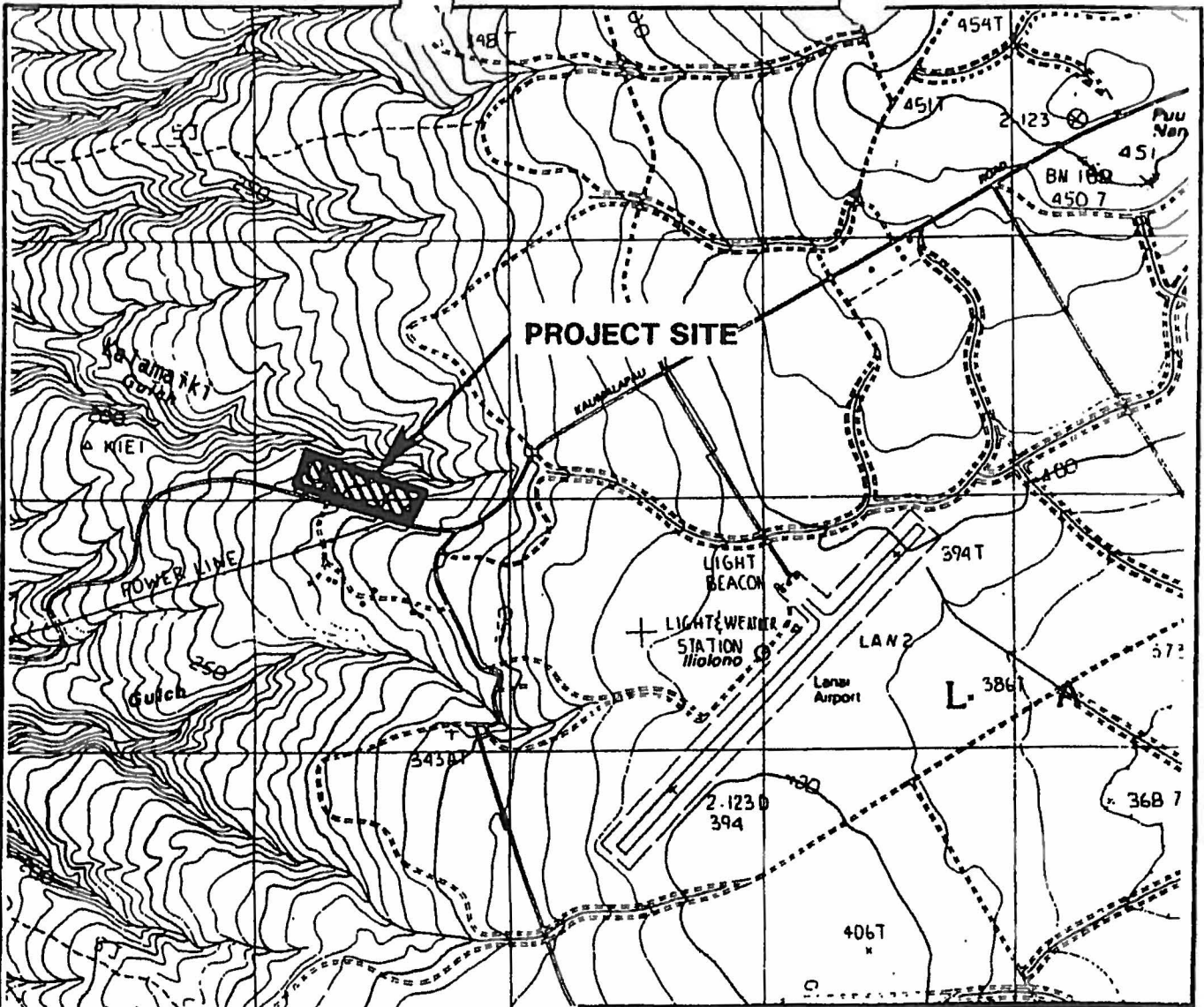
The landfill use on a portion of the property meets the objective to provide efficient, safe and environmentally sound systems for the disposal as stated in the Maui County General Plan, 1990 update.

6. Lanai Community Plan

The Lanai Community Plan discourages approvals of Special Permits in the State Agricultural District unless the Special Permit is to accommodate public-facility uses whose location is determined by technical considerations; supportive of agricultural uses; or required for the use or distribution of economic resources and not otherwise adversely affecting the environment or surrounding agricultural uses.

7. County Zoning

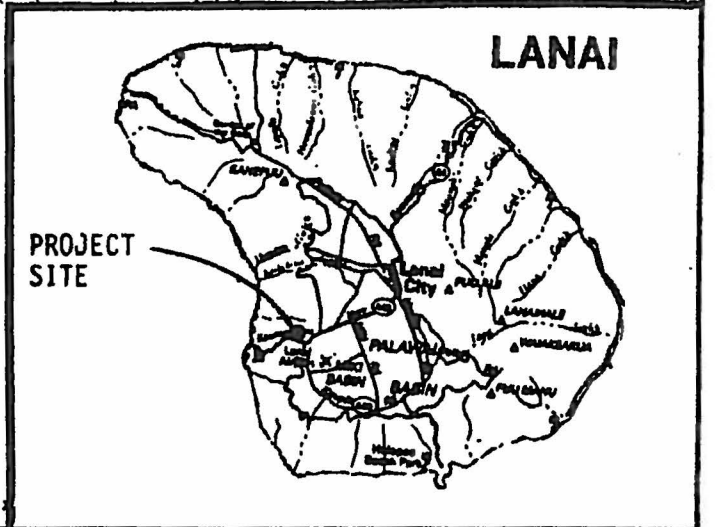
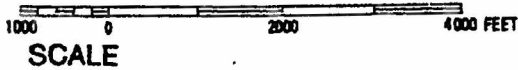
The subject property is zoned Agricultural District. Pursuant to Section 19.30A.060 Special uses, landfills are identified as a special use. If a use also requires a special permit pursuant to chapter 205, Hawaii Revised Statutes, and if the land area of the subject parcel is fifteen acres or less, the State special permit shall fulfill the requirements of this section so that a County special use permit is not required for the landfill portion of the subject property.



REFERENCE: U.S.G.S. Topographic Map
Lanai South, HAWAII
Provisional Edition 1984



NOTE: Contours are
in meters.



FIGURE

1



Harding Lawson Associates
Engineering and
Environmental Services

Location Map
Lanai Sanitary Landfill
Lanai, Hawaii

DRAWN
jcl

JOB NUMBER
21805.302

APPROVED
GF

DATE
12/93

REVISED DATE

14/3639

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



LINDA ROSEN, M.D., M.P.H.
DIRECTOR OF HEALTH

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

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

COUNTY OF MAUI
DEPT OF PLANNING
CURRENT DIV. RECEIVED

'14 JUL 22 P2:08

July 22, 2014

Mr. William R. Spence
Director
Department of Planning
County of Maui
2200 Main Street, Suite 315
Wailuku, Hawaii 96793

Attn: Benjamin T. Sticka

Dear Mr. Spence:

Subject: Lanai Sanitary Landfill -Time Extension
Applicant: County of Maui, Department of Environmental Management,
Solid Waste Division
Permit No.: SUP 94/0005 & SP 94-386
TMK: (2) 4-9-002:001
Project Location: Kaumalapau, Lanai, Hawaii
Project Description: Time Extension Request for State Special Use Permit
(SP 94-386)

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

National Pollutant Discharge Elimination System (NPDES) permit coverage may be required for this project. The Clean Water Branch should be contacted at 808 586-4309.

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

EXHIBIT 12

Mr. William R. Spence
July 22, 2014
Page 2

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

Sincerely,

A handwritten signature in cursive script that reads "Patti Kitkowski".

Patti Kitkowski
District Environmental Health Program Chief

c EPO

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

August 1, 2014

County of Maui
Department of Planning
Attention: Mr. Benjamin T. Sticka, Staff Planner via email: benjamin.sticka@mauicounty.gov
2200 Main Street, Suite 315
Wailuku, Hawaii 96793

Dear Mr. Sticka:

SUBJECT: Lanai Sanitary Landfill – Time Extension

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

At this time, enclosed are comments from the (a) Land Division – Maui District and (b) Engineering Division on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin E. Moore".

Kevin E. Moore
Acting Land Administrator

Enclosure(s)
cc: Central Files

EXHIBIT 13



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 14, 2014

MEMORANDUM

2014 JUL 16 PM 2:53
RECEIVED
MAUI DISTRICT
LAND DIVISION

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

FROM: *R* Russell Y. Tsuji, Land Administrator *RS*
 SUBJECT: Lanai Sanitary Landfill - Time Extension
 LOCATION: Island of Lanai; TMK: (2) 4-9-002:001 (portion)
 APPLICANT: County of Maui, Department of Environmental Management, Solid Waste Division

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by **July 30, 2014**.

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

Attachments

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

Signed: *Daniel Omellas*
 Print Name: Daniel Omellas
 Date: 7/17/14

cc: Central Files



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 14, 2014

MEMORANDUM

TO: FROM:

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

RECEIVED
LAND DIVISION
2014 JUL 29 PM 12: 07
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

TO: *AD*

FROM: *AD* Russell Y. Tsuji, Land Administrator *RS*

SUBJECT: Lanai Sanitary Landfill – Time Extension

LOCATION: Island of Lanai; TMK: (2) 4-9-002:001 (portion)

APPLICANT: County of Maui, Department of Environmental Management, Solid Waste Division

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by **July 30, 2014**.

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

Attachments

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

Signed: _____
 Print Name: Corey S. Chang, Chief Engineer
 Date: 7/28/14

cc: Central Files

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

LD/ Russell Y. Tsuji

**Ref.: Lanai Sanitary Landfill, Time Extension Request for State Special Use Permit (SP 94-386),
Kaunulapau
Maui.016**

COMMENTS

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

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

- () Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
- () Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.
- () Mr. Carolyn Cortez at (808) 270-7253 of the County of Maui, Department of Planning.
- () Mr. Stanford Iwamoto at (808) 241-4896 of the County of Kauai, Department of Public Works.

- () The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

- () Additional Comments: _____

- () Other: _____

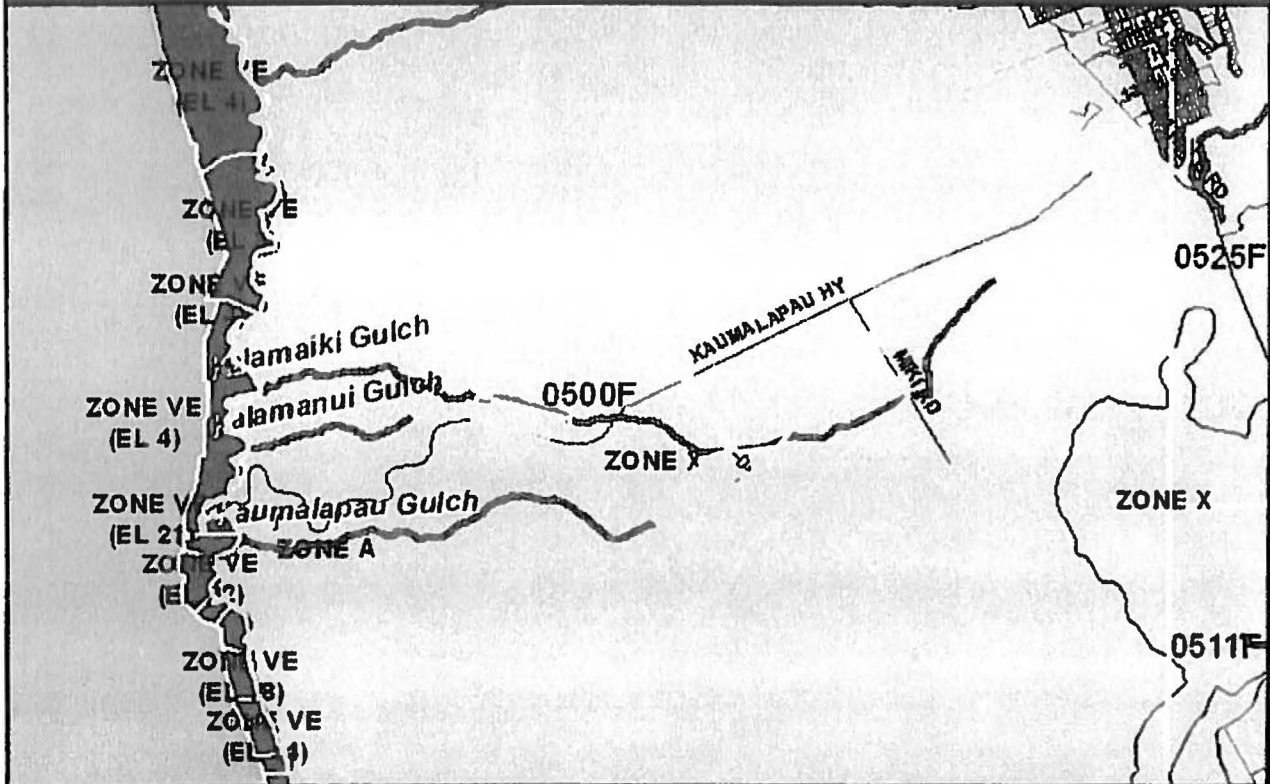
Should you have any questions, please call Mr. Dennis Imada of the Planning Branch at 587-0257.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 7/22/14



FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

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

- Zone A: No BFE determined.
- Zone AE: BFE determined.
- Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

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

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

OTHER FLOOD AREAS

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

PROPERTY INFORMATION

COUNTY: MAUI
TMK NO: (2) 4-9-002-001
PARCEL ADDRESS: KAUNIALAPAU HWY LANAI CITY, HI 96763
FIRM INDEX DATE: SEPTEMBER 19, 2012
LETTER OF MAP CHANGE(S): NONE
FEMA FIRM PANEL(S):
 1500030512F-SEPTEMBER 19, 2012 1500030325F-SEPTEMBER 19, 2012 1500030350F-SEPTEMBER 19, 2012 1500030514F-SEPTEMBER 19, 2012 1500030525F-SEPTEMBER 19, 2012 1500030513F-SEPTEMBER 19, 2012 1500030511F-SEPTEMBER 19, 2012 1500030500F-SEPTEMBER 19, 2012

PARCEL DATA FROM: JULY 2013
IMAGERY DATA FROM: MAY 2005

IMPORTANT PHONE NUMBERS

County NFIP Coordinator
 County of Maui
 Carolyn Cortez (808) 270-7253
State NFIP Coordinator
 Carol Tyau-Beam, P.E., CFM (808) 587-0267

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

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

BEFORE THE LANAI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

KYLE GINOZA, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT,
COUNTY OF MAUI

To Obtain a Time Extension of a Special
Permit (SP94-386) for the Continued Operation
of the Lanai Sanitary Landfill on Approximately
25 acres of Land at Kaumalapau Highway
Situated within the State Land Use Agricultural
District at Lanai City, Island of Lanai, County of
Maui, Hawaii, TMK: (2) 4-9-002:060 (portion)

DOCKET NO.

SP 94-386

SUP 94/0005

Lanai Sanitary Landfill Time Extension

Kyle Ginoza, Director, Department of
Environmental Management, County of
Maui

(KFW)

MAUI COUNTY PLANNING DEPARTMENT'S RECOMMENDATION
TO THE LANAI PLANNING COMMISSION
AUGUST 19, 2015 MEETING

DEPARTMENT OF PLANNING
COUNTY OF MAUI
2200 MAIN STREET, SUITE 315
WAILUKU, MAUI, HI 96793

Land Use Commission Special Use Permit SP94-386 (County SUP 94/0005)
k:\wp_docs\planning\sup\1994\0005_lanai sanitary
landfill\extension_2014\staff_report_to_approval\lpc_recommendation_19-august-2015.doc

BEFORE THE LANAI PLANNING COMMISSION

COUNTY OF MAUI

STATE OF HAWAII

In The Matter Of The Application Of

KYLE GINOZA, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT,
COUNTY OF MAUI

To Obtain a Time Extension of a Special
Permit (SP94-386) for the Continued Operation
of the Lanai Sanitary Landfill on Approximately
25 Acres of Land at Kaunalapau Highway
Situated within the State Land Use Agricultural
District at Lanai City, Island of Lanai, County of
Maui, Hawaii, TMK: (2) 4-9-002:060 (portion)

DOCKET NO.

SP 94-386
SUP 94/0005

Lanai Sanitary Landfill Time Extension

Kyle Ginoza, Director, Department of
Environmental Management, County of
Maui

(KFW)

CONCLUSIONS OF LAW

State Land Use Commission Special Permit

The application complies with the applicable standards for a State Land Use Commission Special Permit as established in the Planning Department's Report to the Lanai Planning Commission, August 19, 2015, Docket No. SP 94-386 and SUP 94/0005 as follows:

- (1) The use shall not be contrary to the objectives sought to be accomplished by Chapters 205 and 205A, HRS, and the rules of the Land Use Commission.
- (2) The desired use would not adversely affect surrounding property;
- (3) The use would not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection;
- (4) Unusual conditions, trends and needs have arisen since the district boundaries and rules were established;
- (5) The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

Further, at its regularly scheduled meeting on March 19, 2008 the Lanai Planning Commission approved the request for a ten-year time extension of Land Use Commission Special Use Permit (SP 94-386). The previous Findings of Fact, Conclusions of Law, and Decision and Order adopted by the Land Use Commission filed and effective October 6, 2008, are still applicable to the project. Therefore, the sanitary landfill use is still deemed as an "unusual and reasonable" use within the State Agricultural District, therefore a time extension is justified.

RECOMMENDATION

State Land Use Commission Special Permit

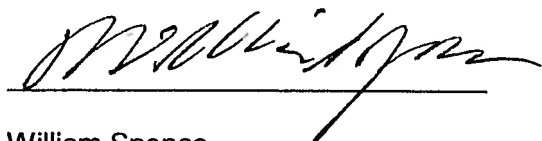
Pursuant to the foregoing the Lanai Planning Department recommends approval of the applicant's request for a Land Use Commission Special Permit time extension subject to the following conditions:

1. That the State Land Use Commission Special Use Permit shall be valid until September 13, 2029, subject to further extensions by the Lanai Planning Commission and the State Land Use Commission upon a timely request for extension filed at least ninety (90) days prior to its expirations.
2. That full compliance with all applicable governmental requirements shall be rendered.
3. Petitioner shall use non-potable water, to the extent possible, for grading and dust control of the landfill.
4. Petitioner shall ensure that impacts from wind blown debris into Kalamaiiki Gulch are mitigated in a timely manner.
5. Petitioner shall immediately stop work and contact the State Historical Preservation Division, Department of Land and Natural Resources should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.
6. Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.
7. Petitioner shall timely provide without any prior notice, annual reports to the Land Use Commission and the County of Maui Planning Department in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.
8. The conditions imposed herein may be fully or partially released upon timely motion to the Lanai Planning Commission and Land Use Commission and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.
9. That the Applicant shall address in the annual report how the County and/or State are addressing solid waste diversion that may include recycling, re-use and reduction.

10. That the Applicant implement the attached Best Management Practices designed to minimize infiltration and runoff during the operation of the landfill.

In consideration of the foregoing, the Maui County Planning Department recommends that the Lanai Planning Commission adopt the Planning Department's Report and Recommendation prepared for the August 19, 2015, meeting as its Findings of Fact, Conclusions of Law and Recommendation and to authorize the Director of Planning to transmit said written Recommendation on behalf of the Lanai Planning Commission to the State Land Use Commission.

APPROVED:

A handwritten signature in black ink, appearing to read "William Spence", is written over a horizontal line.

William Spence
Planning Director
County of Maui

**LANA'I PLANNING COMMISSION
REGULAR MEETING
AUGUST 19, 2015**

APPROVED 10-21-2015

A. CALL TO ORDER

The regular meeting of the Lana'i Planning Commission (Commission) was called to order by Chair Kelli Gima approximately 5:31 p.m., Wednesday, August 19, 2015, in the Lana'i Senior Center, Lana'i City, Hawaii.

A quorum of the Commission was present (See Record of Attendance).

Ms. Kelli Gima: Time is now 5:31 p.m., so I'm going to call this meeting to order. This is the August 19th, 2015 Lanai Planning Commission meeting. We have...a couple of people missing. We have Jarrod missing, and Beverly missing, but we're going to go ahead and start. We have quorum.

B. PUBLIC TESTIMONY - At the discretion of the Chair, public testimony may also be taken when each agenda item is discussed, except for contested cases under Chapter 91, HRS. Individuals who cannot be present when the agenda item is discussed may testify at the beginning of the meeting instead and will not be allowed to testify again when the agenda item is discussed unless new or additional information will be offered.

C. APPROVAL OF THE MINUTES OF JULY 15, 2015 MEETING

Ms. Gima: So I'm going to open it up right now to public testimony. I don't have a sign in sheet, but if you signed up to testify raise your hand. Anyone? Well, alright then. So I'm going to close public testimony and go on to Item C, which is the approval of the minutes of July 15th, 2015 meeting. Any discussion regarding these minutes? Okay, no discussion. Do I hear a motion to approve?

Mr. Stuart Marlowe: So moved.

Ms. Gima: Moved by Stu, second by Brad. All in favor of approving the minutes of July 15th raise your hand. One, two, three, four, five, six, seven. And no noes. Okay, so the minutes are approved for July 15th.

It was moved by Commissioner Stuart Marlowe, seconded by Commissioner Bradford Oshiro, then unanimously

VOTED: to approve the July 15, 2015 meeting minutes.

(Assenting: J. Aoki, M. Baltero, K. Gima, S. Koanui Nefalar, S. Marlowe, B. Oshiro, B. Zigmund

Excused: J. Barfield, S. Ferguson)

D. COMMUNICATIONS

1. **MR. KYLE GINOZA, Director, DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, COUNTY OF MAUI requesting a 15-year time extension on a State Land Use Commission Special Use Permit (SP 94-386) for the continued operation of the Lana'i Sanitary Landfill on approximately 25 acres of land at Kaunalapau Highway situated within the State Agricultural District at TMK: 4-9-002: 060, Lana'i City, Island of Lana'i. (SP 94-386) (SUP 94/0005)**

The Commission may take action on this request.

Ms. Gima: And we will just move on forward to Item D, which is Communications, starting with No. 1, Mr. Kyle Ginoza -- sorry if I pronounced that wrong...*(Ms. Kelli Gima, Chair, read the above project description into the record.)*

Mr. Clayton Yoshida: Good evening Madame Chair, members of the Lanai Planning Commission, Clayton Yoshida with the Planning Department. Staff planner for this item is Kurt Wollenhaupt. And also with us is the Deputy Director from the Department of Environmental Management, Mike Miyamoto; and an engineer from the Solid Waste Division, Department of Environmental Management, Elaine Baker. So I'll turn it over to Kurt.

Mr. Kurt Wollenhaupt: Hi and good afternoon members of the Lanai Planning Commission. It's a pleasure to be with you. My name is Kurt. This is my first time, so we hope that it's a happy relationship starting out. The item before you today is indeed a time extension of a special permit for the operation of the Lanai Sanitary Landfill. So that does bring us to the question, well, why are we here today and what are we doing? And that is that the special permit on any acreage greater than 15 acres on the agricultural district zoned land does require review by this body, the Lanai Planning Commission. In addition, because this is over 15 acres, it will require final approval by the State Land Use Commission. So depending upon what happens here tonight those results will be transmitted to the State of Hawaii's Land Use Commission for their final dispensation and review.

The original time extension request was submitted in a timely manner prior to its expiration date of September 13th, 2014. Obviously we are now in 2015. There have been some staff changes, additional information; however, the policy that should an application be presented prior to 90-days expiration that the department continues processing it so that we're hoping that this can be move forward in an expeditious manner.

That being said the Lanai Sanitary Landfill was originally approved for 10 acres. Consequently you had a Special Permit Petition Land Use Commission Docket SP66-36. I went back with Riley Hakoda at the State Land Use Commission and was able to pull those old documents from 1966 for the commissioners. That interestingly enough for the original 10 acres does not have a time limit, so upon the expansion of the landfill an additional 25 acres, the Land Use Commission ruled and approved these additional acres and that is indeed what we're today is

for a possible extension of special permit 94-386 for the 25 acres.

There's a historical time line that's in here. I'm sure that the members are well aware of what the history of this project has been. Of course, rate to fill are our moving target. The department did request and was pleased that there was a recent engineering study and consequently the Department of Environmental Management did revise the request to extend from 10 years to 15 years for the time extension, to September 13, 2029. Ms. Elaine Baker and Mr. Mike Miyamoto will be discussing the particulars as they're engineers, and I'm representing the Planning Department.

My apologies for a bit of an errata on page 4 that this is greater than 15 acres, and therefore the Lanai Planning Commission will be the advisory body sending it on to the State Land Use Commission.

Just to give some of the members that may be new, there are five criteria to review a special permit. Number one, is it an unusual but reasonable use within the ag district; whether the desired use would adversely affect surrounding property; whether it would unreasonably burden public agencies; whether new trends and conditions have arisen since the boundaries were established; and, what kind of land is essentially not so suitable for agricultural purposes. Those are indeed the criteria by which any special permit is to be reviewed by this body and by the State Land Use Commission.

Ms. Beverly Zigmond: Excuse me? Can I ask a quick question?

Mr. Wollenhaupt: You can.

Ms. Zigmond: Sorry. Over here. And this is just a really manini thing, but again I want to make sure that we're talking about the right thing on page 4 under applicable regulations. It says "therefore the Maui County Planning Commission is the authority for this Special Use Permit."

Mr. Wollenhaupt: And that was -- I apologize that was an errata. It is over 15 acres. The Lanai Planning Commission is advisory. The State Land Use Commission is the final authority. So thank you, and I'm glad we got that corrected.

The analysis portion with regards to the Maui Island Plan, the Lanai Community Plan is in the staff report, along with the five criteria which I just mentioned and how they comply with. I shouldn't probably need to have to read all of that because I'm sure you're interested in the engineering part of this. That being said, I think that provides an overview, and Ms. Elaine Baker, civil engineer, with the Department of Environmental Management, will present a power point on the specific Lanai landfill. Thank you.

Ms. Elaine Baker: Okay, the first slide. Can -- does this work? I guess, so okay. The first slide is an aerial from Google Earth taken in January of this year. And you can see the main features of the landfill -- the office, and equipment area in the middle, the terrace slopes, the concrete perimeter swale, two riff raft swales, and a retention pond for storm water in the upper left hand

corner.

Okay, next slide please. Okay, we're here for a 15 year time extension request for Special Permit 94-386. We were -- our permit had expired so we had to renew for 10, and we thought, well, let's make it 15 since that's maximum time estimated for the landfill life. Comparison of 2015 and 2014 topographic surveys of Lanai landfill estimates 15.6 years of additional life. This is the same fill rate that we've had this year, 19,500 cubic yards. This volume includes both cover soil and municipal solid waste.

Okay, next slide. This slide is a summary of the Special Use Permits obtained for Lanai landfill. October 29th, 1966, SP 66-36 was issued by the Land Use Commission for the establishment of Lanai landfill on 10 acres. There is no time limitation on this original permit for 10 acres. On September 13th, 1994, the LUC issued SP 94-386 for an additional 25 acres for the Lanai landfill. Then on September 12th, 2008, that was renewed in a 10 year time extension for 25 acres of the landfill. That expired on September 13th, 2014. Now we have the 15 year time extension for that 25 acres which when put with the original 10 acres is 35.78 acres. And we did apply for this extension in a timely manner, on January 29th, 2014. This Special Use Permit is required by the Department of Health to operate the landfill. It's imperative that we have this permit.

Okay, so now I'm going to leave the landfill momentarily, and go to Lanai Solid Waste and Recycling Plan highlights. Efforts to expand the redemption center into a recycling center on Twelfth Street hit a roadblock when the County was notified of lease termination by Pulama Lanai in January of 2013. Redemption is managed by the State. It is not a County function at this point in time. Current recycling for the island includes residential scrap metal and residential electronics, collection events coordinated with and/or managed by Pulama Lanai. Recent County scrap metal events for residents were held November 2013 and this past June 2015. Pulama Lanai is designing a facility at Miki Basin for collected materials. Now the County funds referred to recycling which is an Oahu company to handle the residential scrap metal, not commercial, and related materials which are the propane tanks, cars, batteries, and appliances, while collection is done by Pulama Lanai. Recent County electronic events for residents were in November 2013, and there is one scheduled for this month, next Wednesday morning at the central baseyard.

Now history of recycling on Lanai. In 1994 to 95, Na Keiki O Ka Aina Environmental Education Program was funded by a County grant, Lanai Community Benefit Funds, Lanai High & Elementary School. And included in this program was aluminum recycling. We also at that time had Lanai Waste Systems run by Mr. Manny Amaral. In that year, he recycled 565 tons. In 1995 to 96, we still had Na Keiki O Ka Aina Environmental Education Program and we still had Lanai Waste Systems. He was recycling 17 tons, primarily newspapers and aluminum. In 1996 and 97, we still had Na Keiki O Ka Aina Environmental Education Program, but in January 87 Mr. Amaral pulled the recycling bins from Lanai City. In 1997 to 98, Lanai Waste Systems recycles aluminum, scrap metals, newspapers, glass and used motor oil – 22 ½ tons. 1999 to 2004, it was Lanai Waste Systems primarily recycling hotel glass and green waste. Now in 2005 the County received HI5 funds to run redemption centers, and Tri-Isle Resource

Conservation and Development, RC&D, received a County grant with State funds to run the HI5 Center on Lanai which is defined as an under served area. Tri-Isle negotiates an informal lease with Castle & Cooke for use of a temporary undeveloped property. In 2006 to 07 the Tri-Isle grant using State funds continues the HI5 center. In 2008, Tri-Isle is funded directly by the State to run the HI5 program. And that's when it changed from County to State, and continues to be State run today. 2008 to 2009, there was a lease agreement the County negotiated for M1 Zoning signed for an undeveloped site at Twelfth and Fraser. And in August 09 a relocation clause was added to lease agreement which meant that the tenants upon notice could be made to relocate. Okay, so Tri-Isle received the County recycling grant to design, build, equip and operate the recycling and redemption center at Twelfth and Fraser. In 2010, Tri-Isle hires Manthos Engineering and Lanai Building Company. In 2011, MECo installs electricity, the lease is amended to 2018. In 2012, RRR operates the redemption center, the building permit for the structure, and there was construction of the concrete slab and structure. In 2013, the County received the lease termination letter with relocation option in January, and vacate in June.

Okay, so recycling on Lanai, why did the County not choose to relocate? Land costs -- lease for the Twelfth and Fraser site cost \$400 a month. Leases had been negotiated for two undeveloped sites. Relocation meant a third undeveloped site. Development costs -- the County paid \$551,358 to develop the Twelfth and Fraser site. Operations cost -- energy cost for electricity to bale commodities and for fuel to move them to market offset environmental benefits as recycling markets fluctuates. And currently scrap metal is in the pits as well card boards. I was told card board used to be 120 a ton, now it's 30 a ton, but recycling markets has always fluctuated like that. So what we have is an event base recycling on Lanai. Recycling occurs as events rather than as ongoing collection. Recycling is available for materials with the most adverse impacts to the landfill, either by their volume, weight, and/or component materials. So those are the scrap metal, appliances, auto, batteries, propane tanks, tires and electronics.

Now Lanai's waste management future. This is a question for Lanai's residents and businesses. In 2015, the County hired a consultant to evaluate further options. Do we landfill? Well land filling today is not what land filling was when this land fill opened back in 1966. There are State and Federal regulations, so that sites have to meet certain location and design criteria such as being located not more than 10,000 feet of an airport runway end, used by turbo jet aircraft, or within 5,000 feet for piston type aircraft, or demonstrate that there is not a bird hazard to aircraft. Have a line of whether hydraulic conductivity of no more than one times tenth minus centimeters per seconds. In other words, a bottom line or that doesn't leak to protect the ground water. Do we have a transfer station? Well, where do we transfer our waste to and why would we bother to do that? Small scale waste energy? Which one? Are there even any? Stay tuned.

So Lanai's landfill improvements -- now we're back to the landfill, the purpose of this meeting. The Lanai landfill improvements, 2006 to 2015. In 2006 the County spent \$150,000 for survey and design of the storm water system upgrade. In 2007, the design total was \$204,475. Additional funds were added and we did the job. In 2008 we contracted \$2.2 million for the storm water system upgrade, and we started the job. 2009 we constructed the upgrade. 2010 we launched the alternative daily cover program using a tarp instead of a soil four days a week.

We started at two. And this was approved by DOH. In 2011, we designed an alternative energy system for the landfill office, \$75,000. In 2012 we put up the photo voltaic panels and weather stations was installed with a laptop, \$150,000. 2012, we routed the rip rap channels into the detention ponds because the rip rap was rolling away, \$24,900. 2013, three moisture probes were installed per DOH, \$110,000. 2013, vetiver were was planted for erosion control, \$78,077. 2014, additional vetiver was planted for erosion control, and in 2015 we hydroseeded the slopes for erosion control, \$5,000 to date. We will continue the hydroseeding.

Okay, so on each one of those, the Lanai landfill storm water system improvement 2006 to 2009, it features a 15 foot wide, four-inch thick, perimeter fiber reinforce concrete swale, two rip rap channels to the basin, and one rip rap overflow swale, and two concrete inlet swales because we have to control the storm water runoff from the highway. Okay, the alternative daily cover program is the tarp, what you see in the picture. It saves air space and saves cover soil. January 2010 we notified DOH that we were going to conduct this demonstration program. July to December 2010, we did daily photo documentation of the demonstration program, and this was tarping for two consecutive days. February 2011, we reported to DOH, and in May 2011, we were approved by DOH. July to October 2011, we extended the tarp to four consecutive days. October 2011, we reported to DOH, and April 2012, we got approval from DOH.

Okay, photo voltaic panels installed 2012. Container roofs were coated elastahyde water proofing. We installed 36 240-watts solar panels with an inverter solar charger controller, power distribution panels, and battery storage. We also installed a weather station on the office roof which measures wind speed and direction, temperature, humidity, rainfall, solar radiation. And we have a lap top computer provided with an internet connection.

Okay, rip rap swales were grouted in 2012. Storm water flows pushed the rip rap off the filter fabric, and the County contracted with Lanai Builders to grout the rip rap. Grout has prevented further displacement of the rip rap. Moisture probes -- three were installed in June 2013 to monitor landfill . . . (inaudible) . . . Okay, and here's a photo of one of them. They go down about 20-feet, and to monitor moisture at the bottom of the landfill, and it has been very dry since 2013. Vetiver grass was planted in 2013 to 2014. Vetiver grass is a perennial bunch grass used as a vegetative barrier to control runoff. Its strong compact root system, it strips down the slope, runoff, traps sediment and allow water infiltrate soil. It was planted to prevent storm water from running across the landfill. As you gather from the storm water is an issue at the landfill. Hydroseeding, 2015, we hired a landscape to put hydroseed Bermuda and rye grass to protect the soil slopes from erosion due to storm water runoff, and we will continue to hydroseed the slopes.

So, the Lanai landfill staff performs rubbish collection, litter control, equipment operation and maintenance, customer service, innovative use of locally available no cost materials, pond sediment removal, erosion control. And here they are, Jason, Keoni and Manny. Any questions?

Ms. Gima: Any questions members? Go right ahead.

Mr. Oshiro: You're asking for a 15-year permit? Is one year gone already since you applied back in September of 2014?

Ms. Baker: Yes.

Mr. Oshiro: So you've only got 14-years left.

Ms. Baker: But they go retroactive. The permit is dated retroactively. So, yes, 14-years now.

Mr. Oshiro: Okay, I've got another -- I've got a bunch of questions, but I'll just go down. Motor oil, who and where? You know, any, any other, any other county you can go and dump it at -- not dump it but you can take it and, and . . . (inaudible) . . . Here on Lanai, we don't got no place to dump them. And if you don't got no place to dump guess where they put it? Some place out on Pulama's land.

Ms. Baker: Right. Yes. I know for a number of years they did have used motor oil collection at the service station. But I don't even see the service station. I guess I must have missed it. So apparently now they've been unable. See it's a partnership that we had with the County. It was the service station, that we paid them to handle the used motor oil. But if they're not willing to do that, if we can't find anyone who's willing to do it, then it doesn't happen. And now, see that's been funded by the State, and now the State is beginning to look at that money and consider not funding the used motor oil program at all.

Mr. Oshiro: Okay, next question. The scrap containers, the batteries, the paint, the appliances and stuff -- unless there's a more recycle, a reoccurring pick up, people going dump. And if you just go outside the dump, the first viewing point right below the dump, when you look out to the left, there's a T.V., there's a desk, there's a chair. And that's only right at the dump now. There's other people if you go out in the State land, they got dumped out in the gulches and, you know, it doesn't make sense because if you don't have a reoccurring pick up more often people just going take it to their convenience to get it out of their yard, and you going find it out in, out in the --

Ms. Baker: Well...well, the collections are to occur more frequently than they have recently.

Mr. Oshiro: How much more frequently?

Ms. Baker: Three times a year.

Mr. Oshiro: Three times a year.

Ms. Baker: There has been a permit problem with trying to get a DOH permit. That's why they didn't have recycling events from November 2013 until 2015. But now that they've got that hurdle handled so there should be collection events three times a year.

Mr. Oshiro: That don't even work because I had, I've had a garage, the whole roof re-roofed,

and I had all the metal out there. And if my wife didn't go out and stop they guys and say, hey, hey, what you guys going pick this up? They would've left it and it's been there since 2013. So, you know, I don't know if the County's got to get with Pulama to work out something where you call in say, hey, I've got some scrap metal that needs to be picked up cause these guys was going drive right by. And I would've, I'd be end up, you know, I'd be talking to somebody down in Pulama saying you guys gotta come get this.

Ms. Baker: Right. Well, Pulama apparently is applying to the State for permit for a recycling, a scrap recycling facility. But these things always take time.

Mr. Oshiro: Okay, right now, how high is that fence down at the dump?

Ms. Baker: It's a six-foot cyclone fence.

Mr. Oshiro: It's a six-foot cyclone fence but the problem is the landfill is higher than that six-foot. So what use is it there for? I know it was put there to stop, prevent waste from flying out.

Ms. Baker: Right. And now we have the portable screens and litter screens.

Mr. Oshiro: Yeah, but, but you still get stuffs that flies out.

Ms. Baker: Actually, I thought –

Mr. Oshiro: And it doesn't make sense because right now the landfill is higher than that six-foot.

Ms. Baker: Right.

Mr. Oshiro: And then if you gonna leave it open for another 14-years, eh, two years ago I could see the gulch. Now I cannot see the gulch and that's two years, okay. There still be a lot of construction here on Lanai so that dump is going get filled. 15-year time is going be filled long before that.

Ms. Baker: Well, they do have a 20 ton per day limit to have their small community exemption is that we don't have to put in ground water wells that go 800 feet deep. So the maximum the landfill can take any day is 20 tons.

Mr. Oshiro: So again we come to the problem if we don't have occurring pick up of waste people going to dumping out in the field.

Mr. Michael Miyamoto: If I may respond, my name is Mike Miyamoto. I'm the Deputy Director for the Department of Environmental Management. And I hear your concerns, and it's something we're working on, this household hazardous waste that will address some of these concerns regarding the oil that residents may have, old paint that you want to dispose of. We're just starting that on Maui right now, and we're planning to bring it to the various islands, you know, the other two islands also to try and get that to be an ongoing program. As you may have

seen last year's Council budget they approved this environmental protection and safety division program. And what that does is that it creates this pot of money to address these environmental type protection and concerns, which includes landfill diversion, these household hazardous waste, metals, and so forth, these other issues. So we're working with that. We're getting prepared to start the 2017 budget process, and we're going to be looking to put more money in there to, like, you say, serve the more rural communities for those type of services like household hazardous waste and metal. And since we don't have a facility here, we partner with Pulama Lanai and some non-profits to help them to try and get that off island as much as possible. So we're fully in support with what Pulama Lanai is doing, trying to get their own permits for those types of facilities.

Mr. Oshiro: Sorry, one more and then I give it to you. Okay Lanai planning, they didn't address anything about a future landfill, okay. You have any idea if it goes beyond what, what, it can fill up in the next 14-years? Do you have any idea where you gonna put the next landfill? I mean, would be nice to kind of think about it already, right?

Mr. Miyamoto: I agree. And we have been in discussion with Lynn here from Pulama Lanai, and we're also doing that engineering study that looks to do, you know, do you want to create another visual thing, like, another landfill, or like as Elaine showed in the presentation, do you want to transfer it? More than likely because of the barge system it would go to Oahu. Their facility, their incineration facility doesn't get enough trash right now. So right now they're just writing a check to the service provider for the incineration process because they don't get enough waste. So the waste may have some value to them. The other alternative is a small waste conversion type facility that could either generate power or some kind of alternative fuel like bio-gas. The one on Maui we're looking is bio-gas. We're looking at creating this bio-gas. You can clean it, you can manipulate it so it can be CNG, LNG, and that can be used to fuel diesel. So we just met with somebody who was thinking about --. I take that back. If you saw the one on the Big Island, the private company was looking to do their own waste conversion facility. They were looking to develop bio-gas, and they were going take that bio-gas and fill his refuse truck. He's got his own fleet of commercial refuse trucks, and he wanted to convert all of that into CNG and LNG, and he was going to use the trash that people threw away, convert it through that process, create the gas, and then use that to fuel his vehicles. So that's the kind of models that we're looking at and in conversations with Pulama Lanai.

Ms. Zigmond: Okay. Hi. I have a couple of questions on the staff report. So, on page, I guess, it's 4-5, the kind of items that are excluded in our landfill includes commercial construction and demolition debris. So I'd like to know what happens to that.

Mr. Miyamoto: Yes I'm sure Lynn could probably testify to how much we've made or shipped it off island, containerized it and get it off the island. Because we've agreed that there are certain things that could go into the landfill, but general construction waste like she's doing a great job trying to recycle as much of that as possible so she doesn't have to pay a landfill cost because metal has value. Although it's decreasing, it still has some value so she's trying to separate as much of that as possible. And we're trying to work with her to accept what is acceptable within that list at the landfill to reduce the cost.

Ms. Zigmond: Is there a fee for that?

Mr. Miyamoto: It's all -- the shipping off is all borne by the company. The County has no involvement in it at all. We're just saying, you can't bring it here. She has to pay the full bill to take it off island.

Ms. Zigmond: Okay. Thank you. And then it says "dead animals over 70 pounds," is there a scale? Do we actually weigh them?

Mr. Miyamoto: Oh, so you're --. That's mainly --.

Ms. Zigmond: It says "dead animals." I mean, I don't care what kind it is. I just want to know to know if there's a scale?

Mr. Miyamoto: To be honest I really am not familiar with the, the animals. I'll ask Elaine if she knows.

Ms. Baker: Well, I was talking to Manny and Jason today, they don't get full on dead animals. They get the remains, so the hide and bones, apparently. So they're now coming in. Apparently it was separated. Oh, because the State hunting season, so moufflon sheep has just started, or will start this coming weekend, and run for nine weeks. And then deer is February and March. And they use to come in separately. But then that incurred a special handling fee. And so now it comes in apparently as mixed load so the State has worked something out for mixed loads. So to my understanding the entire animal doesn't make it to the landfill. It's only parts of it.

Ms. Zigmond: Okay, thank you. And then about half way through the staff report, this is the...fiscal year 2014 annual report, on condition no. 3, it says "petitioner shall utilize non-drinking water to the extent possible for grading and dusting control at the landfill." And the response says that "it currently uses an agricultural source of water provided by Pulama Lanai." So I'd like to know where that water's coming from.

Ms. Baker: I thought it was a field across the highway.

Ms. Zigmond: Is it potable? Is it non-potable?

Ms. Baker: Well –

Ms. Zigmond: And I'd like a little more specific where that comes from please.

Mr. John Stubbart: John Stubbart, Director of Utilities. The water source currently being used for filling the truck for the waste water is potable water at this point. Before it was non-potable, but we have moved our chlorination point, and so that, all that water in the Palawai loop now is potable water.

Ms. Zigmond: About how much is used on a daily basis? And what well is that coming from?

Mr. Stubbart: Well 4 is the primary source. And gallons per day...

Ms. Baker: It's a 4,000 gallon trucks. How often do we fill it? I know we don't fill it every day because the man power issues. But I know Jason today was talking about he was glad to have a water truck because back in the day he use to have to pray for rain to control the dust down there. So I would say our use is moderate but I would have to defer that to Jason. He said I could call.

Ms. Zigmond: Because water is always an issue here. And one other question please. What happens when this permit expires? What happens to the current landfill?

Ms. Baker: It will be closed according to regulations. It will have a prescribed soil cover on it and be grassed and become vacant land...unless someone chooses to develop it. There have been landfills turned into golf courses, but I guess there are other lands for that here.

Mr. Oshiro: I have two more questions. One, one -- the biggest question I got is how high is this landfill going? Is it going become a mountain? It is going to be another -- we going have to rename this, this landfill?

Ms. Baker: It gets --. Sorry. It's narrower as you go higher so your capacity is reduced as you go higher.

Mr. Oshiro: So that's why you compacting everything that has to be brought down there?

Ms. Baker: That's standard waste handling to compact the waste.

Mr. Oshiro: Compact the waste to save landfill, save the landfill.

Ms. Baker: Right. Compact the air space. It's all about air space, trying to conserve it.

Ms. Joelle Aoki: In your recommendations on 5.2 you indicate that possible public composting options of green waste composting. Do you foresee that to be in this, in this 15 year extension? And, and one more part for that question. Is there, is there current regulation and/or fines on improper green waste disposal currently with the County of Maui?

Ms. Baker: With the State. Okay, that, that is with State. Okay, and also State. There's a limit. You can't have more than half a load be green waste that comes in. But we don't accept commercial green waste down at the landfill, only residential.

Ms. Aoki: And I'm sorry, let me clarify. Improper disposal of green waste, meaning in other areas beside the landfill. Do you know if there's any regulations and/or HRS relating to improper disposal of green waste. . . (inaudible) . . . invasive species, and, and that type of . . . (inaudible) . . .

Ms. Baker: You mean illegal dumping?

Ms. Aoki: Yes.

Mr. Miyamoto: Hi. Mike Miyamoto again. Having been in Public Works as a Deputy in Public Works, we treat it as, as littering. You know any time you see people who just dump green waste, trash or whatever, we treat it as littering, and for Public Works, anything in the public right-of-way we're responsible for. Anything outside of the public right-of-way within private property we try to work with the owner of the land to try to clean it up. There's certainly, you know, some Department of Health concerns about rats, and bugs, and everything else. And then there's also, you know, the fire hazard of it all, so if we try to get the Fire Department involved in those types of issues. So we try to work with private land owners if it's on their property. But if it's in the public right-of-way it becomes Public Works, and then we work with them when they try to bring it to the landfill to properly dispose of it.

Ms. McCrory: Lynn McCrory, Pulama Lanai. We currently have two compost facilities. One is in the city and that is operational. Right now we're just bringing a bunch of green waste up there, and it's going to be sitting on the site. The other site is a much larger facility. It's out near the airport. We have the permit for it, but we are waiting right now for a clean air permit for one of the machine and that's been about nine months now. So hopefully very soon we'll get that permit, and then that facility will actually start going the green waste to compost. And then that will be available and we'll be able to take more of that.

I did want to address just a couple of minutes, Brad, if you have a minute. The collections that we done, and they were done every four months since we started -- were paid for by Pulama. Our trucks, we picked up everything from cars, to white goods, to batteries, to tires. None of that went in the landfill. That all went to containers. It was all shipped to H-power, or the batteries went to a specific place, the tires went to a different place. There was only one period since 2013 where we didn't make every four months. We made it every -- we had one that went five months before we did it. The County does pay refrigerant recycling a small portion of that costs for them to do the work of smashing down the cars, filling up the various containers and shipping. But it doesn't cover all of the cost, so everything that everyone in this community had saved up -- and think we're down to almost to no cars and we're still finding some in the bushes as you know -- never made the landfill, where it could have.

We do have, at Miki Basin, two sites that we have set aside. One for Maui Disposal where they will operate to pick up the trash that they pick up around town. And the other one will be for refrigerant recycling, and we are in the process of setting up the lease for them. And then you will be able when that is set up and functional to take things to that site, so that will be in place. But they are also applying for the recycling permit. And once that is granted then we'll be able to go. In the mean we stay with, every four months and the notice that goes out. But know that gets done, and it doesn't go to the landfill.

Mr. Oshiro: Okay, I want to say thank you to Pulama for doing all of that because if not, like, it would be in your property. Question about the green waste, you said in the city, is that a

collection point or --?

Ms. McCrory: No, it's not open for collection at this point. You, you should take the green waste down to the landfill where it's separated, and then we try to come back up and pick it up, and we've just been, at this point, piling it over at the new composting site. It's just not been ground.

Ms. Aoki: Thank you. So does that mean in your recommendation what you've indicated as far as green waste disposal, will that still be an option in the next 15 years in light of Pulama Lanai's efforts with composting? And, and thank you very much Lynn because that is a huge benefit for our community. I'm asking these questions because I hike every evening and I've observed individuals who have started businesses illegally dumping green waste. And there is some contents in that green waste that is not considered green waste that is littering, and introducing invasive, potential invasive species that is very close to our hale. And so I'm just curious about this because now I'm really keeping an eye on it because I've seen it occur for almost every day. So will that still be an option in this next 15 year extension based on your recommendation?

Mr. Miyamoto: Yes. Typically, we take the residential green waste and so long as it's not over 50% of the waste. You know, we're thankful for our private partners who will then be up, and can take the commercial. And if residents would take it to her, they could certainly reduce the amount of trash going to our landfill. So right now we're still by permit allowed to take residential. And then hopefully when they get their commercial facility up, residents can then take it straight to them and possibly, who knows, maybe you get some compost at the back end or maybe some mulch out of it.

Ms. Aoki: I've observed -- I actually have taken green waste down on the weekend when they're open and they've segregated it, so I, I've personally witness that. And that, that just brings the light that at least six days a week, there's a location to dispose of your green waste. There is no reason to be dumping illegally. Thank you.

Ms. Gima: Any other questions from Commissioners at all? Anything else from you folks?

Mr. Wollenhaupt: The recommendation?

Ms. Gima: Yes, please.

Mr. Wollenhaupt: Members of the Lanai Planning Commission –

Mr. Yoshida: Yeah, I guess we did ask for public testimony at the beginning but that was for people who couldn't stay generally. So I guess if people want to testify on this item, I guess, the Commission can ask for public testimony.

Ms. Gima: Okay, we'll open up public testimony again.

Mr. Ron McOmber: I thought they were going to forget about us. My name is Ron McOmber.

I'm also a member, it's still in standing, of the community plan amendment stuff, the CPAC. You know what bothers me about this extension is all the stuff we read, that landfill only has six years of life left. Six years. It's six years, and you want to add another nine years to that? I mean, this is not our statement. This is statement in the, in the paperwork that, that landfill only has six years of life left. So what the hell we suppose to do with the other nine years? This is, this is not right. If we had known that the County was going to come back and ask for a 15 year extension while we were doing the CPAC, we would have addressed that. We did not address that. It was not brought up to us. We read it. Well, you've got six years. Go.

The other thing that bothers me is they show all this improvements that they did down there. Believe me I was a UPW shop steward. Everything they gave them down there made their life a little bit better to work in that hell hole down there. All the electricity, all of the air-conditioning, all the trailers, all of the stuffs that they did down there sure in the hell wasn't doing it 15 years ago. So whatever they've done, I think a lot of it was generated because the County knew they had to take care of their employees. It had nothing to do with how good. Those guys bust their butts down there. For you guys that go down there regular, that's, that's probably one of the cleanest landfills there is in the State. These guys are local boys. They work hard. So, to say we had to spend \$200,000 for this or \$150,000 for that, that was something they had to do for those people working down there. So this is not a given. It's something they should've been doing a long time ago. When I was UPW shop steward, they should have been doing it then. We couldn't get them to do.

If this landfill, it only has six years of life, what are we doing the other nine years? This isn't right. We need to have the County get off their butt and find another site. They were gonna go across to the other side and put it in the old quarry, but Castle & Cooke said, oh no we'll give you that site, but you've got to pave the road. Well the County doesn't have the money to pave the road. Something has to be done. I think it's misleading that this community, the community plan people did not see this and we should've addressed it at that point. And we're still not done with the community plan so we're gonna bring this. I'm going to personally bring it up when we continue our, out stuff on the community plan. This upset me something awful that this would come along six months after we're done doing the community plan. Lanai people don't deserve this. Pulama has done a wonderful job of taking all their big stuff off the island. If they went down their down there and started dumping their stuff like Castle & Cooke did, that dump would be across the road. I gotta give them credit for that. But not for one minute do you believe that this pit is a 15 year. This is actually a nine year on to what the County already understand is six year life is at. So when you're doing this, somebody needs to answer some questions. Before you okay this, we need to find out more about this. Thank you very much. You were going to ask me a question?

Ms. Zigmond: Okay this is disturbing, right? So we're hearing 15 years, 14 years, 15 years, and now you're saying six. So can you recall where that information came from because that's a lot of difference?

Mr. McOmber: It's in the assessment of that. There's somewhere there's an assessment that said that we only had six more years left of that. It's a County assessment. And now I'm

looking at 15 years now? Something's not right about this. And if you let the County off the hook on this, County's notorious for not taking care of this. Look at what we're doing about affordable housing. We have -- we have acres over here for affordable housing, we can't even get them to do the infrastructure. I'm really upset with the County. The County is not taking care of Lanai. Thank you.

Ms. Zigmond: Thanks Ron. Then I'd ask the County, I'd like to hear what you have to say about the six year life, please.

Mr. Miyamoto: Thank you. Mike Miyamoto, Deputy Director for Environmental Management. Basically the landfill has a fixed amount of air space it can occupy. So let's do an analogy. Like you have a gallon bucket, you have a gallon of air that you can put in it. When you calculate the six, you might be filling it with a big cup. The rate of fill tells you you're going to fill that gallon of bucket really quick. Well, if today you're filling it with an eye drop, how much longer will that air space in that gallon bucket last? It's going to last much longer. So right now that's why in our permit you saw that we stated 15.6 years based on the current rate of filling. So that rate goes down due the wonderful efforts of Pulama Lanai and recycling and everything, that may last, that landfill which has a fixed amount of air space by permit may take even longer to fill. So that, that's the key factor there, that rate you're filling these landfills at.

Ms. Zigmond: Could it get filled more quickly?

Mr. Miyamoto: Given the way we're moving right now, you know, because of our restrictions and the way we operation our permit, we do an annual assessment of how we're filling it. For example, one of the things that's really important, someone brought up about compacting. The better you compact that, the more air space you have available. So if we can do a better job at compacting, we can get more air space. If the dirt, the dirt has to be at least six inches at the end of every day, typically. But now we're using a tarp so we don't have to put in that additional six inches of dirt to fill that air space, so it's saving us more air space so the landfill can last even longer because we're not wasting air space with dirt.

Mr. Stephen Ferguson: Hi. I've got a question. So where did the discrepancy from his six year he saying was one County assessment and then how did --? I understand the volume you talking about here, you get one fixed volume, but what was his six, six year that he said, what were they based? You know, what input in the landfill was that based on if you saying that your 15.6 years was based on the current which should be a higher level now because get more stuff going on Lanai, and so, so how you got 15.6 and he saying is six. What was that six based on? Would you know that?

Mr. Miyamoto: I don't know personally off hand. All I can think of is we still have that same amount of air space that we can fill. We can't go above a certain elevation. We recently had that on Maui, that, the Maalaea C&D landfill. Their permit says they can only go to a certain height, and that's what they're limited to and that gives them the volume of air space they can occupy. We would have to go back and look at the calculations. Like you said, you know, maybe there were the fill rate was higher, maybe we didn't do as good of a job with the green

waste or with other bad things that shouldn't be in the landfill back then. I'd have to go back and do more research on it.

Ms. Stacie Koanui Nefalar: Mines is a commenting . . . (inaudible) . . . So my husband is the landfill supervisor. From what I know, conversations, was because the way Castle & Cooke dumped their, their rubbish or their trash, Manny Amaral use to pick it up. Manny use to bring his, his rubbish into the dump, so the dump would charge Manny. So it was hotel trash that would be going into the landfill too. So now that Pulama has a different way, they have different disposing methods, it's less trash going in there.

Mr. Ferguson: Okay so what would happen say, say that demand went up for waste? Say she said 20 tons maximum per day. What if this island start generating more trash and then you, you going turn away trash or what going happen to the excess if you reach that level if more construction happen, or more whatever? You know, where that excess going, if you exceed that 20 tons?

Mr. Miyamoto: Exactly. We're way, I think, we're pretty well below the 20 tons per day with construction/demolition waste at this point. You know, certainly as the island grows or if there's more waste, I mean, there's certainly things that the hotel can do like, for example, cardboard has a value on the market. So the recycling of cardboard is valuable to them. You know, for example, on Maui, a lot of the hotels have their own baler because they want that, that income from the cardboard. So we would look at further, you know, doing more recycling or landfill diversion as we call it, whether it be -- for the commodity that have a value on the market. I'll give an example, an extreme example. Glass has \$9.00 a ton when you deliver it all the way to the guy in California. It costs us about 300-plus dollars a ton to get it to him, and he just gives us \$9 at the back end, so it really don't make sense to do that. So we would look at somehow doing some kind of other program that could then recycle the glass. Keep it local. If we can crush it, we can possibly use it at the landfill to --. If you can imagine the top surface of the, of the trash everyday, it's not a perfectly flat surface. There's holes and everything. So we're working with DOH right now to allow us to crush that glass and fill in those holes and then put the dirt on top or the tarp on top so that way we can, we save some air space, we save some materials that goes in the landfill. Because like you say, glass has some air in it. If we don't crush it, it's wasted air space. So we would really look for more recycling. Partnering with the private sector to help us in that aspect also.

Mr. Oshiro: I got a question.

Ms. Aoki: Thank you. Thank you Ms. Chair. Based on your land diversion, have you monitored data on the rate of fill in the past three years since Pulama Lanai has started their recycling program because I didn't see that data provided?

Ms. Baker: The data is in the planning packet because we have to do an annual report to the Department of Health every year, the end of July, for the previous fiscal year so we do report on waste tonnages. And now that we do annual topography we compare the volume that we use each year with the tonnage. But because there is no scale we have to estimate the

incoming tonnage.

Ms. Gima: Okay, I'm gonna finish up public testimony before any of the other Commissioners ask any other questions. So anybody else would like to testify? Stan?

Mr. Stanley Ruidas: Stan Ruidas, Lanai resident. I was on the Commission, sitting where you guys sitting, I think Bev was there, and we approved this years ago, I guess, 2008. And they said that they would have a site that would be available, you know, at the end of the permit. Well, you gotta, you gotta hold these guys accountable because they neva do the recycling which is like they blaming the State. But every time blame the State, blame the State. But the County should be more proactive. And, you know, you look, you drive down there and you can see the thing is high. I no care about air space. You guys look at it, you know it's getting high. Brad knows. All, all the trash getting dumped. Sunday, Monday they close, where all the trash going? In the hunting area. That's not being nice. That's not being pono to the land. Oh, budget cuts, oh, maybe that. But look, you look you spend a lot of money on, I don't know, . . . (inaudible) . . . too much money. But my point is if I was you guys I would deny this, or if you guys no have the ability, just make sure it doesn't pass because at that time when we passed the original permit, this thing should've been taken cared of. And they going ask for 15 years? Something going happen. We going get one place that we not going like. Thank you. Thank you for letting me talk trash.

Ms. Gima: Anyone else wanting to provide public testimony at this time? Okay, so I'm going to close public testimony and last questions, thoughts, Commissioners?

Mr. Oshiro: You know, I asked the question, how high is this thing going? You guys actually know how this mountain's going so can I have the fact of how high up, elevation wise, this, this hill suppose to be?

Ms. Baker: Okay, it's in the planning document in the master plan, and it's my understanding, it's about 800 feet elevation above sea level. There should be a final grade drawing in here. So basically from where we are now the mauka portion would go up another 25 feet, and over the office it would be about 50 feet. Okay, does it give an elevation? He, he found the page. And it is a matter of economics. It's very costly to site and build a new landfill. Okay, 1,022. I'm off 200 feet. Okay, maximum 1,022. And that's the mauka, the most mauka point of the landfill because it does slope mauka to makai.

Ms. Richelle Thomson: Thank you. I just wanted to add Deputy Director Miyamoto addressed this, but just to qualify that what the Commission is considering is an extension of the special permit, a time-extension. The landfill does operate under a Department of Health permit so it has -- that's also Department of Health, that's the closure height, the closure plan, all of the waste restrictions that apply to the landfill. So what you're considering is whether this landfill has operated in compliance with its special permit, the terms, and whether it continues to meet those terms, and whether the time requested is backed up by the data presented by the department.

Ms. Gima: Okay, commissioners, any other questions...discussion, comments? Okay, so we'll have the County provide their recommendations on this permit.

Ms. Zigmond: Madame Chair could they please, for, especially for the sake of our new Commissioners, give us as on page 12 of the staff report what our alternatives are prior to them giving their recommendation? Thank you.

Mr. Wollenhaupt: Hi. Good evening Commissioners. In response to Commissioner's request for alternatives to the State Land Use Commission Special Use Permit, and to reiterate once again that this body is giving an advisory opinion to the State Land Use Commission for their final dispensation, there are three alternatives. The first would be deferral. The Commission may defer action to another meeting to obtain information they believe would assist in their deliberation on this request. Two, they can recommend approval to the State of Hawaii Land Use Commission. The Commission is not the final authority as reiterated as this is over 15 acres, and therefore can make a recommendation to approve or to deny the special permit. Or their recommendation to the State of Hawaii Land Use Commission can be to deny this time extension. So you have deferral, recommendation of approval to the State Land Use Commission, recommendation of denial to the State Land Use Commission.

Did you wish me to go on to the --? The recommendation of the Department of Planning regarding the time extension for the special permit SP 94-386, the application does comply with the applicable standards for a State Land Use Commission special permit as noted in the Conclusion of the Law, regarding the points one through five. That being the case, the Department recommends that the approval of the request for the Land Use Commission special permit time extension subject to 10 conditions. Did you want me to read all 10 or --? So in consideration of the foregoing the Maui County Planning Department recommends that the Lanai Planning Commission adopts the Planning Department's report and recommendation prepared for the August 19th, 2015 meeting as its Findings of Fact, Conclusions of Law and Recommendation and to authorize the Director of Planning to transmit the recommendation on behalf of the Lanai Planning Commission to the State of Hawaii Land Use Commission for their final deliberation.

Mr. Oshiro: You know everybody talking about tonnage going into the dump daily now. Well, Koele and Manele is not open, so their waste is not being taken to the dump. But as soon as they come online their waste, both hotels, going down to the dump. So they cannot say it's not over 20 tons. You know, you don't know what it is because right now the only waste they picking up is on Wednesday and Thursday -- Tuesday and Wednesday when they come through the city. And Maui Waste pretty much, when the hotels were open, they were picking up trash every day, from both hotels. I just want the Commissioners to know that.

Ms. Thomson: Thank you for the comment. I wanted to kind of reiterate too the, the options that you have -- deferral, if you don't have sufficient information or the resources can't answer the questions that you have; recommending approval or recommending denial to the State Land Use Commission. Recommending denial, I think, you know, I would, I'd suggest that you really think through what the landfill means to this community and the time needed to develop a new

landfill is very, very long. It's incredibly complicated, not only in the land acquisition, but in the permitting of a new landfill. It's a...it would probably take the better part of, you know, a decade, you know, it potentially could. So, you know, keep that in mind as far as, you know, what you're approving is does this landfill meet the requirements for a time extension of the special permit. And if it does not, or you feel it does not, you then can make those findings on the record as well. Thank you.

Ms. Zigmond: I have a question with all due respect to Madame Vice-Chair, do you need to recuse yourself from this vote?

Ms. Koanui Nefalar: I believe I can make a, you know, non-partisan position. I don't think I...and, you know, I can vote last to see what everybody else votes.

Ms. Thomson: Thank you for that question. The Vice-Chair and I did address this at the last meeting in preparation, and, you know, my thought on it are if you have a conflict of it's whether you or your spouse, generally, your very immediate family has a direct financial interest in the outcome of an application before you. Where her husband is a County employee and the fact is that even if this were denied, you know, or approved he has a County job and it's a union job, so he would not be losing his job or his salary. So that, that's kind of the thinking and my recommendation is that she does not need to recuse herself unless she personally feels that she couldn't make a fair decision.

Ms. Zigmond: I just know in the past there have been some times when people should've recuse and didn't, so I just wanted us to be squeaky clean. Thank you.

Ms. Gima: Okay, does any of the Commissioners want to entertain any motions regarding this permit?

Mr. Marlowe: I would like to move that we accept the permit, and pass it as requested. That's the recommendation.

Ms. Gima: Is there a second to Stu's motion?

Ms. Marlene Baltero: I second.

Ms. Gima: Seconded by Marlene. Okay, and so the motion has been made by Stu to recommend for approval to the State Land Use Commission, seconded by Marlene. All in favor? Oh, I'm sorry, is there any further discussion regarding this before we vote?

Mr. Ferguson: The length of this permit is, is set, what they asking for, yeah? The 15 years, that cannot be re-looked at or --? Because I just feel, I just feel from six to 15 seems -- nine years seems a whole big gap.

Ms. Thomson: So the motion is to approve as recommended by the Planning Department. So the, the current motion is to approve as requested for the full 15 years. And as far as what your

choices are though you don't have to vote for that motion, or you could make a motion to amend that time component of the condition. So if you, if you felt that you wanted a different time limit to be considered you could move to amend it. You may want to, you know, revisit the department information, though, you know, I think that they provided information supporting the 15 years by the most recent engineering report. But if you need any further data from them or to discuss it more, please feel free.

Ms. Gima: So we still have a motion on the floor. Stu, to clarify your motion was to approve as the County has recommended?

Mr. Marlowe: Yes.

Ms. Gima: Okay. Alright, and that was second by Marlene. Any further discussion before we vote? So all in favor of approving or recommending of approval to the State Land Use Commission as recommended by the County raise their hand. Okay so that motion fails, we have four. And how many against? Noes? How many noes? One, two, three. Joelle? None? Okay. Would anybody else like to entertain a different? Yeah, Joelle abstained. By abstaining your vote is a yes. Okay.

Ms. Aoki: . . . (inaudible) . . .

Ms. Gima: Well then it passed. But it's passed now...because you abstain that's a yes. So, the motion has passed.

It was moved by Commissioner Stuart Marlowe, seconded by Commissioner Marlene Baltero, then

**VOTED: to recommend approval to the State Land Use Commission
as submitted by the Planning Department**

(Assenting: J. Aoki, M. Baltero, K. Gima, S. Koanui Nefalar, S. Marlowe

Dissenting: S. Ferguson, B. Oshiro, B. Zigmund

Excused: J. Barfield)

Ms. Gima: I'm going to propose we take a 10 minute break before we go on to our next item, so we will resume at 6:55 p.m.

(The Lanai Planning Commission recessed at approximately 6:40 p.m., and reconvened at approximately 6:57 p.m. Commissioner Beverly Zigmund left the meeting at 6:40 p.m.)

- 2. August 4, 2015 First Semi-Annual Report (January to June 2015) submitted by LYNN McCRORY, Senior Vice-President of Governmental Affairs, PULAMA LANA'I regarding the project irrigation demand associated with**

the Residential and Multi-Family Development at Manele, TMK: 4-9-017:001, 002, 003, 004, 005, and 4-9-002:049, Manele, Island of Lana'i. (95/SM1-015) (95/PH2-001)

The Commission may provide its comments on the report.

Ms. Gima: Okay, we're going to resume our meeting right now. It is now 6:57 p.m. Just for the record Commissioner Zigmond has left this meeting, but we will move on with our agenda. And so up next is Item 2...*(Ms. Kelli Gima, Chair, read the above project description into the record.)* I'm not going to read through all the TMKs, and this at Manele on the Island of Lanai. And the Commission may provide its comments on the report. So Lynn, I'll turn it over to you.

Ms. McCrory: Lynn McCrory, Pulama Lanai, and I'm going to turn it over to John Stubbart our water utility manager for any questions you have.

Mr. Stubbart: Do you have any questions?

Mr. Marlowe: . . . (inaudible) . . .

Mr. Stubbart: No.

Ms. Gima: Any questions, Commissioners, for Mr. Stubbart or Ms. McCrory?

Ms. McCrory: I just want to be -- oh, Lynn McCrory -- I just want to be sure that we're still providing the information in a format that is workable with the graphs rather than all numbers that once were in there. Graphs are still good? Okay.

Mr. Oshiro: Thank you. Nothing to do with water, or maybe it does got to do with water, but Koele, when the hotels open up they going re-sod and open that . . . (inaudible) . . . up again? I just wondering.

Ms. McCrory: Decisions haven't been made on the golf course when it will re-open or what will be done.

Ms. Gima: Any other questions Commissioners? Okay, thank you very much Mr. Stubbart, Ms. McCrory. We will move along, and this to Item E which is the workshop on the Public Trust Doctrine provided by Corp Counsel.

E. Workshop on the Public Trust Doctrine provided by the Department of the Corporation Counsel

This is for information purposes.

Ms. Thomson: So Commissioners, my apologizes. I did bring the presentation on a flash drive,

but unfortunately the version of power point that I used to create it wasn't compatible with the machine so please refer to the hard copies. And there are additional hard copies if anybody in the audience would like to follow along.

So the public trust in Hawaii is a -- it's a body of law based on the Hawaii Constitution, and public trust resources are all natural resources including land, water, air, minerals, and energy sources such as geothermal. I'm focusing primarily on water because I think that's probably the, the issue of concern to the Commission. And that's also the bulk of the law in Hawaii has to do applying the public trust doctrine to water resources.

So we're on page 3, Hawaii Constitution Article 11, Section 1, is, I won't read it, but it states that natural resources are held in the public trust and they're held by the State for the benefit of the people. Section 7 of that same Article discusses water resources and the Constitution has set out instructions to the legislature to create an agency that would oversee water conservation and manage its use in a more holistic fashion. So the State Commission on Water Resource Management was created under State law, and the State Water Code is also a part of that chapter. It's 174C, Hawaii Revised Statutes.

Page 5, those are really just a listing of the primary public trust cases in the State of Hawaii. And you notice that near the bottom, the Waiahole Water Case is bolded. So that was the, one of our main cases that the Hawaii Supreme Court dealt with applying the public trust to water resources. So page 6, we're talking about the Waiahole Ditch, and it's a ditch constructed on Oahu in the early 1900s that diverted water from windward Oahu to water the sugarcane fields in the central plains. And that was used for decades before sugarcane became not viable, and the water continued to be used for different types of development. In 1992, the Commission on Water Resources Management began requiring people wanting to use the ditch water to apply a permit under State law. Many people applied. In fact, so much that they applied for a greater quantity of water collectively than was in the ditch. So several parties including community non-profit groups petitioned CWRM, which the Commission on Water Resources Management, to leave more water in the windward streams so that those streams would be viable and support aquatic life again. CWRM issued its decision and divided the water including leaving a quantity in, in the streams. That decision was appealed with the Hawaii Supreme Court, and the Supreme Court laid out several tests for public trust.

So the public trust according to the Hawaii Supreme Court is the State and the County's duty to protect the purity and the flow of waters, and to -- it should be insure -- that waters are put to a reasonable and beneficial uses. The State can compromise the public rights and the water resources only after a decision is made with openness, diligence, and foresight, and that commensurate with the high priority of these rights. What the court is saying is that when you're looking at the public trust resources you need to use a high level of scrutiny and do a very good job in your analysis.

The next page, page 8, describes the dual nature of the water resources trust. So it's both resources protection, protecting traditional and customary Hawaiian rights, wildlife and maintenance of ecological balance, scenic beauty, and the preservation and enhancement of

the waters where uses that in the public interest, while also maximizing the reasonable and beneficial use of the water. So it is a balancing test based on the best available information that you have and that applicants provide to you.

So the Hawaii Supreme Court kind of went on through this case to discuss applying the public trust, you know, and stating that it doesn't preclude, you know, ceases any uses, but it requires that all uses, public or private, promote the best economic and social interest of the people of the state. And it's a balancing test again. It's a controlled development, rather than no development.

On page 10 is the most recent case. We refer to it as Kauai Springs. It's a 1914 -- I'm sorry -- a 2014 case, and a private water bottling company reviewed by the Court of the Kauai Planning Commission to -- excuse me -- the Kauai Planning Commission's denial of a combined application for a use permit -- a special use permit -- zoning and also a special permit to withdraw water from the stream for use in its operation. This case also went up to the Supreme Court, and the Supreme Court laid out a very clear set of steps for agencies to follow in applying public trusts. So the agency's duty is to maintain the purity and the flow of the waters and to ensure that water is put to reasonable and beneficial uses. So again, it's a balancing test. The applicant seeking to use the water needs to demonstrate actual need, and also the propriety of draining the water from public streams to satisfy the need. They need to demonstrate that there is no practicable alternative water source, and if there is a reasonable allegation of harm to one of the uses protected by the public trust, the applicant, the applicant also must demonstrate either that there's no harm or that the potential harm does not preclude a finding that the requested use is reasonable and beneficial.

So pages 11 and 12 really go into, or the rest of the pages actually go in to how does an agency such as a planning commission apply the Kauai Springs analysis. So in analyzing an application, you, you would look to is this use consistent with public trust purposes? And those are enumerated. They're under the first bullet of page 11. When you're in your decision making mode you apply a presumption in favor of the public use, access, enjoyment and resource protection. Each proposal should be evaluated on a case by case basis. And the applicant has the burden of producing the necessary data and information. If the requested use is private or commercial, you apply an even higher of scrutiny to it.

Page 12 discusses what is reasonable and beneficial? What you're doing is you're examining the proposed use in relation to other public and private uses. State law defines reasonable and beneficial use as the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans in the public interest. If the, and in case if the Lanai Planning Commission would find that use is reasonable and beneficial, the applicant continues to have a duty to implement reasonable measures to mitigate cumulative impacts.

And page 13 is really just a reminder on, you know, making a very clear record, especially if you're making decisions on water uses. You know, that's not completely uncommon that these would be reviewed by a court. You need to make findings on the record to track the steps that

you took in reaching the decision. So how did you get to your decision. Analyze the application and all of the evidence presented, and then base your decision on the evidence in the record, and the law they applied. And your commission, your commission's decision is reflected in the document called Findings of Fact, Conclusions of Law, Decision and Order. And that, along with the entire record would be reviewed by an appellate court. And the Supreme Court said that clarity in your decision making is all the more essential when you perform a duty as a public trustee. And you are bound to demonstrate that you've properly exercised that discretion vested in you by the constitution and the statute.

If a decision -- and this goes for really, you know, all commission, commission decisions that are reviewed by a court. Page 14 is how a decision may be overturned. And what you're trying to do is make decisions that are not overturned. So you want to stay away from this listed six things. You know, make sure that you're making full decisions based on the record, the evidence before you, and the law that you're applying.

So I realize that the -- you know, we, we spend at least a semester discussing things like public trust in law school, so you know, 10 minutes worth is probably...a little bit confusing. But, as we get to applications that involve any public trust resources, it's an overlay of law that is in addition to, you know, say an SMA permit. So you not only are apply SMA law, but you also consider public trust concerns on that application. I mean, if you have questions, I can try to answer them. Or if I can't, I'll get back to you on it. But it's definitely a very . . . (inaudible). . . area of law, so thanks for your time.

Ms. Gima: Commissioners, any questions, comments? No test. No test please. It's a lot to take in within 10 minutes, but I guess if any of us have any questions that come up in the future then we can refer back to you. Okay. Okay sounds good. Alright, so we'll move along to the next item which is Item F, the Director's Report, starting no. 1, open Lanai applications report as distributed by the Planning Department with the August 19, 2015 agenda.

F. DIRECTOR'S REPORT

1. Open Lana'i Applications Report as distributed by the Planning Department with the August 19, 2015 agenda

Mr. Yoshida: Thank you Madame Chair and members of the Lanai Planning Commission. The Department has circulated its list of open applications as of August 10th. Is there any questions?

Mr. Oshiro: Clayton, excuse me, the pink house, okay, the hedge, the hedges are cut down, but I still want to know if they approaching in the County, County's, the variances the County get. And I don't know if you know that but, you know, I just wondering because you still have the hazard where if somebody parks along the mock orange going up on Eleventh Street you get hard time to see a vehicle coming down the road, even though they the bushes down, down to three feet. So I was just wondering, you know. I, I got my, I did do the e-mail to the Mayor and

I got results, and two days later after I e-mailed it was cut. So, you know, I, I was just wondering about that.

Mr. Wollenhaupt: This is for Jean, right? Jean Buckley, the pink house? Yeah, she, she's coming in for a short-term home rental permit. And so I was over there today and they're going to be redoing the driveway. So the driveway is not the issue. I guess the issue is the, the vegetation that goes around that corner. Now that was my first time over on Lanai. I'm trying to understand. So I went over there. She passes the results for the short-term rental home, and she's getting a driveway permit. But as for the view plain corridor, it doesn't really, it doesn't go with the, the permit, but we can certainly do what –

Mr. Oshiro: The reason I bring up that, if you had seen that mock orange bushes it was like this much below the stop sign. I mean that stop sign is like eight or nine feet high, okay. The thing that bothers me is that the house on both sides of the street, both sides, okay, I want to know if they approaching the County's property because if you look at it the house on the left side of road is about this much of grass and then the road and he's got bushes planted. And if this guy doesn't take care of those bushes when they grow we going have another problem.

Mr. Wollenhaupt: So the issue is the vegetation and the corner cutback.

Mr. Oshiro: Cutback or are they in -- are these bushes in their property?

Mr. Wollenhaupt: And I don't have any idea.

Mr. Oshiro: Because, yeah, that, that was one of the issues when I e-mailed the Mayor. I asked, you know, is, is the boundary of that. Because if you look down that street, Eleventh Street, you can see that the boundary from the road to where most people got their property line is almost five yards. And these guys are just a foot away from that road. So, I just want to know.

Mr. Wollenhaupt: Do you know how long that vegetation has been there? Is that something new?

Mr. Oshiro: No, the reason I'm bringing it up because I just moved in about a year ago, and I, I almost got hit coming out of there. I have, you have to actually come out in the middle of the road to see up if a vehicle is parked on the up side, along that mock orange bush.

Mr. Wollenhaupt: Right.

Mr. Oshiro: So, you know, that's why I brought it up. It's a hazard just waiting, an accident waiting to happen. Okay. And it bothers me that if, if she does it, and she's in County's property, what about the guy down below? You know those -- I don't know what the guys on the left side is going do, but I think he's going try get in short term rentals over there to. So, you know, they pretty much going let the vegetation grow, you know.

Mr. Wollenhaupt: Yeah, I don't know what Public Works issues are in corner cutback. I know most towns have a -- you go from corner to corner, you make a diagonal or triangular, and then you can't have any obstruction in that view plain as you're turning the corner. But I -- Public Works, we don't have anyone from Public Works. I guess it's a question I can refer over to them. We have some diagrams and pictures.

Mr. Oshiro: When she does get permitted to do the short-term, is she, does she have to come out with a letter to go around that area?

Mr. Wollenhaupt: She will have to come out with the copy of the permit, and a 24-hour contact number to everyone that's adjacent to her property, and the adjacent to the adjacent. So if this is your property, everyone around that property, and then everyone around that ring. That's the current --

Mr. Oshiro: A bigger ring.

Mr. Wollenhaupt: Well, it's adjacent to you so. . . (inaudible) . . . This is adjacent. So if you live next door to Jean, you'll get a letter. And the people who live next door to those people will get a letter. That, that's how they decided on.

Mr. Oshiro: Well, Jean, Mendes. Yeah, okay, I'll get one. Alright. Thank you.

Mr. Wollenhaupt: . . . (inaudible) . . . you get one.

Ms. Aoki: So when you say "adjacent" does that mean --? What, what is the status right now on Lanai Planning Commission's recommendations to the Maui County Council regarding short-term rentals specific to Lanai? Do you know where that's at or are they still in deliberation review?

Mr. Yoshida: Yeah, Planning Committee, Council Planning Committee chaired by Council Member Don Couch considered the proposed amendments again on July 23rd. I think Gail Riener testified from the Lanai Council Services Office. She was here the week before talking about an issue she has with a short-term rental home. The matter was deferred at that July 23rd meeting, and I guess to believe that the item may come back sometime in October.

Ms. Aoki: And how many permits do we currently have outstanding or submitted for short-term home rentals that is active besides the pink house?

Mr. Yoshida: One other one.

Ms. Aoki: One other one coming up, yeah?

Mr. Wollenhaupt: That, the Peterson's house on Houston Street, Jeremy Peterson. Jeremy and Amanda Peterson, at 928 Houston Street. They submitted theirs, and then there could be -- there was a gentleman in here who was asking questions about the process, and he may

presumably submit one. So right now, since I guess I have, I'm the only real person processing, I have two currently in process on Lanai.

Ms. Aoki: These individuals, these owners are actually submitting their certified letter of notification according to County requirements of a 500 foot radius according to the GIS site?

Mr. Wollenhaupt: According to the real property tax?

Ms. Aoki: Yes.

Mr. Wollenhaupt: Yeah. That's where they get their names off our real property tax.

Ms. Aoki: Okay. Just curious because that's a lot of people.

Mr. Wollenhaupt: Well, that is indeed a unique. Whether one would call this a problem, it's a situation because your lots here are pretty small and it's a considerable amount of notification. So we're going to get to the point very quickly where if anyone else is coming in for a permit here, they're all going to be coming to this commission for public hearing. Because now that we have one over Queen Street, and now there's one probably on Houston Street, you're going to get a couple more and you're going to have the entire area now bounded by them. So you're going to be seeing them all if that provision of a hearing when there is one within 500 feet automatically comes to this commission. So, preparing you for many perhaps.

Ms. Aoki: Thank you.

Ms. Gima: I have another question regarding the pink house. So I see there's one completed project and then one open? Is that the driveway? One of them is the driveway project right now?

Mr. Yoshida: Well, I guess they're both for the pink house. The one that's close was the Request for Comments (RFC) which the planner checks for completeness before we start processing. Because if it's incomplete then this month sit there for months until it's completed. And it has been completed and now the planner is processing those short-term rental home permit applications.

Ms. Gima: Thank you. Any other questions regarding the project, open and closed projects? Okay. Thank you.

2. Agenda Items for the September 16, 2015 Lana'i Planning Commission meeting

Mr. Yoshida: Okay, our next meeting is scheduled for September 16th. We don't have any definite items for that meeting. You know, I would say from October on that, that probably you'll be busier especially if the Council on Tuesday passes the resolution referring the bill for an

ordinance to allow for accessory dwellings on smaller lots, between 5,000 to 7,499 square feet to increase the -- to help to address the affordable housing issue. So if that pass, the resolution passes on Tuesday's Council meeting, then it will be referred to the three planning commissions for public hearing and comments.

We also have two applications that recently have been filed by Pulama Lanai. And another application from AT&T to locate a cell tower in the ag district. So those will be coming up. With respect to the Captain's Retreat, I guess people have been asking about, well, what happened to the Captain's Retreat. This was brought up when they wrote a letter of protest on the Maly's Bed & Breakfast Home permit back in February. Gina Flammer did file a Request for Service (RFS). The owners of the Captain's Retreat were contacted by a zoning inspector instructing them to take their advertising off the internet. We had checked several times, and the advertising is not on the internet. So that's kind of a follow up on, on that item.

Oh, I guess, we have a up-coming -- well, last year we hosted the state wide planning conference and this year the State Office of Planning is hosting the conference, October 14th through the 16th at the Hawaii Convention Center. And it's a good chance to meet your, you know, fellow commissioners from different jurisdictions. We have allotted two slots for this commission, and so far we just have Vice-Chair Nefalar can attend. But if there's anybody else who would like to attend, they can contact the Chair or Leilani and we can circulate the information to them.

Mr. Marlowe: When are the dates?

Mr. Yoshida: October 14th through the 16th. Typically on the Wednesday they have all these field tours of the rail, Kaka'ako. They probably go through the homeless camp in Kaka'ako. They have different mobile workshops. So if commissioners are interested, you can let the Chair or Leilani know. That's all we have to report Madame Chair.

Ms. Gima: So, Clayton, I'm going to request, and given that you just said that we don't have anything on the agenda as of now, for next month. I had e-mailed Leilani and Clayton back, regarding, you know, putting in a request for items for the agenda for this meeting. So I'm just going to request right now, and we talked about this before, you know, resuming the discussion of the SMA boundary amendments or changes for Lanai. Also, to get a status of the light and heavy industrial area at Miki Basin...and I guess that would be, yeah, from Pulama Lanai.

Ms. Lynn McCrory: . . . (inaudible) . . .

Ms. Gima: We can put it on the next because it's not on the agenda now.

Mr. Yoshida: Yeah, I guess, with respect to the SMA boundary, amending the SMA boundaries, the director kind of wants to take a hands on, kind of supervision of that project because he did make himself available to attend various CPAC meetings, Lanai Planning Commission meetings, and the Council's Planning Committee meetings here on Lanai. And he did hear suggestions that the boundary, SMA boundary be revised. So, he's working in house with some

of our geographic information system folks regarding the mapping of the current flood zones and archaeological sites, and so forth.

Ms. Gima: So maybe it would be appropriate, then, for next month since the director's currently working on this in house, is to then to get an update on where he's at with that. You know, again, I'm going to put on the record again this has been a request that's been made for the past two years, and we haven't yet to have it on the agenda or have any sort of discussion. So at this point I'm not going to ask, I'm going to kind of demand that it's on the agenda because it's, like, I said it's been two years. That, and the update from Pulama. I mean if there's no objections can we, since Lynn is here and is willing to give us an update and it's only 7:30 p.m., can we, can we vote to have that put on the agenda right now?

Ms. Richelle Thomson: To add an item to the agenda it would, you just need a, you need at least two-thirds of the majority. So you need to vote to add it to the agenda, and it would need to be something that does not affect a significant number of people, so it's limited in scope, not a significant number of people would be affected by it. So those are the two criteria for adding things to agendas. If it's just, if it's just an update and there aren't a lot of people in the public who would be interested in that. You know, that's a sunshine law thing, yeah. So if you think it's something that generally the members of the public would want to know about and be able to testify on them, then you'd just want to put it off. Or you can listen to what Lynn's going to tell you.

Ms. Gima: Well, okay, you know, Lynn's here, she's willing to give us this update right now. I mean, sure, there are people in the public that would probably want to hear this, but it's not, like, we're, yeah, I mean we could always ask for another update again. So, I'm just going to, for the record, get a vote to add this to the agenda, getting an update regarding the light and heavy industrial at Miki. So all in favor of adding this to the agenda raise your hand. One, two, three, four. Okay, it failed. We can't put it on the agenda. We need six. Okay, so I'm asking that we put that on next month's agenda, and Lynn will be ready to give us an update at that time.

And then, and then just lastly, I mean, since we're not going to add anything on the agenda at this time, I don't know, in regards to just having announcements being made. Maybe an announcement can be put on next month's agenda, you know, I was informed by our previous chair that LWAC has an opening a member on the Planning Commission as he was a member of the Planning Commission and a member of LWAC. So, if you could put that on just as an announcement. We don't need to vote on anything about that. It's just an announcement. LWAC has a seat for someone from the Lanai Planning Commission, and, yeah. It's an announcement. So those are the items I would like on the September agenda please. I don't think it's much to ask.

Mr. Yoshida: Yeah, I mean, possibly could we tie the update on the SMA boundary review, to make it cost effective, say when we have a public hearing item such as -- if we have a public item such as if Council passes out this resolution on Tuesday regarding allowing for accessory dwellings, affording accessory dwellings, on smaller lots with an area of 5,000 to 7,499 square feet?

Ms. Gima: So am I hearing –

Mr. Yoshida: That would make it more cost effective.

Ms. Gima: Well, when would, yeah, when, I mean, when would that be?

Mr. Yoshida: Possibly October –

Ms. Gima: Okay.

Mr. Yoshida: -- because we have –

Ms. Gima: But then you said once October comes we're really busy, so I can really foresee it again, saying, we don't have time to discuss it.

Mr. Yoshida: Well, we're only -- yeah, we're only starting to process the Pulama applications and the AT&T cell towers because they've only filed them within the past two weeks. So it will take some time for that. But I think we're going to be busier than we were in the first half of the year...aside from that January meeting on the Manele Bay Hotel Renovations SMA. But, you know, again, with these Council resolutions we have a 120-days to turn it around. So, you know, by the end of year, that's minutes, everything, to turn it around. So we would try to have the hearing within 60-days after the resolution is transmitted to the department.

Ms. Gima: I guess I'm just confused on why it -- about the whole cost effectiveness of having something on the agenda.

Mr. Yoshida: Well, I guess it's just we're just trying to make it cost effective for the, I guess the, for the public at large. Because there are expenses. You know, we're going to have to stay over night.

Ms. Gima: So am I kind of sensing that we may not have a meeting next month if there's not anything important on the agenda?

Mr. Yoshida: Yes.

Ms. Gima: But we're requesting for things to be put on the agenda, Clayton.

Mr. Yoshida: Yes.

Ms. Gima: And it is our meeting. It's Lanai's meeting. So I'm, again, I understand your point about being cost effective...but, I, I'm, again, requesting on the record that that be on next month's agenda. Any other discussion about anything that any of you would like to have added to the agenda? I mean, Corp Counsel, I'm right when we can request for items to be on the agenda, correct?

Ms. Thomson: Yeah. So if they are items that are within your jurisdiction. So if you have a supervisory or approval authority over the subject matter, then, yeah, you know, that would be your--. One of the things, you know, just from, it's more from a departmental standpoint -- so with, you know, with having night meetings, night meetings aren't required by, by the rules, the Planning Commission rules or by the County Code. In fact there's, there are probably some issues having night meetings because they're outside of normal County working hours, and they're really expensive. So, it's, you know, it costs the tax payers a lot of money to have night meetings. I think they're very valuable especially if there are, you know, topics that you think are going to have a lot of folks come out and, you know, that need to work during the day. And I know a lot of you do work during the days too, which is one of the reasons we've had night meetings. But I know from my department, like, I'm not going to Molokai next week because that's a full day out of the office. So they don't get my productivity for that entire day, and plus there's the transportation cost and all of that. And those meetings are held during the day. It's really just, you know, my time, but you have a lot of staff over here. The hotel rooms are \$250 a night.

Ms. Gima: That's a different conversation just based off of the question I just asked about us being able to add something for the agenda. That's a different discussion. I mean, I think we've discussed that in the past.

Ms. Koanui Nefalar: Yeah, if...so, if, if I'm looking at the agenda, it says F2, agenda items for September 16th Lanai Planning Commission meeting, and that's what we're trying to do, put items on the September 16th planning commission meeting. If that wasn't the intention then maybe it shouldn't have been placed here?

G. NEXT REGULAR MEETING DATE: SEPTEMBER 16, 2015

H. ADJOURNMENT

Ms. Gima: Okay, we will wait to formally hear if we have a meeting or not next month. But, yeah, at this point, it is now 7:36 p.m. There is no further questions or discussion, and I am going to adjourn the meeting.

There being no further discussion brought forward to the Commission, the meeting was adjourned at approximately 7:36 p.m.

Respectively submitted by,

LEILANI A. RAMORAN-QUEMADO
Secretary to Boards and Commissions II

RECORD OF ATTENDANCE

PRESENT:

Joelle Aoki
Marlene Baltero
Stephen Ferguson
Kelli Gima, Chair
Stacie Lee Koanui Nefalar, Vice-Chair
Stuart Marlowe
Bradford Oshiro
Beverly Zigmond

EXCUSED:

Jarrold Barfield

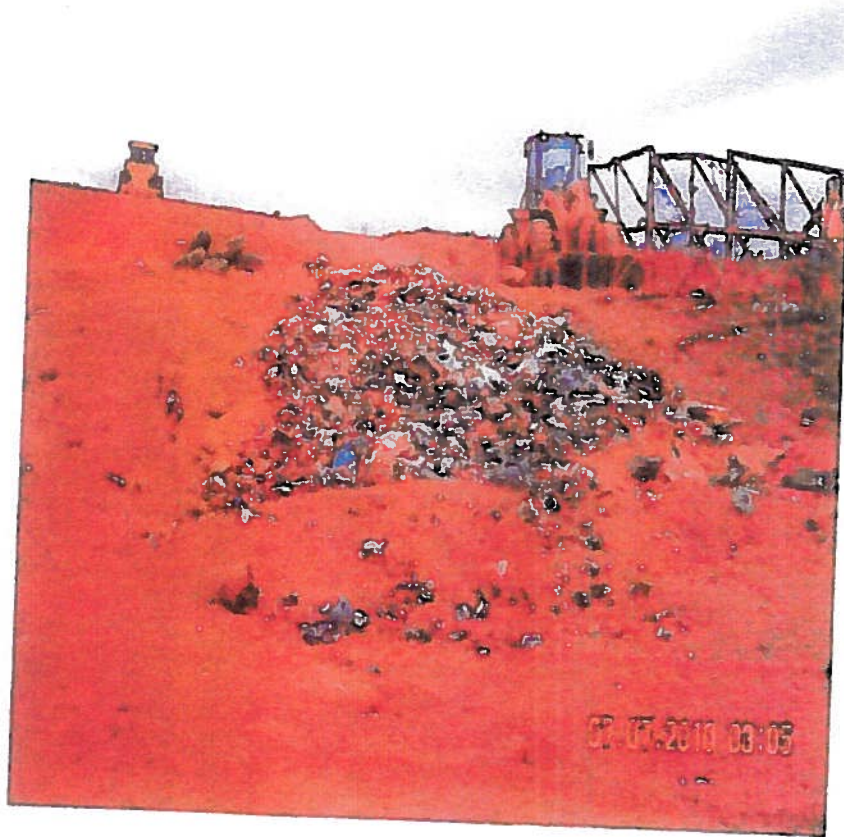
OTHERS:

Clayton Yoshida, Planning Program Administrator, Current Planning Division
Kurt Wollenhaupt, Staff Planner
Mike Miyamoto, Deputy Director, Department of Environmental Management
Elaine Baker, Engineer, Department of Environmental Management
Richelle Thomson, Deputy Corporation Counsel

LANAI LANDFILL



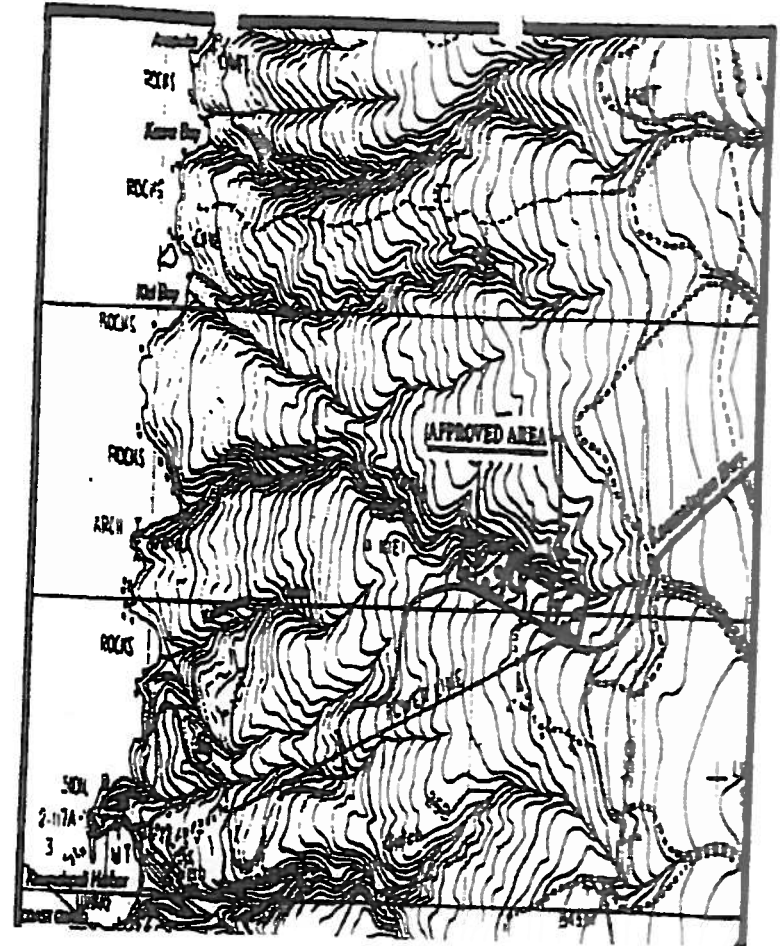
15 YEAR TIME EXTENSION REQUEST FOR SP94-386



- Comparison of 2015 and 2014 topographic surveys of Lanai Landfill estimates 15.6 years additional life.
- This assumes the same fill rate of 19,500 cubic yards each year.
- This volume includes cover soil and municipal solid waste.

SPECIAL USE PERMIT SUMMARY

- October 29, 1966 SP66-36 was issued by the Land Use Commission (LUC) for the establishment of Lanai Landfill on 10 acres. No time limitation on this original permit for 10 acres.
- Sept 13, 1994 LUC issued SP94-386 for an additional 25 acres for Lanai Landfill (TMK 4-9-02: por. 1.)
- Sept 12, 2008 LUC granted a 10 year time extension for 25 acres of Landfill (TMK 4-9-002:001.) which expired on Sept 13, 2014.
- 15-yr time extension for 25 acres, which is included with original 10 acres in 35.7 acres and is TMK 4-9-002:060. Applied for 10-yr extension on Jan 29, 2014.
- SUP is required by the Dept. of Health to operate Lanai LF.



LANAI'S SOLID WASTE & RECYCLING PLAN HIGHLIGHTS

- Efforts to expand redemption center into a recycling center on 12th St. hit a roadblock when County was notified of lease termination by Pulama Lanai in January 2013.
- Redemption is managed by the State.
- Current recycling: residential scrap metal & residential electronics collection events coordinated with and/or managed by Pulama Lanai.
- Recent County scrap metal events for residents: Nov 2013 & June 2015.
- Pulama Lanai is designing a facility at Miki Basin for collected materials.
- County funds Refrigerant Recycling handling residential scrap metal and related materials while collection is done by Pulama Lanai.
- Recent County electronics events for residents: Nov 2013 & August 2015.

HISTORY OF RECYCLING ON LANA'I

- **1994 - 95** Na Keiki O Ka'Aina environmental education program funded by County grant, Lana'i Community Benefit fund, Lana'i High and Elementary School - aluminum recycling
- Lanai Waste Systems - Manny Amaral - 565 tons
- **1995 - 96** Na Keiki O Ka'Aina environmental education program
- Lanai Waste Systems - Manny Amaral - 17 tons - newspaper and aluminum
- **1996 - 97** Na Keiki O Ka'Aina environmental education program
- Jan 1997 Mr. Amaral pulls recycling bins from Lanai City
- **1997- 98** Lanai Waste Systems recycles aluminum, scrap metal, newspaper, glass, used motor oil - 22.5 tons
- **1999 - 2004** Lanai Waste Systems - hotel glass, greenwaste

LANA'I RECYCLING HISTORY (CONTINUED)

- **2005** County receives HI5 funds to run redemption centers.
- Tri-Isle Resource Conservation & Development (RC&D) receives County grant (state funds) to run HI5 center on Lana'i which is an underserved area.
- Tri-Isle negotiates informal lease with Castle & Cooke for use of a temporary undeveloped property.
- **2006 - 7** Tri-Isle grant using state funds continues HI5 center.
- **2008** Tri-Isle is funded directly by state to run HI5 program.
- **2008 - 9** Lease agreement for M1 zoning signed for (11/08) undeveloped site at 12th & Fraser; relocation clause (8/09).
- Tri-Isle receives a County recycling grant to design, build, equip, and operate the Recycling & Redemption Center at 12th and Fraser.
- **2010** Tri-Isle hires Manthos Engineering & Lanai Building Co.
- **2011** MECO installs electricity; lease amended to 2018.
- **2012** RRR operates redemption center; building permit for structure, construction of concrete slab & structure.
- **2013** County receives lease termination letter with relocation option in Jan; vacates in June.

RECYCLING ON LANA'I

- **LAND COSTS:**
- Lease for the 12th & Fraser site cost \$400/mo,
- Leases had been negotiated for 2 undeveloped sites,
- Relocation meant a 3rd undeveloped site.
- **DEVELOPMENT COSTS:**
- County paid \$551,358.00 to develop the 12th & Fraser site.
- **OPERATIONS COSTS:**
- Energy costs for electricity to bale commodities and for fuel to move them to market offset environmental benefits as recycling markets fluctuate.
- **EVENT BASED**
- Recycling occurs as events rather than as ongoing collection.
- Recycling is available for materials with the most adverse impact to the landfill, either by their volume, weight, and/or component materials:
 - Scrap metal,
 - Appliances,
 - Auto batteries,
 - Propane tanks,
 - Tires,
 - Electronics.

LANAI'S WASTE MANAGEMENT FUTURE

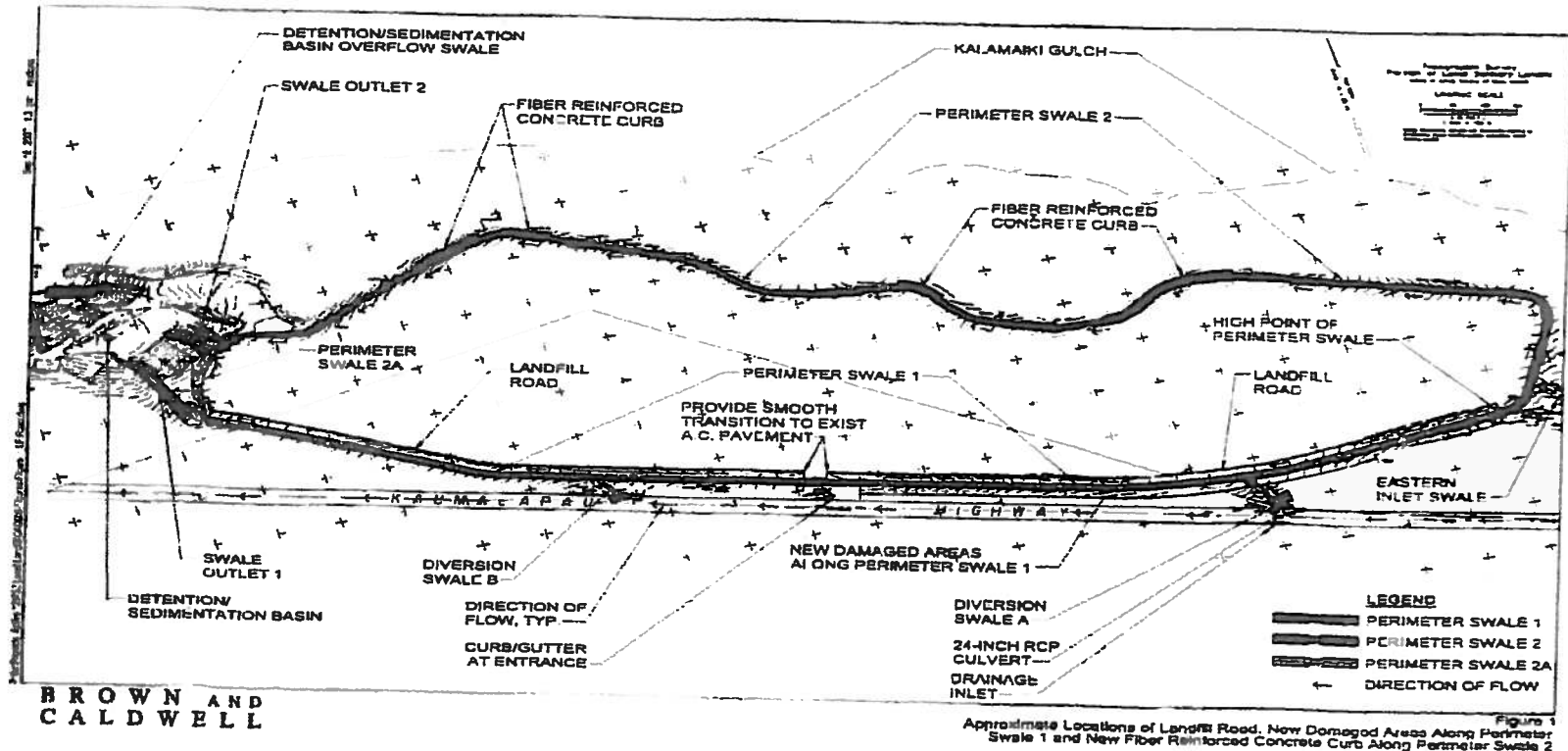
- This is a question for Lanai's residents and businesses.
- In 2015 the County hired a consultant to evaluate future options:
- Landfill?
Sites have to meet certain location and design criteria such as:
 - Located not more than 10,000 ft. of any airport runway end used by turbojet aircraft or within 5000 ft. for piston-type aircraft or demonstrate that there is not a bird hazard to aircraft.
 - Have a liner with a hydraulic conductivity of no more than 1×10^{-7} cm/sec.
- Transfer station?
 - Transfer where? and why?
- Small scale waste-to-energy?
 - Which one? Are there any?

LANAI LANDFILL IMPROVEMENTS

2006 - 2015

- 2006 - 150K for survey/design of storm water system upgrade
- 2007 - Design total: \$204,475; additional funds added; bid job
- 2008 - Contract 2.2M for storm water system upgrade; start job
- 2009 - Construct storm water system upgrade
- 2010 - Alternative Daily Cover (tarp) approved by DOH
- 2011 - Design alternative energy system for LF office - \$75,000
- 2012 - PV panels & weather station installed; laptop - \$150,000
- 2012 - Grout riprap channels into detention pond - \$24,900
- 2013 - 3 Moisture probes installed per DOH - \$110,000
- 2013 - Vetiver planted for erosion control \$7877
- 2014 - Additional Vetiver planted for erosion control
- 2015 - Hydroseed slope(s) for erosion control - \$5000

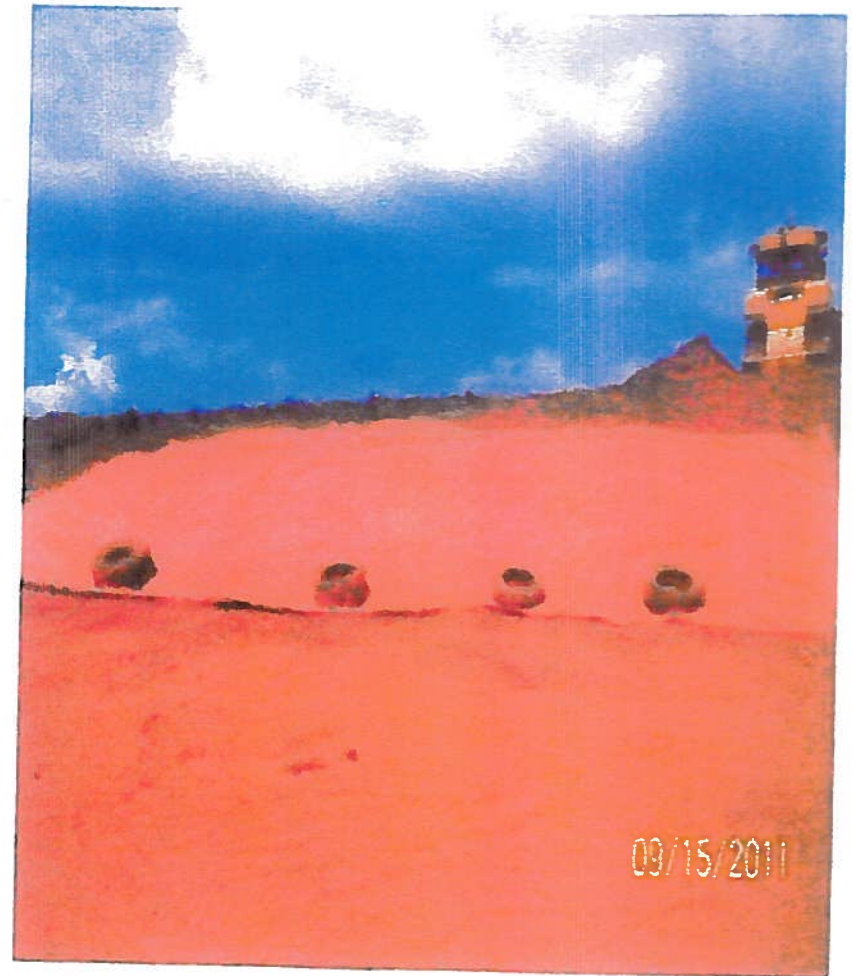
LANAI LANDFILL STORM WATER SYSTEM IMPROVEMENTS 2006 - 2009



- 15 ft. wide 4-inch thick perimeter fiber reinforced concrete swale
- 2 rip rap channels to basin and 1 rip rap overflow swale
- 2 concrete inlet swales

ALTERNATIVE DAILY COVER (TARP)

- **SAVES AIRSPACE**
- **SAVES COVER SOIL**
- Jan 2010 notification of demonstration program to DOH
- Jul to Dec 2010 daily photo documentation of demonstration program, tarp 2 consecutive days
- Feb 2011 report to DOH
- May 2011 approval by DOH
- Jul to Oct 2011 extension to tarp 4 consecutive days
- Oct 2011 report to DOH
- Apr 2012 approval by DOH

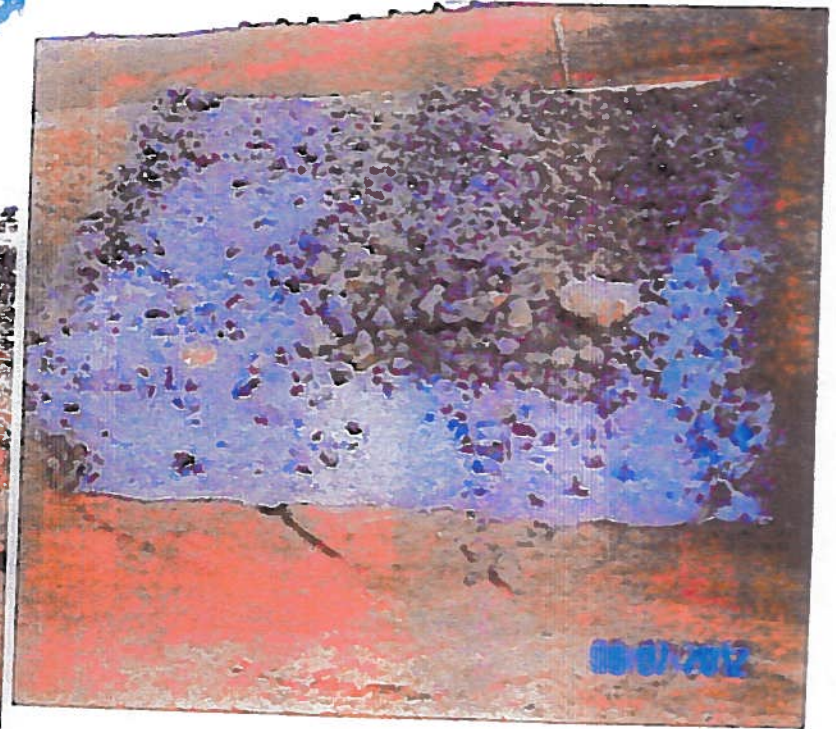


PHOTOVOLTAIC PANELS INSTALLED 2012



- **CONTAINER ROOFS COATED WITH ELASTAHYDE WATER PROOFING**
- **INSTALLED 36 240 WATT SOLAR PANELS WITH INVERTER, SOLAR CHARGER CONTROLLER, POWER DISTRIBUTION PANEL, BATTERY STORAGE**
- **WEATHER STATION INSTALLED ON OFFICE ROOF MEASURING WIND SPEED & DIRECTION, TEMPERATURE, HUMIDITY, RAINFALL, SOLAR RADIATION**
- **LAPTOP COMPUTER PROVIDED WITH INTERNET CONNECTION**

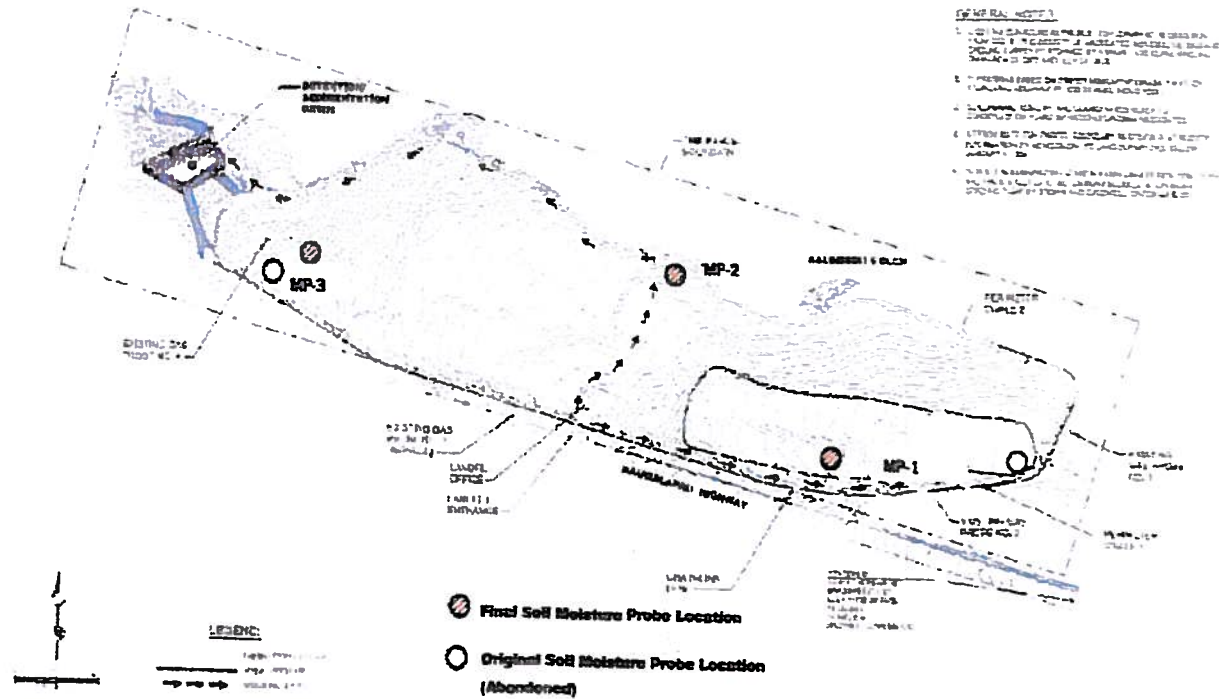
RIPRAP SWALES GROUDED - 2012



- STORMWATER FLOWS PUSHED THE RIPRAP OFF THE FILTER FABRIC
- COUNTY CONTRACTED WITH LANAI BUILDERS TO GROUDED THE RIPRAP
- GROUDED HAS PREVENTED FURTHER DISPLACEMENT OF THE RIPRAP

Moisture Probes

3 were installed in June 2013 to monitor landfill leachate



SOIL MOISTURE PROBES

1. SOIL MOISTURE PROBES TO MONITOR LEACHATE
2. PROBES TO BE INSTALLED AT THE FOLLOWING LOCATIONS:
3. PROBES TO BE INSTALLED AT THE FOLLOWING LOCATIONS:
4. PROBES TO BE INSTALLED AT THE FOLLOWING LOCATIONS:
5. PROBES TO BE INSTALLED AT THE FOLLOWING LOCATIONS:

Source: Dept. of Environment and Heritage, Landfill Model Plan (DEC, 2009)

Figure 1. Soil Moisture Probe Locations



VETIVERGRASS PLANTED 2013 - 2014



- **VETIVERGRASS IS A PERENNIAL BUNCH GRASS USED AS A VEGETATIVE BARRIER TO CONTROL RUNOFF.**
- **ITS STRONG, COMPACT ROOT SYSTEM AND STIFF STEMS SLOW RUNOFF, TRAP SEDIMENT, AND ALLOW WATER TO INFILTRATE SOIL.**
- **IT WAS PLANTED TO PREVENT STORMWATER FROM RUNNING ACROSS LF**

HYDROSEEDING - 2015



- **HIRED LANDSCAPER TO HYDROSEED BERMUDA AND RYE GRASS TO PROTECT SOIL SLOPES FROM EROSION DUE TO STORMWATER RUNOFF**
- **WILL CONTINUE TO HYDROSEED SLOPES**

LANAI LANDFILL STAFF PERFORMS: RUBBISH COLLECTION, LITTER CONTROL, EQUIPMENT OPERATION & MAINTENANCE, CUSTOMER SERVICE, INNOVATIVE USE OF LOCALLY AVAILABLE NO-COST MATERIALS, POND SEDIMENT REMOVAL, EROSION CONTROL



LANAI LANDFILL STAFF



- **JASON NEFALAR, KEONE KANIHO, MANNY CLARABAL**

Mayor

WILLIAM R. SPENCE
Director

MICHELLE CHOITTEAU McLEAN
Deputy Director



COUNTY OF MAUI
DEPARTMENT OF PLANNING

September 2, 2015

Mr. Kyle Ginoza, Director
Department of Environmental Management
2050 Main Street, Suite 1C
Wailuku, Hawaii 96793

Dear Mr. Ginoza:

SUBJECT: RECOMMENDATION OF APPROVAL OF TIME EXTENSION OF LAND USE COMMISSION (LUC) SPECIAL PERMIT FOR LUC DOCKET NO. SP94-386 PERTAINING TO THE LANAI SANITARY LANDFILL, LOCATED AT KAUMALAPAU HIGHWAY, LANAI CITY, LANAI, HAWAII; TMK: (2) 4-9-002:060 (POR.)

At its regular meeting on August 19, 2015, the Lanai Planning Commission (Commission) reviewed the above-referenced request and, after due deliberation and receipt of testimony and exhibits, hereby recommends approval to the LUC the time-extension request for the Lanai Sanitary Landfill, subject to the following conditions:

1. That the LUC Special Use Permit shall be valid until **September 13, 2029**, subject to further extensions by the Commission and the LUC upon a timely request for extension filed at least ninety (90) days prior to its expiration.
2. That full compliance with all applicable governmental requirements shall be rendered.
3. That Petitioner shall use non-potable water, to the extent possible, for grading and dust control of the landfill.
4. That Petitioner shall ensure that impacts from wind-blown debris into Kalamaiiki Gulch are mitigated in a timely manner.
5. That Petitioner shall immediately stop work and contact the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) should any previously unidentified archaeological resources such as artifacts, shell, bone, charcoal deposits, human burial, rock or coral alignments, pavings or wall be encountered during development of the Special Permit area.
6. That Petitioner shall fully comply with requirements of the State Department of Health for sanitary landfill operation.

7. That Petitioner shall timely provide, without any prior notice, annual reports to the LUC and the County of Maui Planning Department (Department) in connection with the status of the subject project and Petitioner's progress in complying with the conditions imposed herein. The annual report shall also include the capacity remaining in the landfill at the time of submission of the annual report. The annual report shall be submitted in a form prescribed by the Executive Officer of the Commission.
8. That the conditions imposed herein may be fully or partially released upon timely motion to the Commission and LUC and upon the provision of adequate assurance of satisfaction of these conditions by the Petitioner.
9. That the Petitioner shall address in the annual report how the County and/or State are addressing solid waste diversion that may include recycling, re-use, and reduction.
10. That the Petitioner implements the attached Best Management Practices (BMPs) designed to minimize infiltration and runoff during the operation of the landfill.

Further, the Commission adopted the Report and Recommendation, prepared by the Department for the August 19, 2015 meeting as the Findings of Fact, Conclusions of Law, and Decision and Order. Parties to proceed before the Commission may obtain Judicial Review of Decision and Orders issued by the Commission in the manner set forth in Chapter 91-14, Hawaii Revised Statutes.

Thank you for your cooperation. If additional clarification is required, please contact Staff Planner Kurt Wollenhaupt at kurt.wollenhaupt@mauicounty.gov or at (808) 270-1789.

Sincerely,



WILLIAM SPENCE
Planning Director

Attachment

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
John S. Rapacz, Planning Program Administrator (PDF)
Kurt F. Wollenhaupt, Staff Planner (PDF)
Michael Miyamoto (PDF)
Elaine Baker (PDF)
State Land Use Commission
Project File
General File

WRS:KFW:sn

K:\WP_DOCS\PLANNING\SUP\1994\0005_Lanai Sanitary Landfill\Extension_2014\LPC_Approval_Recommendation.doc

Best Management Practices

The following BMPs should be considered with respect to storage of recyclable and waste materials to prevent contamination of runoff.

LAND USE COMMISSION
STATE OF HAWAII

2000 JUL -2 A 11: 51

General BMPs

Scrap containers should be covered to prevent them filling with rain and should not have perforated bottoms to allow fluids to escape.

Scrap containers should be cleaned on a regular schedule and the washwater treated appropriately (i.e., as hazardous waste if necessary).

The area where containers are stored, or uncontainerized scrap is piled, should have an impervious surface area to prevent infiltration. The area should also be bermed to collect all runoff for treatment and kept clean at all times.

Storage of Automotive Batteries

Store batteries upright in a covered place and check routinely for leaks and cracks, especially when exposed to freezing temperatures.

Dropped or cracked batteries should be stored in an acid resistant tub.

Batteries stored outside should be suspended above an impermeable surface and covered to prevent acid runoff.

Keep a neutralizing agent (e.g., baking soda) nearby in case of spills or leaks.

Stack batteries no more than five high and make sure that any leaking fluid will not be washed away as runoff.

Never drain batteries into a drain or onto the ground.

Small quantities of lead acid batteries should be stored in acid resistant tubs.

Large quantities of batteries should be stored in an isolated area with no floor drains.

Avoid long-term storage of batteries.

Storage of Unused Paint

Unused paint should remain in the can and stored in leak-proof tub skids, preferably with a lid. If the tub skid does not have a lid, the collection area should be covered.

The storage site must meet all provincial and local requirements and standards.

Avoid long-term storage of unused paint products.

Storage of Household Hazardous Wastes

Solvents, pesticides, gasoline and other household hazardous wastes must be stored in a concrete bunker. Within in the bunker they should be stored in leak-proof tub skids. The bunker must be fire-proof, vented and provide spill containment capabilities.

Household hazardous waste bunkers must meet all provincial and local requirements and standards, including approval by the local fire authority.