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July 9, 2012

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

Dear Mr. Hooser:

SUBJECT: Final Environmental Assessment (FEA)
Applicant: Paradise Helicopters
Request: Helicopter Landing Area
TMK: 1-1-114:022 Royal Gardens Subd., Puna, Hawai'i

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OFC. OF ENVIRONMENTAL
QUALITY CONTROL

The County of Hawai'i Planning Department has reviewed the comments received during the 30-day comment period on the draft environmental assessment that ended on March 27, 2012. We have determined that the project will not have significant environmental effects and have issued a Finding of No Significant Impact (FONSI).

Please publish notice of availability for this project in the next available OEQC Environmental Notice. We have enclosed the following:

- One copy of the Final EA
- A CD containing the .pdf files for the EA and .doc file with the OEQC transmittal documents, including project summary
- A completed OEQC Environmental Notice Publication Form and associated material.

If you have any questions, please feel free to contact Jeff Darrow at 961-8158.

Sincerely,

BJ LEITHEAD TODD
Planning Director

Enclosures: Final EA (1 copy)
Completed OEQC Publication Form
Distribution List
Final EA and Project Summary (on disk)

JWD:smn
P:\wpwin60\CH343\2012\L Terry-ParadiseHelicopters-FonsiFEA.doc
cc: Ron Terry

OEQC Publication Form The Environmental Notice

Name of Project: Helicopter Landing Area at Royal Gardens

Applicable Law: Chapter 343, HRS

Type of Document: Final EA

Island: Hawai'i

District: Puna

TMK: (3rd) 1-1-114:022

Permits Required: County Special Permit

Name of Applicant: Paradise Helicopters
Calvin G. Dorn, President
Address PO Box 5371
City, State, Zip Kailua-Kona HI 96745

Contact and Phone Greg Mooers 880-1455

Approving Agency: Hawai'i County Planning Department
Address 101 Pauahi Street, Suite 3
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Contact and Phone Jeff Darrow 961-8158

Consultant Geometrician Associates
Address PO Box 396
City, State, Zip Hilo HI 96721
Contact and Phone Ron Terry 969-7090

Project Summary Paradise Helicopters is seeking permission through a Special Permit to develop and utilize a 15 by 15-foot standalone platform for helicopter landing placed within a 100 by 100-foot clearing on a 1.003-acre property owned by Jack Thompson in the Royal Gardens Subdivision of Puna. A Helicopter Landing Area is a permitted use for the property, which has agricultural County zoning and is within the State Land Use Agricultural District, subject to issuance of a Special Permit by the County of Hawai'i. The subdivision has been inundated by lava flows from Kilauea for several decades and for many years Mr. Thompson's was the only occupied home within two miles in any direction. The home and landscaped yard was covered by lava in March 2012.

Paradise Helicopters used the subject property as a landing area in the past and is unaware of any environmental problems in the area. The landing would take place as an additional feature of existing tours that already fly over the property. The project site has no rare or endangered flora or cultural resources. Wide-ranging endangered birds and the Hawaiian hoary bat might occasionally be present in remaining kipuka areas of Royal Gardens but would not be adversely affected. Volcano helicopter tour noise has generated complaints from residents and others concerned with natural and cultural resources, and this larger issue is being dealt with partly through the National Park's Air Tour Management Plan process, and partly through ongoing discussion among the FAA, the State of Hawai'i, the air tour industry, and affected communities.

Distribution List for Helicopter Landing Area at Royal Gardens Final EA

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Dear Participant:

Attached for your review is the Final Environmental Assessment (DEA) prepared pursuant to the EIS law (Hawaii Revised Statutes, Chapter 343) and the EIS rules (Administrative Rules, Title 11, Chapter 200).

Project Name: **Helicopter Landing Area at Royal Gardens**
Location: Island: **Hawai'i** District: **Puna**
Tax Map Key Number: **(3rd) 1-1-114:022**

Approving Agency: **Hawai'i County Planning Department**
Address: **101 Pauahi Street, Suite 3**
Hilo HI 96720
Contact: **Jeff Darrow**

Phone: 961-8158

If you no longer need the Final EA or Draft EA, please recycle them. Thank you for your participation in the Environmental Assessment process.

FINAL ENVIRONMENTAL ASSESSMENT

Helicopter Landing Area at Royal Gardens

Tax Map Key: (3rd.) 1-1-114:022, Royal Gardens Subdivision,
Puna District, Hawai'i Island, State of Hawai'i

July 2012

Prepared for:

County of Hawai'i
Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawai'i 96720

FINAL ENVIRONMENTAL ASSESSMENT

Helicopter Landing Area at Royal Gardens

**Tax Map Key: (3rd.) 1-1-114:022, Royal Gardens Subdivision,
Puna District, Hawai'i Island, State of Hawai'i**

APPLICANT:

Paradise Helicopters
Calvin G. Dorn, President
PO Box 5371
Kailua-Kona, Hawai'i 96745

APPROVING AGENCY:

County of Hawai'i
Planning Department
101 Pauahi Street, Suite 3
Hilo, Hawai'i 96720

CONSULTANT:

Geometrician Associates LLC
PO Box 396
Hilo, HI 96721

CLASS OF ACTION:

Construction of New Helicopter Facility That May Affect Land Classified as
Conservation District

This document is prepared pursuant to:

The Hawai'i Environmental Protection Act,
Chapter 343, Hawai'i Revised Statutes (HRS), and
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules (HAR).

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- APPENDIX 1a Comments in Response to Early Consultation and Correspondence with
State Historic Preservation Division
- APPENDIX 1b Comments to Draft EA and Responses

SUMMARY OF THE PROPOSED ACTION, ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Paradise Helicopters is seeking permission through a Special Permit to develop and utilize a 15 by 15-foot standalone platform for helicopter landing placed within a 100 by 100-foot clearing on a 1.003-acre property owned by Jack Thompson in the Royal Gardens Subdivision of Puna. A Helicopter Landing Area is a permitted use for the property, which has agricultural County zoning and is within the State Land Use Agricultural District, subject to issuance of a Special Permit by the County of Hawai‘i. The subdivision has been inundated by lava flows from Kilauea for several decades and for many years Mr. Thompson’s was the only occupied home within two miles in any direction. The home and landscaped yard was covered by lava in March 2012.

Paradise Helicopters used the subject property as a landing area in the past and is unaware of any environmental problems in the area. The landing would take place as an additional feature of existing tours that already fly over the property. The project site has no rare or endangered flora or cultural resources. Wide-ranging endangered birds and the Hawaiian hoary bat might occasionally be present in remaining kipuka areas of Royal Gardens but would not be adversely affected. Volcano helicopter tour noise has generated complaints from residents and others concerned with natural and cultural resources, and this larger issue is being dealt with partly through the National Park’s Air Tour Management Plan process, and partly through ongoing discussion among the FAA, the State of Hawai‘i, the air tour industry, and affected communities.

**PART 1: PROJECT DESCRIPTION
AND ENVIRONMENTAL ASSESSMENT PROCESS**

1.1 Project Location and Description

Paradise Helicopters is seeking permission through a Special Permit to develop and utilize a 15 by 15-foot standalone platform trailer for helicopter landing placed within a 100 by 100-foot clearing on a 1.003-acre property (TMK: (3) 1-1-114:022) owned by Jack Thompson in the Royal Gardens Subdivision of Puna (see Figures 1-4).

A Helicopter Landing Area is a permitted use for the property, which has agricultural County zoning and is within the State Land Use Agricultural District, subject to issuance of a Special Permit by the County of Hawai'i. The Hawai'i County Planning Department has determined that an EA is necessary because any helicopter that lands there is likely to fly over the Conservation District and there is at least some potential to affect it (see Figure 1b).

The subdivision has been inundated by lava flows from Kilauea for decades and for the most part has been uninhabited. All roads leading to the subdivision have been buried by lava. For many years Mr. Thompson's home, which had been featured in numerous print and television reports that focused on the isolation and difficulty of living in the area, was the only residence within two miles in any direction. Paradise Helicopters used the subject property as a landing area in the past and is unaware of any environmental problems on the site. The use has been discontinued until an EA is completed and the Special Permit is considered by the Hawai'i County Windward Planning Commission. The home and landscaped yard was covered by lava in March 2012 (see Figure 3e). Inspection by Paradise Helicopters indicates that the surface on the property is stable pahoehoe suitable and safe for a landing platform.

Paradise Helicopters, which has 35 employees on the Big Island, would like to resume landings on the property as an additional feature of existing Kilauea Volcano helicopter tours that already fly over this property. Landings would occur daily at the site between 9:00 am and 5:00 pm, with no night flights. They anticipate up to four flights per day with four to six passengers and one pilot on each flight. The visitors would be on the ground for about thirty minutes each trip. Although the forested *kipuka* surrounded by lava around Mr. Thompson's home is no longer present, the stop would still provide visitors an up-close look at the stark contrast of the lava inundation in an area of tropical beauty with scenic vistas of the ocean. It would also provide Mr. Thompson with a beneficial use for his property that helps compensate for the lack of road access and loss of his home. Prior to the lava inundation, Mr. Thompson had affirmed that the site would not be used as a bed and breakfast operation, a pledge which is now moot but still accurate.

Improvements on the property would consist solely of a 15' x 15' landing platform that will be hauled in one piece by helicopter. The platform will be standalone and will be placed one to two feet above the ground surface and leveled (see Figure 3c for typical platform photo). There would be no fueling facilities, lighting, retail operations or restroom facilities on the subject parcel. The normal flight pattern, which may vary with weather and eruption activity, is directly from the Hilo airport to the Pu'u O'o vent, to the subject property and then returning to the Hilo airport with a side trip to view waterfalls on the Wailuku River (Figure 5). Some flights will also originate from Kona and approach from south or northwest. Because the area near Royal Gardens is highly scenic from the air, the flight pattern would be essentially the same with or without a landing at Mr. Thompson's property.

Figure 1a Location Map



Figure 1b State Land Use Districts Near Proposed Landing Site

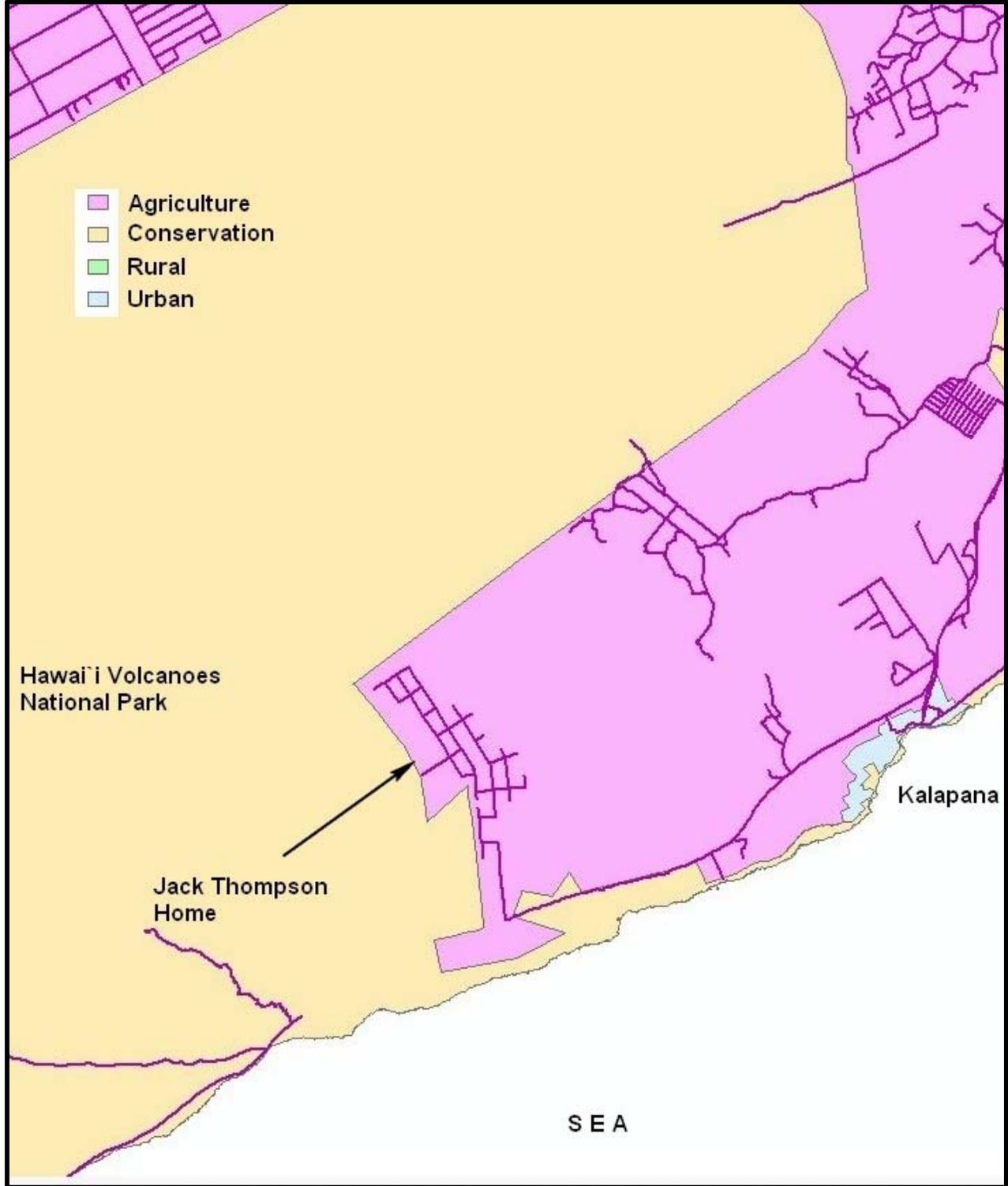
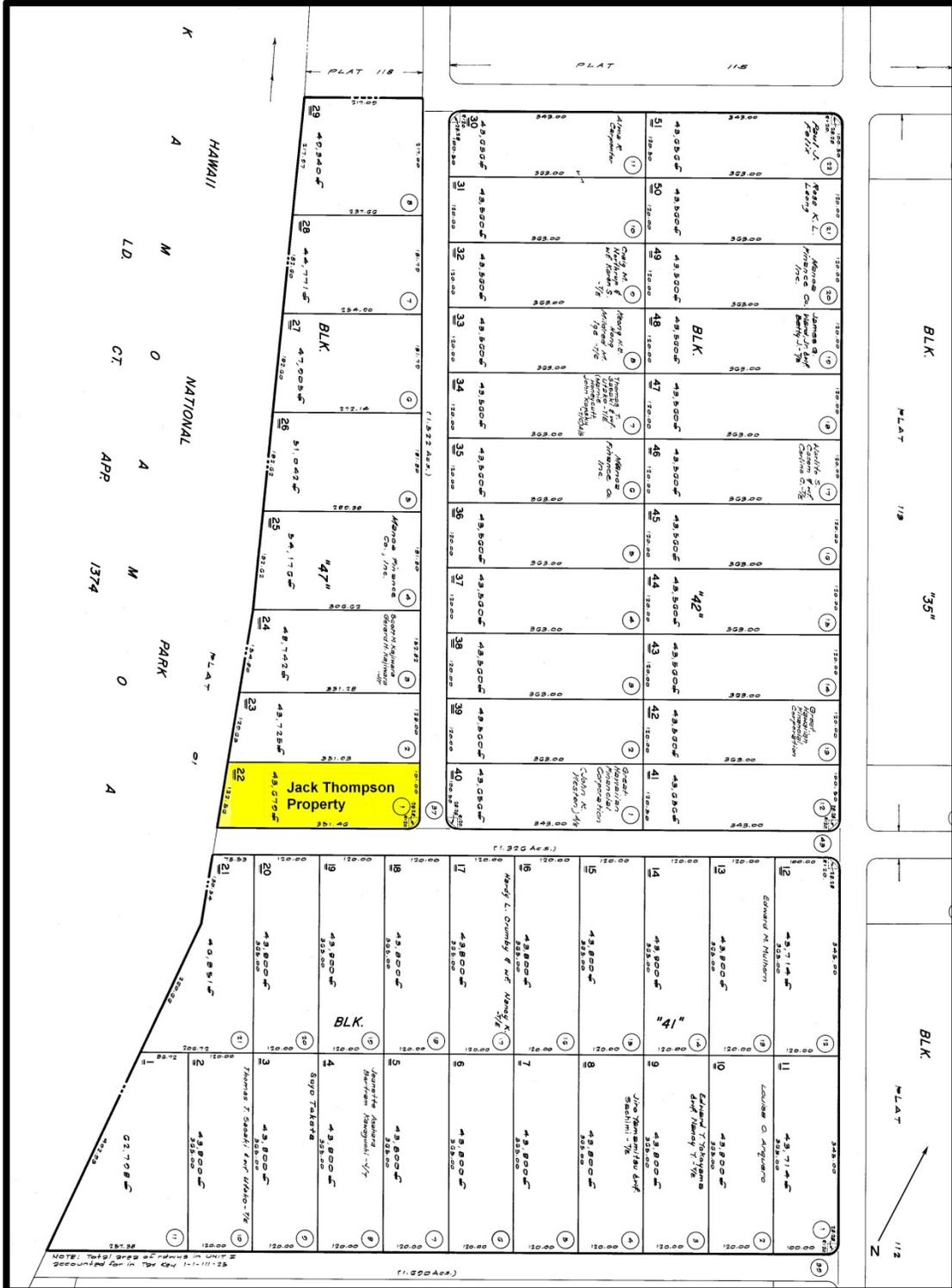


Figure 2 TMK Map



Source: Hawai'i County Real Property Tax Maps, portion of Plat Map. Some labels added.

Figure 3 Project Site Photographs



3a Airphoto ▲ ▼ 3b Proposed Landing Area (areas now covered by lava)



Figure 3 Project Site Photographs, continued



3c (Former) Interior Landing Site Vegetation ▲ ▼ 3d Typical Landing Platform



Helicopter Landing Area at Royal Gardens Environmental Assessment

Figure 3e (Current State of Property)



Figure 4 Site Plan (note: house has been covered by lava)

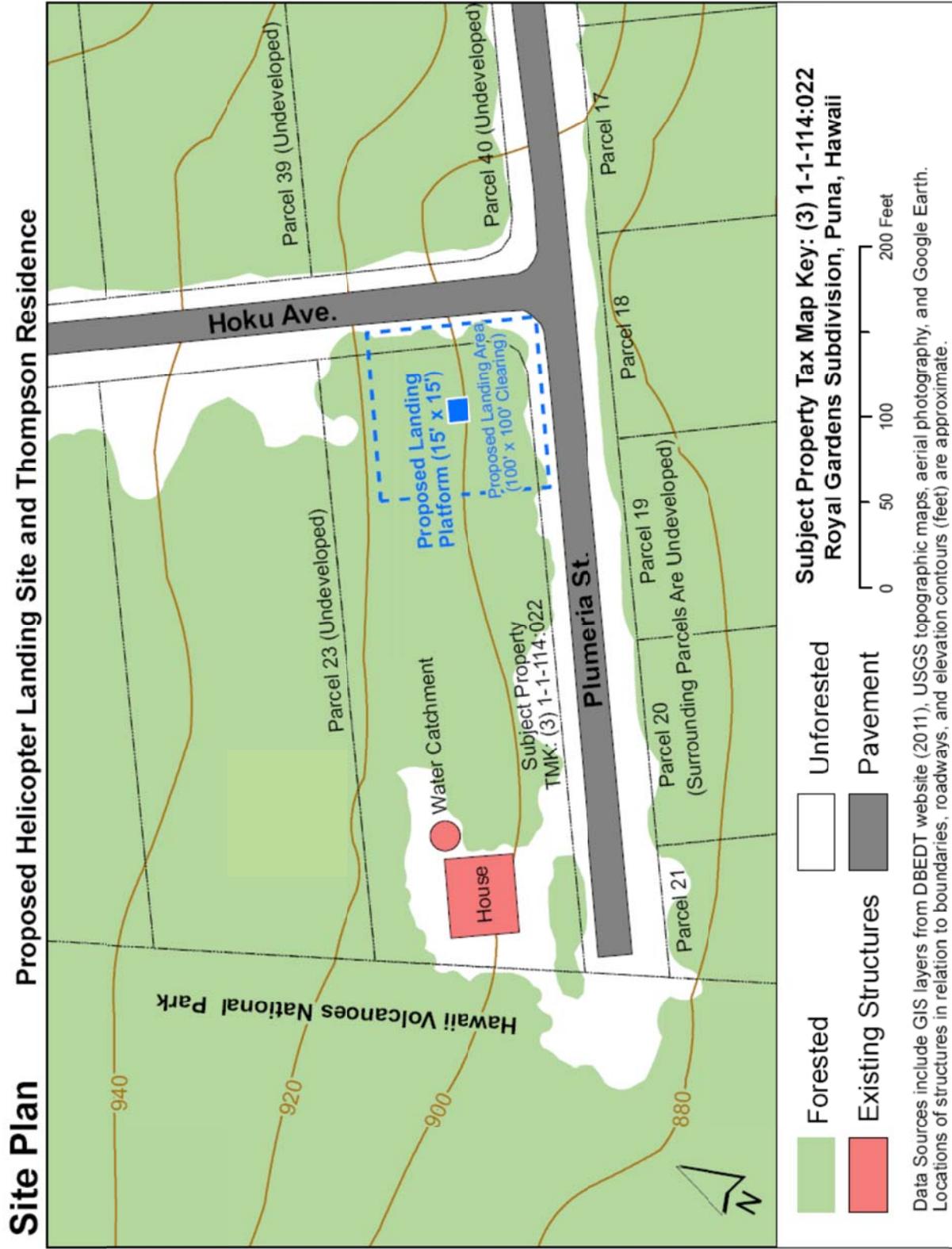
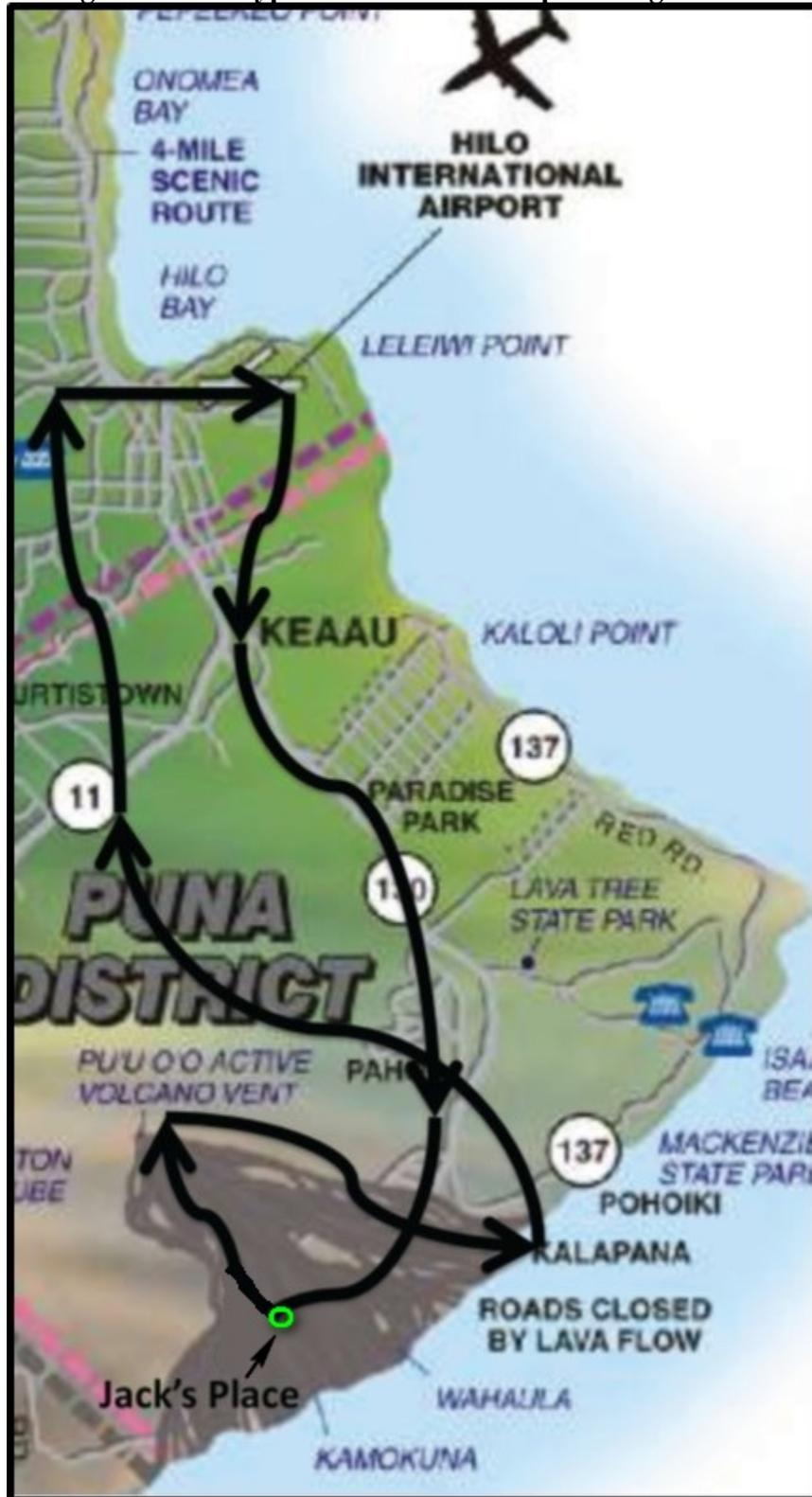


Figure 5 Typical Paradise Helicopters Flight Route



1.2 Environmental Assessment Process

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai‘i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai‘i Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawai‘i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria.

Part 4 of this document states the finding (anticipated in the Draft EA) that no significant impacts are expected to occur; Part 5 lists each criterion and presents the findings made by the applicant in consultation with the Hawai‘i County Planning Department, the approving agency. In the EA process, if the approving agency determines after considering comments to the Draft EA that no significant impacts would likely occur, then the agency issues a Finding of No Significant Impact (FONSI), and the action is permitted to occur. If the agency concludes that significant impacts are expected to occur as a result of the proposed action, then an Environmental Impact Statement (EIS) is prepared.

1.3 Public Involvement and Agency Coordination

The following agencies and organizations were and/or are being consulted in development of the environmental assessment and/or Special Permit application:

Federal:

Department of Interior, National Park Service U.S. Fish and Wildlife Service

State:

Department of Land and Natural Resources Office of Hawaiian Affairs
Department of Health State Historic Preservation Division

County:

Civil Defense County Council
Department of Public Works Planning Department
Police Department Fire Department

Private:

Sierra Club Neighboring property owners (4 people)
National Park Service List of Kalapana Community Consultees (14 people)

Copies of communications received during early consultation are contained in Appendix 1a, which also contains correspondence to and from the State Historic Preservation Division. Appendix 1b contains written comments on the Draft EA and the responses to these comments. Various places in the EA have been modified to reflect input received in the comment letters; additional or modified non-procedural text is denoted by double underlines, as in this paragraph.

PART 2: ALTERNATIVES

2.1 No Action

Under the No Action Alternative, the 15 by 15-foot standalone platform for helicopter landings placed within a 100 by 100-foot clearing would not be developed and the landings would not take place. Paradise Helicopters tours would not have the opportunity to offer visitors the experience of landing at Mr. Thompson's property, and Mr. Thompson would not benefit from the income he receives from the landings. This EA considers the No Action Alternative as the baseline by which to compare environmental effects from the project.

2.2 Alternative Locations

Because of its highly unique characteristics, there are no other potential landing locations that are suitable for the proposed use, and therefore, no alternative sites have been advanced in this Environmental Assessment.

PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

3.1 Physical Environment

3.1.1 Climate, Geology, Soils and Geologic Hazards

Environmental Setting

Geologically, the site is located on the slopes of Kilauea Volcano on lava dated from 1,500-3,000 years in age, and soil on the site appears to be minimal. The climate in the area is mild, with a mean annual temperature of 75 degrees (U.H. Hilo-Geography 1998:57 and annual rainfall averaging approximately 72 inches (<http://rainfall.geography.hawaii.edu/interactivemap.html>)).

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. Volcanic hazard as assessed by the U.S. Geological Survey in this area of Puna is Zone 2 (Heliker 1990:23). Zone 2 includes the areas that are adjacent to, and downslope from, the east rift zone, where lava flows are most likely to travel because of the regional slope.

In terms of seismic risk, the entire Island of Hawai‘i is rated Zone 4 Seismic Hazard (*Uniform Building Code, 1997 Edition*, Figure 16-2). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built, as the 6.7-magnitude quake of October 15, 2006, demonstrated. That earthquake, and a magnitude 6.0 aftershock, caused no damage to the project site. The project site does not appear to be subject to subsidence, landslides or other forms of mass wasting.

Impacts and Mitigation Measures

In general, despite the high hazard, geologic conditions impose no constraints on the proposed action and it is not imprudent to undertake. In response to early consultation, the Hawai‘i County Civil Defense Agency noted that:

“The area indicated is perpetually under threat from lava inundation as long as the eruption on the southeast flank of Kilauea volcano continues. However, we do not consider it such a significant risk to recommend prohibiting the landing area” (see email in Appendix 1a).

Paradise Helicopters stays apprised of volcanic conditions and does not operate during times when lava flows are other volcanic conditions pose a hazard to visitors. They will not land in the area if it is under imminent threat of lava inundation. The Draft EA stated that lava might destroy the home within a matter of months to years, after which landings at the site might have little or no reason to continue, and that until then, the landings would offer visitors a unique and unforgettable perspective on geologic hazard. Paradise Helicopters has reviewed the potential attraction of the tour subsequent to the March 2012 lava inundation and has determined that it would still have value.

3.1.2 Drainage and Water Features

Existing Environment

Due to the recent lava substrate, the project area has no perennial surface water bodies and no areas of local (non-stream related) flooding. No Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM) are printed, and the project site is thus in Zone X, outside the 500-year flood plain.

Maps printed by the Pacific Tsunami Warning Center and the Hawai'i County Civil Defense Agency locate the project site outside the area that should be evacuated during a tsunami warning (<http://www5.hawaii.gov/tsunami/maps.asp>).

Impacts and Mitigation Measure

There will be no impact on floodplains or flooding from emplacement or use of the landing platform and associated clearing. Trees and shrubs will be cleared by hand and no heavy equipment will be used, avoiding sedimentation and erosion impacts.

Helicopters contain fuel and lubricants. Although the landing site would not involve refueling or maintenance, any helicopter operations involve at least some risk of a spill. Paradise Helicopters employs the following standard operating procedures in case of a spill of any hazardous material:

1. REPORT THE SPILL
 - a. If an employee observes a release of a hazardous material, it is reported to supervisor.
 - b. The Fire Department is promptly notified of any of the following spills:
 - i. Any uncontrolled quantity of a hazardous substance, or if assistance is needed by the Fire Department, or as instructed by the Material Safety Data Sheet.
 - ii. Oil and other petroleum products with quantity exceeding 10 gallons or area of spill greater than three feet in any direction or any amount that is spilled into a stream or body of water.
2. STOP THE SOURCE OR CONTAIN THE SPILL: If safe and appropriate to do so, employees don any required personal protective equipment, make the spill scene off limits to unauthorized personnel, and prevent the spill from migrating.
3. CLEAN UP THE SPILL: If within the capability of unit that caused spill, employees may clean up spill. If not, the Fire Department or the County Department of Environmental Management (DEM) will make the decision for assistance and coordinate with other units. Employees who handle/work with the hazardous material as part of job are to be trained and qualified to participate in the cleanup of the spill. Regardless of the size of the spill it must be cleaned up.

4. DISPOSE OF THE SPILLED MATERIAL: All spilled material and other contaminated material (soil, gravel, absorbents, etc.) must be properly disposed of. It is the responsibility of the unit that created the spill to properly package and dispose of the waste. DEM will determine required disposal method. Spills not reported to the Fire Department still need to be reported to DEM for proper disposal and reporting. The exception to this requirement is for DEM-approved disposal instructions for a specific hazardous material.

Given the small quantities of fuel and lubricants on an individual helicopter, the distance of the project site from sensitive water bodies or land uses, and the procedures in which all employees are trained, the potential for any significant spill or environmental damage from the helicopter landings is negligible.

3.1.3 Flora, Fauna and Ecosystems

Existing Environment

The vegetation of the general Royal Gardens area can best be classified as a *kipuka* of ‘Ohi‘a Lowland Mesic Forest (Gagne and Cuddihy 1990) within a bare lava substrate. It consists of an open canopy of sparse native forest dominated by ‘ohi‘a trees (*Metrosideros polymorpha*) between 10 and 30 feet high, with some larger individuals. Biological reconnaissances of the area in July and November of 2011 indicated that, like many mesic forests, it is diverse, with a variety of native shrubs including *alahe‘e* (*Psydrax odoratum*), ‘*akia* (*Wikstroemia* sp.), ‘*ulei* (*Osteomeles anthyllidifolia*), ‘*a‘ali‘i* (*Dodonea viscosa*), and *pukiawe* (*Leptecophylla tameiameiae*), as well as several species of native ferns, sedges and vines, notably dodder (*Cassytha filiformis*). This forest has been overrun by lava flows over the course of several decades and has been greatly reduced in size (as occurred on the Thompson property in March 2012). The forest’s integrity has been compromised by subdivision into roughly 1-acre lots, with homes on some of the properties and roads throughout. As a result, it is highly invaded in most areas by the region’s dominant invasive species as well as other non-natives, notably guava (*Psidium guajava*), Christmas berry (*Schinus terebinthifolius*), butterfly bush (*Buddleia asiatica*), *Desmodium* spp., white shrimp plant (*Justicia betonica*), *Melochia umbellata*, and lantana (*Lantana camara*). A wide variety of non-invasive non-native plants that were brought in for food or ornamental purposes are also present, including mango (*Mangifera indica*) and *ulu* or breadfruit (*Altoecarpus altilis*). No rare, threatened or endangered species were present in or near the 100-by 100 foot area to be used for helicopter landing, nor in the areas near Mr. Thompson’s former home or adjacent to the subdivisions street where tourists might walk. No streams, lakes or wetlands with potential aquatic biology are present or would be affected in any way by the project.

Fauna

Early morning visits to the site detected only a few species of common non-native birds, with most individuals being Japanese White-eyes (*Zosterops japonicus*). Few endangered or otherwise rare bird species would be expected in this area, because at 1,100 feet in elevation, it is too low for Hawai‘i’s endangered forest birds. Several native birds are known to use the area at least occasionally, including the Hawai‘i ‘*Amakihi* (*Hemignathus virens virens*), the *Elepaio* (*Chasiempis*

sandwichensis), the Hawaiian thrush or ‘Oma‘o (*Myadestes obscurus*), and even the ‘Apapane (*Himatione sanguinea*) (pers. comm. Dr. Patrick Hart of UH-Hilo to Ron Terry, November 2011). Although the endangered Hawaiian Hawk (*Buteo solitarius*) was not observed in the project area, it undoubtedly forages in the general area, as it is commonly seen throughout forested areas of Puna. The vegetation in Royal Gardens includes some ‘ohi‘a trees as tall as 40 feet that could possibly be suitable for hawk nesting, but none appear to be present in the area near the landing site.

The endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) is often found in alien as well as native vegetation in a variety of locations throughout the island of Hawai‘i. These solitary bats are widely scattered and roost almost undetected in tall shrubs and trees. They have been observed in many areas of Puna and should be presumed to be present at least occasionally and to roost perhaps somewhere in Royal Gardens. Although no endangered Hawaiian Petrels (*Pterodroma sandwichensis*) or threatened Newell’s Shearwaters (*Puffinus auricularis newelli*) would be likely to nest in the area and none were observed, they may overfly the site on their way to colonies on the mountains.

Impacts and Mitigation Measures

While the general area contains native flora, no resources requiring special protection are present. No threatened or endangered plant species listed by the U.S. Fish and Wildlife Service were present (USFWS 2011). As the project site now consists of Mr. Thompson’s lava-covered property and roadways in front of it, where visitors walk during their brief visit, there would be no direct impact to any kind of vegetation. Although helicopters can be vectors for seeds or other parts of invasive plants, the already highly disturbed character of the area means that such impacts will likely not be significant.

In a November 21, 2011 letter in response to early consultation (see Appendix 1a), Hawai‘i Volcanoes National Park expressed, among other issues, concerns regarding the effect on birds:

“There may also be impacts to adjacent park resources from the noise and rotor wash associated with repeated landing and take-off’s in a relic forested area. The relic forested areas in this part of the park, harbor bird species such as the federally endangered ‘Io (Hawaiian Hawk). In addition, any clearing that may occur should consider surveys to ensure no impacts to the federally endangered hoary bat that may be roosting in trees, particularly during the reproductive period. Consultation with US Fish and Wildlife Service is suggested to determine if there are significant floral or faunal resources in the area to be impacted.”

Noise from the rotor wash of a helicopter can distract birds and induce them to leave an area, which can interrupt life-cycle activities and modify behavior. However, birds tend to avoid the disturbance and then return to normal after the helicopter leaves. If disturbance is frequent, birds will come somewhat habituated to frequent noise (Whittaker and Knight 1998). In general, because the noise will be intermittent and will last only about 5 minutes during takeoff and landing, the effects will be very limited. Another potential impact associated with helicopters is bird collisions, which can injure or kill birds and even harm aircraft. The U.S. Army has maintained a long record of helicopter

operations in Hawai‘i and has only recorded one documented helicopter strike of a bird since 2002 (U.S. Army 2011). Furthermore, the National Park Service utilizes helicopters extensively (and without any reported adverse effect) in its natural resource management efforts in far more sensitive areas, which are parts of the Park that are forested, zoned for Conservation and inhabited by multiple species of endangered forest birds. Given the general scarcity of native birds in the area and the planned landing schedule, impacts to native birds from helicopters are unlikely. No lighting is involved and impacts to native seabirds, which can be attracted to lighting and suffer collisions as a result, would not occur.

The landings would take place in the daytime and impacts with Hawaiian hoary bats, which would be very likely to avoid the helicopter anyway, would not occur. The Draft EA noted that clearing of low trees and shrubs for the helicopter landing area might disturb bats during the roosting season (now June 1 to September 15) when they are vulnerable. Although clearing for the 100 by 100-foot area required to emplace and operate a 15 by 15-foot platform was so minimal that the chance of encountering a roost was very low, it was recommended that clearing of trees or shrubs taller than 10 feet take place outside the roosting period. The subsequent lava inundation has rendered this moot.

An important neighboring land use is Hawai‘i Volcanoes National Park, located directly adjacent. Lava has overrun most of this area. Native species as well as non-native species from Royal Gardens periodically colonize the area, often only to be overrun by fresh lava flows. The periodic helicopter landing would not be expected to have adverse impacts to the vegetation or ecosystems there.

3.1.4 Air Quality and Scenic Resources

Environmental Setting

Air quality in Puna is generally good, with periodic air pollution derived from volcanic emissions of sulfur dioxide, which convert into particulate sulfate and produce a volcanic haze (vog). This can blanket the area during south winds, which are particularly frequent in the winter.

The steep terrain of the *kipuka* in which Mr. Thompson’s house was situated, surrounded by lava and offering views of the coastline below, coupled with the usually sunny and breezy weather, offers a scenic experience for visitors. The site is somewhat difficult to see from commonly accessible public viewpoints because of its distance from roads. Royal Gardens is not cited as an example of natural beauty within the Puna District in the General Plan, and the Puna Community Development Plan does not identify any scenic resources in the area. The General Plan does contain in Section 7 on Natural Beauty the following goals and policies:

7.2 GOALS

- (a) Protect, preserve and enhance the quality of areas endowed with natural beauty, including the quality of coastal scenic resources.
- (b) Protect scenic vistas and view planes from becoming obstructed.
- (c) Maximize opportunities for present and future generations to appreciate and enjoy natural and scenic beauty.

7.3 POLICIES

(h) Protect the views of areas endowed with natural beauty by carefully considering the effects of proposed construction during all land use reviews.

(i) Do not allow incompatible construction in areas of natural beauty.

7.5.1 Puna

Along the coast of Puna district the black sand beaches and tidal ponds are noted features of natural beauty.

The inland areas of Puna are lava land. Major areas of natural beauty are the 1960 Kapoho and the Pu'u O'o volcanic regions. The region is significant in that it represents the force of nature in altering the landscape feature into a cone and desolate field of lava.

The Puna Community Development Plan contains the following statement in Section 2 on Historic, Cultural and Scenic Resources:

c. Areas of scenic and cultural interest are accessible to the public in a manner that does not detract from their aesthetic, natural and cultural value.

Impacts and Mitigation Measures

The proposed action will not measurably affect air quality except minimally during landing and takeoff through helicopter exhaust. There are no sensitive receptors for this exhaust nearby and no adverse impacts would occur.

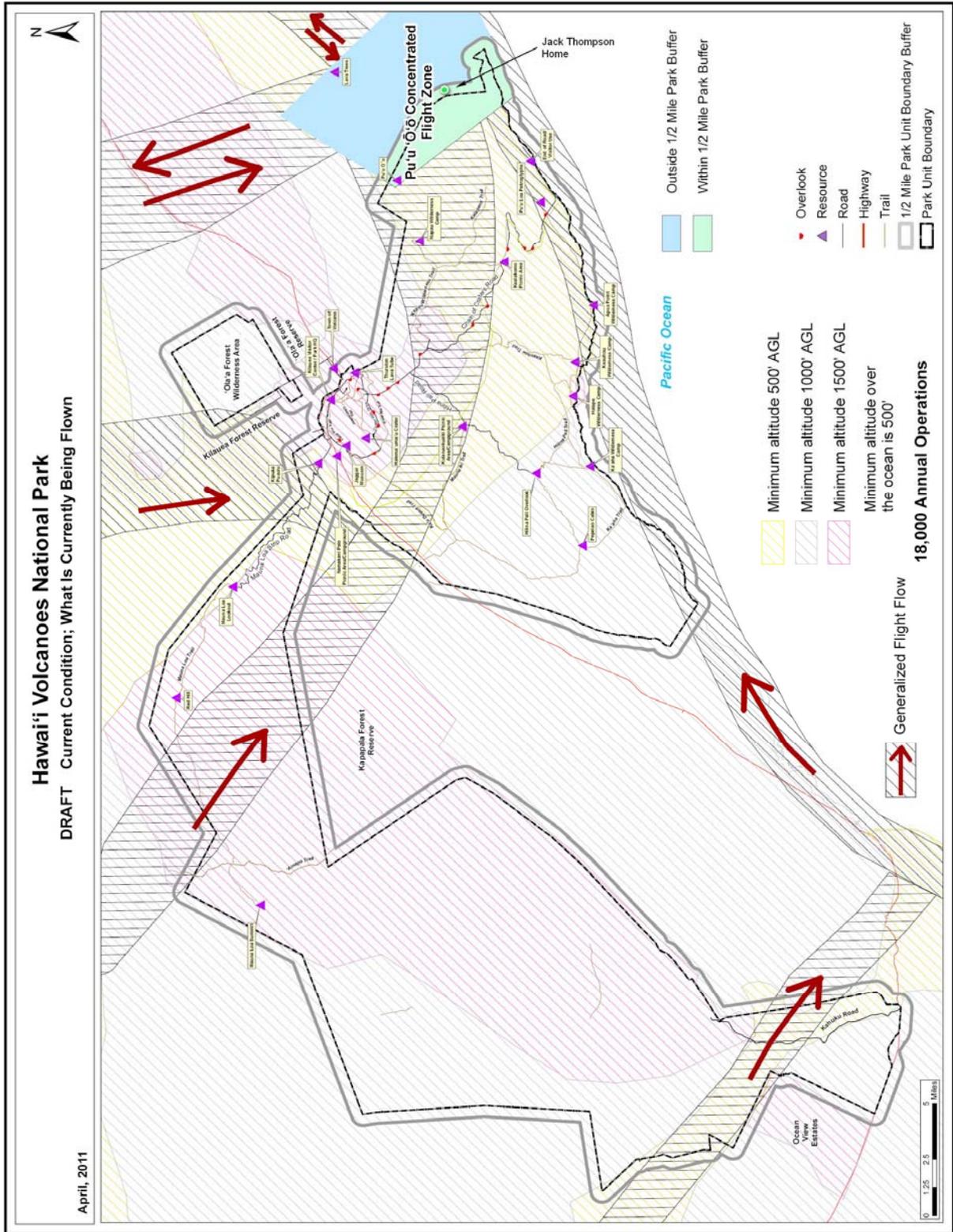
The sights offered to the visitors through landing at Mr. Thompson's property are unique. No adverse scenic effects would occur, and the goals related to natural beauty in the General Plan or Puna Community Development Plan would not be violated.

3.1.5 Noise

Background and Environmental Setting

Mr. Thompson's home is situated in Royal Gardens, adjacent to Hawai'i Volcanoes National Park (HVNP or the National Park). Due to the lava disaster, he had the only occupied home within two miles in any direction. As shown in Figure 6, which is a map reproduced from the April 2011 *Hawai'i Volcanoes National Park Air Tour Management Plan Environmental Impact Statement Newsletter, Preliminary Alternatives for Public Comments*, by the National Park Service and Federal Aviation Administration, this area experiences substantial helicopter and fixed wing tour traffic associated with lava viewing on the East Rift of Kilauea Volcano. Mr. Thompson's home is within the area that was previously termed the Pu'u O'o Concentrated Flight Zone, within the half-mile park buffer. Currently there are around 18,000 flights allowed annually under the annual tour aircraft authorization known as an interim operating authority (IOA), which allows for as many as 28,441 from 11 helicopter and 4 fixed wing operators. The IOA specifies various routes throughout the park that seek to avoid areas where most on-ground Park visitors are present. Nevertheless, during peak periods, the Park experiences up to 60 flights per day, and flights tend to circle multiple times at

Figure 6 Existing Tour Helicopter Routes



viewing areas and fly above neighboring communities. Five to fifteen flights per day pass over Mr. Thompson's property.

Over the years since the Kilauea East Rift eruption began in 1983, air tours of the area have gradually increased. When contacted concerning the proposed landing site, HVNP officials provided a letter stating concerns (see Appendix 1a). They noted that the Park is designated a National Park and World Heritage Site/Biosphere Reserve due to its volcanic, ecological and cultural significance, and that the natural quiet and solitude is part of what visitors come to experience. In addition, park officials are charged with protecting critically endangered species that may be vulnerable to noise and designating wilderness areas and protecting park soundscapes for cultural uses and visitors, as discussed above.

Residents of the South Hilo and Puna Districts have also repeatedly expressed concern with the impacts of helicopter noise on the area on natural and cultural resources, HVNP and other recreational visitor experiences, and the peace and quiet of residents.

In response to a growing number of air tours over national parks across the country, Congress passed the National Parks Air Tour Management Act (NPATMA) of 2000, which directs the Federal Aviation Administration and the National Park Service to cooperatively develop Air Tour Management Plans (ATMPs), including one for HVNP, which is currently in preparation. The objective of the plan is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts of commercial air tour operations upon the natural and cultural resources and visitor experiences. Commercial air tour operations are defined as any flight conducted for compensation or hire in a powered aircraft, where a purpose of the flight is sightseeing over a national park or within ½-mile outside the boundary of any national park, during which the aircraft flies below 5,000 feet above ground level (AGL).

Public meetings held in three locations in East Hawai'i were attended by several dozen people total who voiced a number of specific concerns, although the substantial economic and employment contribution of the tour industry has also been recognized by some. Most of the problems stem from the routes helicopters must use to visit the eruption and ocean entry areas. Suggestions have ranged from banning air tours altogether, to modifying the routes and adding mitigation, to allowing the status quo. Some residents prefer routes near the ocean, while others want helicopters restricted to unpopulated areas. Some want prescribed and fixed routes, while others would like variation to avoid having a few residents carry all the burden of helicopter noise.

HVNP has developed four draft alternatives for the ATMP that have the following elements:

- Maximum and minimum altitudes
- Caps on numbers of overflights
- Weather routes
- Competitive bidding – must bid if set caps on numbers
- Quiet Technology
- Curfews
- Reporting requirements for fee payments

- Adaptive Management
- Pilot Education

In terms of schedule, 2011 was occupied with the public review of draft alternatives (accomplished) and revision of these draft alternatives (in process). An impacts analysis to be conducted in 2012 will be included in a Draft EIS.

In addition to the ATMP, it is important to review references to noise in the Hawai‘i County General Plan and Puna Community Development Plan (PCDP). In Section 4, *Environmental Quality*, the General Plan states that:

“Loud noises are known to have adverse physiological and psychological effects on people. Noise that is loud or out of character, especially from low flying aircraft, is critically disturbing to residents.”

Both the General Plan and the PCDP are silent on the issue of helicopters per se, but the General Plan notes in Environmental Standards 4.4(a) in a reference to pollution that may be broadly construed to include noise pollution that :

“Pollution shall be prevented, abated, and controlled at levels that will protect and preserve the public health and well being, through the enforcement of appropriate Federal, State and County standards.”

In the PCDP, it is stated in Goal 2.1.1, related to Historic, Cultural and Scenic resources, that:

“Tourism in Puna is compatible with historic and natural resources and not intrusive into the area’s communities.”

Impacts of Proposed Action

It is clear that despite the benefits helicopter tours provide for visitors and the local economy, many residents and land managers view them as annoying and perhaps even unhealthful and damaging to the tranquility of the area. However, a helicopter stop at Mr. Thompson’s home, if permitted by the Hawai‘i County Planning Commission, would be part of an overall volcano tour with a route that essentially does not differ substantially from any other eruption tour that the company conducts, which already overfly Royal Gardens. The only difference involves a landing at the residence of Mr. Thompson using flight paths that do not affect any additional residences. Because of the time spent on the ground, Paradise Helicopters would actually conduct one fewer tour per day.

Paradise Helicopters has stated that it makes every attempt to “fly friendly” and avoid undue impacts to Park visitors, residents, or on-ground resources. Recognizing that the only way to avoid impacts altogether is to cease operations, there are still a number of practices that mitigate impacts, including observing minimum altitudes and flying as appropriate and reasonable over unpopulated areas and/or urban areas with existing high levels of noise.

In the future, the number, type, routes and hours of operations of tour helicopters visiting the Kilauea East Rift eruption area will be dictated by the final alternative decided upon in the ATMP, which should be completed within the next two years. Some alternatives would prevent use of this airspace by tour helicopters, because the site is within ½ mile of the National Park, and the tour would not be permissible. Others would allow it, in some cases with route modifications, pilot/visitor education, quieter aircraft, and/or other modifications.

Paradise Helicopters understands the jurisdiction of the ATMP and if future rules prohibit air tours to overfly the area, the company will forego the privileges for landing that might be granted as part of the Special Permit process.

The effect of helicopter noise on wildlife is discussed in Section 3.1.3, above.

The National Park expanded upon concerns raised in their early consultation letter with a letter in response to the Draft EA (see Appendix 1b). Specifically, the National Park raised the following additional or refocused concerns:

Effects of noise from landings/takeoffs. The Park raised the issue that even if there is no change in the flight pattern, noise levels in the immediate vicinity of a helicopter landing will be louder than noise produced from helicopters flying overhead as part of tours. As such, anyone in the immediate vicinity of Thompson property including visitors, geologists, NPS personnel, and cultural practitioners would experience somewhat louder noise for a few minutes several times a day. The farther from the property, the less that difference would be. At the present, there is no indication that any visitors, geologists or NPS personnel are ever present on the ground within a half-mile or so of the former home site (visitors, geologists, park employees and others are often present *inside helicopters* from tour companies and in Park or USGS activities, where, presumably, they would be not disturbed by the noise of another helicopter). With regard to potential interference with scientific activities including equipment data collection, on-the-ground conversation and radio use, and hearing sounds associated with volcanic activity, there is again no indication that such activities are occurring nearby. Paradise Helicopters has stated that if such activities are scheduled, it would make reasonable accommodations to avoid any interference. Concerning the soundscape and visitor enjoyment, the only visitors who would conceivably be able to detect a difference in the soundscape attributable to landings at this isolated properties are park visitors who have hiked at least three miles cross-country in violation of Park policy, and/or trespassed across miles of private property in violation of posted County policy, into the area directly adjacent to the landing site, an area that already contains significant tour helicopter activity and associated noise.

Cumulative noise impact. There would be no increase in the number of tours (there might actually be a small decrease, due to a slightly longer time per trip for trips with landings at the Thompson place), and thus no additional noise to accumulate with levels that already exist in the general area. Within the immediate area of the isolated Thompson property, there are no known sensitive uses and there are no other activities that would contribute to additional noise in this limited area.

3.2 Socioeconomic and Cultural

3.2.1 Socioeconomic Characteristics and Recreation

Royal Gardens and all surrounding areas have been almost completely abandoned because of the ongoing lava flow. Other than the issue of helicopter noise discussed above, there are few potential socioeconomic impacts associated with the proposed action.

In a November 21, 2011 letter in response to early consultation (see Appendix 1a), Hawai'i Volcanoes National Park expressed, among other issues, concerns regarding potential entry into the National Park by the tour visitors:

“If clients on the helicopter tour would be entering the park from this property on foot, it would be considered a commercial use and Paradise Helicopters would be required to apply for a Commercial Use Authorization from the park. Section 418 of the National Parks Omnibus Management Act of 1998, Public Law 105-391 (Section 418), authorizes the National Park Service (NPS) to issue commercial use authorizations (CUAs) to persons (referring to individuals, corporations, and other entities) to provide commercial services to park area visitors in limited circumstances. The CUA is used to provide for incidental use of park area resources by operators who provide commercial services originating and terminating outside of the park area. The permit system applies to all companies providing commercial visitor services to units of the National Park System.”

Other residents and agency officials also commented to the EA author in person that they believe visitors to Mr. Thompson's residence have trespassed on private property in order to view active or cooled lava, which they believe to be a severe violation of the rights of the unfortunate owners of these properties who cannot be present to exclude such unauthorized visitation.

Paradise Helicopters has stated that it is not necessary for the success of the tours for visitors to enter the National Park (entry is actually difficult due to brush) or to enter private property. They are willing to have a condition placed on the Special Permit that would require the tour operators to prevent such incursions.

The National Park also made the following statement:

“Socioeconomics/environmental justice should also be an impact topic considered in the development of your EA. During our ATMP EIS public meetings, we have received extensive feedback from the public regarding the potential socioeconomic impacts and consideration of environmental justice as related to low-flying aircraft.”

This analysis conflates the applicant's request to descend for a landing from an already utilized flight route on an existing tour and ascend back to that route with the larger issue of air tours in Puna. The lack of any homes within three miles of the landing site would prevent additional socioeconomic

impacts related to noise, including those on low-income and minority populations addressed in environmental justice.

3.2.2 Cultural and Historic Resources

Background

The cultural value of the project site was assessed by discussing its current resources and historical uses and context, and then determining whether it supports any traditional gathering uses, is vital for access to traditional cultural sites, or has other important symbolic associations for native Hawaiians or other cultural groups.

The project site is located in an upland area of the Puna District, which is one of the six major traditional districts on the island that remain intact today. This division of districts (and likely of all of the smaller land divisions) extends back in time to at least A.D. 1475, in the time of Chief Liloa. The districts were brought together under a single ruler when ‘Umi a Liloa came to power in about A.D. 1525 (Maly 1999). Barrere (1959) summarized the Precontact politics of the Puna District as follows:

“Puna, as a political unit, played an insignificant part in shaping the course of history of Hawai‘i Island. Unlike the other districts of Hawai‘i, no great family arose whose support one or another of the chiefs seeking power had to depend for his success. Puna lands were desirable, and were eagerly sought, but their control did not rest upon conquering Puna itself, but rather upon control of the adjacent districts, Ka‘u and Hilo.”

The first people probably began utilizing the agricultural resources of upland Puna District during the early expansion period of Hawai‘i Island ca. 600-1,100 A.D. (Burtchard and Moblo 1994). As populations increased in more desirable locations political competition would have pressured people to settle the upland and more marginally agricultural areas of the Puna District.

The entire district of Puna has always been dominated by the activities of Kilauea Volcano. A great lava flow covered much of this part of Puna in the era prior to western contact. Termed by geologists the ‘Aila‘au flow, it occurred 260-450 years before the present. There appears to be no specific legend concerning the flow that has survived to the present, but based on specific ethnographic analogy (with historic lava flows in Kona and Ka‘u) it is likely that this flow was a storied event with cosmologic and mythical associations.

The Puna District generally remained under the control of outside chiefs until the time of Kalani‘opu‘u’s reign in the 18th century. Shortly before his death in 1782, Kalani‘opu‘u’s dominion over Puna and portion of Ka‘u was challenged by the Puna chief ‘Imakakoloa. Kalani‘opu‘u resolved the unrest, but following his death the disposition of Puna once again became an issue until Kamehameha I successfully brought the entire island under his control in 1773.

Much of the Lower Puna area, well-populated by Hawaiians before 1800, was nearly abandoned in the 19th century, with the notable exception of Kalapana and few other coastal areas. Cattle raising and agriculture dominated land use in Puna in the late 1800s. Despite such economic ventures, the population in Puna remained the lowest of any district on the island, reaching a nadir of 834 in 1890. The advent of plantation sugar in Puna in about 1900, and for a relatively short period of time, timber production, brought with it villages of immigrant laborers, and Puna's population began to slowly grow. Growth has accelerated since 1970 as a result of the creation and occupancy of tens of thousands of residential agricultural lots in substandard subdivisions. The low costs and relaxed standards have drawn thousands of residences, including retirees, commuters to Hilo, and individuals and families relying on transfer payments for income. Many native Hawaiians have come to occupy the variety of communities that make up Puna and have thus spurred an interest in the perpetuation and revival of cultural practices.

In general the mid-elevation parts of Puna possess a variety of floral and lithic resources that have documented cultural uses, primarily the gathering of plants for medicinal and ceremonial purposes (Burtchard and Moblo 1994; Maly 1999). Traditional gathering practices in Puna are being perpetuated and revived.

History of the Kalapana Area

An oral history project carried out by the Department of Anthropology at the University of Hawai'i at Hilo in the late 1980s resulted in a document entitled *The People of Kalapana, 1823-1950* (Langlas 1989). Most of the material in this section is abstracted from this comprehensive report. The study included all the *ahupua'a* in the Kalapana area from Kikala to Apua, including the Pulama and Poupou Ahupua'a in which the Royal Gardens subdivision was developed.

Hawaiian settlement of the area began many centuries ago, as attested by oral traditions, and was focused mostly on the shoreline. Archaeological work cited in Langlas indicates that prior to Western contact, Hawaiians had residences both on the coastal flat and a few miles inland, at least in nearby Kamoamo. It is not clear whether they resided there permanently or just temporarily in association with farming. The most important reason that settlement in the Kalapana area was on the coast was the availability of fresh food from the sea. Fishing was on the shore, which also hosted gathering of shellfish, crabs and *limu*, and from canoes. Because of the rough, rocky shores, the inhabitants used canoe "ladders" made of 'ohi'a poles that required great skill and experience to safely launch and land canoes. Taro and breadfruit were major crops of the better watered coastal areas in the east but especially in the forested uplands. Bananas, sugar cane, and 'awa were also grown in the uplands.

Written knowledge of the area begins with the account by Reverend William Ellis of his 1823 tour around Hawai'i Island. He reports having preached on a Sunday three times in Kealakomo (to the southwest of the project site), which he described as populous, but desolate, and occupied with fish drying (Langlas 1989:189-190). He passed through and mentioned Wahaula *luakini heiau* and Kalapana, but did not mention Pulama.

Chester Lyman provided a description of Kealakomo some twenty years later in 1846:

“We passed a potato patch in the broken lava which exceeded anything I had seen. Not a particle of soil was anywhere to be seen, and the holes dug among the stones to receive the potatoes were some of them six feet in depth-thus securing a degree of moisture and shelter from the sun-though no more soil than at the surface

“There are but few people in this region. They are miserably poor, & for some time past have been almost in a state of famine. They get their living by fishing, making salt, & getting fern roots & a few potatoes in the mountains. Their salt works are on the naked lava near the sea, the water of which is evaporated in little cups or vessels made of the Ki leaf & holding of course but a minute quantity of water. These are laid in parallel rows over several acres, & the water poured into them a little at a time from Calabashes. The process is an extremely slow one, tho’ the salt is s[aid] to be excellent for the table. It is sold at the exceedingly low prices of 25 cts a bag, which will contain I sh’d judge ½ a bushel or more” (Lyman 1924:103).

A total of seven grants were awarded between 1854 and 1892, with Grants 1000 and 1872 extending into the lower Royal Gardens area that contains the project site. This indicates that the land near the project site may have had utility for farming. Grant 1872 was owned by the Ka‘awaloa family and used to farm taro (Langlas n.d. 25). While sweet potato could be grown near the coast, taro had to be grown up high. As late as the 1920s, oral histories indicate that most families in the Kalapana area had a taro patch “up in the hills” (Langlas 1989: 26).

Langlas analyzed tax records and determined that population in the Kalapana area declined from as much as 3,000 in 1823 to only about 100 in 1971. A big factor in the shrinking of the population in the western portion was the giant earthquake, with an associated subsidence of four to seven feet, and the tidal wave that struck the area in on April 2, 1968. Many of the coastal villages in southwest Puna were destroyed. Apua was abandoned, and Kealakomo was decimated. By 1891, there were only perhaps two families west of Pulama. Remarkably, less than 5 percent of the Kalapana area population at that time was non-Hawaiian. The entire Kalapana area had about 300 residents in 1910, with a few still present in the western portion from Apua to Kamoamo. After this date, records do not indicate the geographic breakdown, but by 1971 there were only 100 total, with the western area totally abandoned (and incorporated into the Hawai‘i Volcanoes National Park).

Contemporary oral histories indicate that around 1900 there were permanent residences inland, where soil was better. The diverse native species of upland areas would certainly have provided gathering materials. The land also had modern economic value for harvesting *pulu*, the hairy orange fibers at the base of tree ferns used for stuffing mattresses and pillows, and raising livestock such as goats and cattle for sale. Most Hawaiians later moved to the coast except for a few spots in Kikala and Keokeo, east of Kalapana and well away from the project site. But even as late as the mid-20th century there was cultivation of taro in the upland forests:

“Small trees were cut down or barked so that they would die and lose their leaves. Large tree were left in place. The dried brush was not burned. (James Ahia said that if they had burned the cleared patch, the whole forest would have caught fire.) Then the taro huli [the tops above

the edible corms] were planted by making a hole with the digging stick (‘o‘o), putting in the huli and firming the soil around it. After that it was just a matter of weeding a couple of times until the leaves shaded the ground enough to discourage weeds, and waiting for the corms to get big enough to harvest. On the deep soil parcels like Kalewa, the trees were mostly introduced types, such as guava and kukui. But on the rocky state land at Kaola, the native forest was less disturbed and consisted mostly of ohī‘a. There, a site for a new taro patch was picked where the ‘ie‘ie ...vines grew thick in the trees....” (Langlas 1989: 26).

During the same era that population left the drier western areas and the uplands became less used, Hawai‘i Volcanoes National Park began expanding, acquiring property gradually from all the western *ahupua‘a* and coastal Pulama and Poupou between 1911 and 1953. After 1900, the inhabitants lived in the eastern *ahupua‘a* but used the western area for fishing, gathering salt, and other resources. The population remained almost entirely Hawaiian until the 1950s, isolated from the rest of the island at the end of a rural road. Local families intermarried and had their own churches and a grade school in Kalapana. The population steadily dwindled but the Hawaiian community remained intact. Changes occurred when the Park built Chain of Craters Road in 1965, bringing a flood of tourist activity. This same year the grade school was closed. In the 1970s land speculators built infrastructure-deficient subdivisions including Kalapana Gardens, Royal Gardens, Black Sands Subdivision, Kalapana Shores, and Pacific Paradise. Royal Gardens Subdivision was created in March 1973 by Norman Inaba and consisted of 1,425 1-acre lots (Community Management Associates 1992:15). By the 1980s, outsiders outnumbered the local population in Kalapana. The somewhat sparse and neat vegetation grazed by loosely roaming stock was replaced by lush vegetation from the landscaped yards. Even the shoreline changed through gradual subsidence, punctuated by a dramatic three-foot drop associated with a 7.2-magnitude earthquake in 1975, eroding Kaimu Black Sands Beach.

The 1980s and 1990s saw most of the land from Kalapana westward engulfed by lava. The historic features of the western lands, which were concentrated on the coast and included Punalu‘u (or Queen’s Bath) and the old canoe-landing site at Kī, have all disappeared. Royal Gardens has been largely destroyed, separating Mr. Thompson’s property by a three-hour hike from the nearest road.

According to the National Park:

“The Southeast Rift Zone is associated with the birth and creation of Hawaiian culture, as the sites of new lava flows are felt to be some of the most sacred places. The Kupuna group, an informal group of Hawaiian elders, has stated that they feel the sight and presence of these low-flying aircraft to be culturally inappropriate.”

In response to early consultation, the National Park stated:

“The area within the park that borders your project is a section of 42,000 acres of parklands known as the Kalapana Extension. This section of the park is governed by specific 1938 legislation regarding its use by Native Hawaiians for fishing and homesteading. We encourage you to consult with the Kalapana Fishing Ohana regarding any potential for cultural impacts” (see letter in Appendix 1a).

Accordingly, project planners obtained contact information from the National Park for members of the Ohana and other Kalapana cultural and community organizations, including members of the families whose ancestors may have utilized the Royal Gardens area. On December 5, 2011, a letter was mailed to 14 individuals and phone messages were left with several individuals as well. One letter was returned, and it is presumed that the other letters were received by the intended recipients. As of January 10, 2012, one response was received (from Andrea Kaawaloa-Okita), which is included in Appendix 1a in full and excerpted below:

“On behalf of the Kalapana Fishing Council, a grassroots organization formed in September of 2000 to facilitate a longstanding partnership between Hawai‘i Volcanoes National Park and the Kalapana Community, we express concern about the precedence of permitting a remote helipad. The Island of Hawaii has been excessively exploited for tour related activities. The island does not need to further exploit remote and inaccessible areas for use by tourist clientele. The approval of remote helipad sites for the purpose of servicing the needs of residents is an acceptable uses. The establishment of a helipad for tour activities would create an unnecessary and adverse impact to any pristine and remote area of the island.”

Archaeological Resources

In response to early consultation, the National Park stated:

“The proposed landing site is located adjacent to the Puna-Ka‘ū Historic District of the park, which is on the National Register of Historic Places. We recommend that you conduct an archeological survey of the site prior to ground disturbance, or locate the landing site on already disturbed land” (see letter in Appendix 1a).

In response to a request for a determination of no-effect, Hawai‘i Island archaeologist Theresa Donham visited the 100 by 100-foot site on November 15, 2011, and determined that the emplacement and construction of the landing area would have no effect on historic properties, because none are present (see letter in Appendix 1a).

However, as a further precaution, in the unlikely event that human skeletal remains, undocumented archaeological resources, or cultural or traditional remains are encountered during clearing of the 100 by 100-foot area or emplacement of the helicopter landing platform, work in the immediate area of the discovery shall be halted and SHPD contacted as outlined in Hawai‘i Administrative Rules 13§13-275-12.

Cultural Resources and Traditional and Customary Practices

The project site itself, a fraction of an acre in the yard of Jack Thompson, the last inhabitant of Royal Gardens, does not reflect the cultural history of the area. Some common native plants that were used for gathering can be found amid the landscaping and invasive species, but no archaeological features or evidence of the cultivation of taro, breadfruit, bananas, sugar cane, and ‘awa are present. No potentially significant natural features such as *pu‘u*, springs, or cave are present. As part of the early consultation process, the Office of Hawaiian Affairs and the State Historic Preservation Division were contacted in an effort to obtain information about any potential traditional cultural properties that might be present at the project site. Neither agency has supplied any information relative to the existence of traditional cultural properties in the immediate vicinity of the project site, nor did they provide any information indicating current use of these sites for traditional and customary practices. No specific valuable natural, cultural or historical resources have been documented to be present.

However, it is also true that both the National Park, which is entrusted with caring for natural and cultural resources over a very large area directly adjacent to the property, and a representative of the Kalapana Fishing Council, a grass-roots organization with deep ties to the cultural resources of the region, have misgivings about the general idea of helicopter landings in the area. Although there may be little in the way of additional measurable effects on cultural resources or practitioner use involved with brief stopovers in this an area that, although remote, is already flown over by these and other helicopter, there is a sense that landing here creates intangible cultural effects. As such, it is currently difficult to assess whether mitigation in the form of a maximum number of flights, hour restrictions, or other measures could effectively reduce impacts.

The National Park, the Kalapana Fishing Council, and the Office of Hawaiian Affairs were supplied a copy of the Draft EA in order to solicit comments that might provide additional insight into potential effects and mitigation. In a response letter (see Appendix 1b), the National Park reiterated concerns about cultural effects. Aside from the National Park, there were no comments on the Draft EA concerning cultural impacts.

3.3 Utilities and Public Infrastructure and Services

No roads, public utilities, public infrastructure or public services are available at the isolated lot.

The single-family residence on the site is serviced by a catchment system. Water is not required for the proposed landing area. Bottled water is available for the visitors at the airport in Hilo and there is no requirement for water use on the site.

There is no public sewer in this rural area. ~~While the single family residence is served by a cesspool system,~~ There will be no restroom facilities offered to the helicopter crew or passengers, as is typical on a brief helicopter tour.

Police and fire services are available at the Pahoia Police and Fire Stations, approximately 12 miles northeast of the subject property. However given the remoteness of the site and inaccessibility via roadways, no fire or police service can be provided. It is not anticipated these services would normally be needed for the proposed use. Just as with all helicopter tours or work operations in isolated areas, which are taking place daily all over the Hawaiian Islands, rescue in the event of a medical emergency or crash would not be possible via roadways, and would require either another Paradise Helicopters aircraft (which are readily available for any situations) or County services. It should be noted that although commercial helicopters do sometimes require County assistance, they have also proven extremely useful in rescue situations. Paradise Helicopters alone has responded to the following emergencies, at no cost to the victim or taxpayer:

- Rescued a stranded family of hikers in volcano area in 2007
<http://paradisecopters.com/newsletter-summer07.php>
- Rescued a single male from a capsized boat who swam ashore at the National Park
- Flew a female with abscessed tooth from remote hiking area for emergency attention
- Assisted with sea search and rescue for a lost fisherman in 2012
- Airlifted a Laupahoehoe resident in need of medical attention

3.4 Secondary and Cumulative Impacts

The project will not lead to any secondary effects. Other than the issue of noise, the cumulative effects of which are dealt with in Section 3.1.5 above, there are essentially no adverse effects of the project to accumulate with those of other projects in the area, of which there are also none.

3.5 Required Permits and Approvals

It currently appears that because of the size and nature of the portable helicopter landing platform, no Plan Approval or building permits are necessary. A Special Permit from the County of Hawai‘i, Planning Commission is required.

According to an email from Gordon Wong of the Federal Aviation Administration (see Appendix 1a):

“If a permanent heliport site will be established, under FAR Part 157, the proponent must notify the FAA through submittal of FAA Form 7480-1 Notice of Landing Area Proposal. The FAA will conduct an airspace study to determine the efficient use of airspace.”

Calvin Dorn, President of Paradise Helicopters, stated that the site is temporary and will thus not require submittal of a Notice of Landing Area Proposal, but he is currently investigating the issue.

3.6 Consistency With Government Plans and Policies

3.6.1 Hawai‘i State Plan

Adopted in 1978 and last revised in 1991 (Hawai‘i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State’s long-run growth and development activities. The three themes that express the basic purpose of the *Hawai‘i State Plan* are individual and family self-sufficiency, social and economic mobility and community or social well-being. The proposed project would promote these goals by enhancing a business that supports 35 employees on the Island of Hawai‘i, thereby enhancing quality-of-life and community and social well-being. No direct, measurable adverse effects to community well-being would occur, but many in the community express opposition to tour helicopter operations in general.

3.6.2 Hawai‘i State Land Use Law

All land in the State of Hawai‘i is classified into one of four land use categories – Urban, Rural, Agricultural, or Conservation – by the State Land Use Commission, pursuant to Chapter 205, HRS. The property is in the State Land Use Agricultural District, but Conservation District land is adjacent to the west. The rules that administer Hawaii’s EIS law state in §11-200-6(b)(1)(G) that actions that involve “... construction of new, or the expansion or modification of existing helicopter facilities within the State which by way of their activities may affect any land classified as conservation district by the state land use commission...” may be subject to an EA or EIS. As part of its review of

the Special Permit application, the Hawai'i County Planning Department determined that the project required an EA because it is a helicopter facility that could potentially affect Conservation District Land, which lies to the west and is under the control of the National Park. No structures or surface use of the Conservation District land is proposed, and there is no requirement for a Conservation District Use Permit. The stop at Jack Thompson's property will be part of an already existing tour that already overflies Conservation District land. Aside from noise impacts, which discussed above in Section 3.1.5, there will be no impacts on land in the Conservation District, as confirmed by the memo from the Department of Land and Natural Resources in Appendix 1a.

The use requires a Special Permit from the Windward Planning Commission of the State of Hawai'i. A summary of the applicant's discussion of the relationship of the project to Special Permit criteria contained in the Special Permit application is provided below.

Land Use Objectives

The State Land Use Law and Regulations are intended to preserve, protect, and encourage the development of lands in the State for those uses which they are best suited in the interest of public health and welfare.

In recognizing that lands within the Agricultural District might not be best suited for agricultural activities and yet classified as such, and that certain types of uses might not be strictly agricultural in nature, yet reasonable in this district, the legislature has provided for the Special Permit process to allow certain unusual and reasonable uses within the agricultural district.

In this situation, the project site is rocky and does not have soil characteristics that are considered important from an agricultural resources perspective. The remoteness and inaccessibility makes the site infeasible for agricultural purposes. There are no surrounding agricultural uses that could be affected by the proposed use of this 1.003-acre lot. As such, the proposed use would not be detrimental to the agricultural resources of the County of Hawai'i or the State of Hawai'i. Therefore, the removal of a small portion of a 1.003-acre agriculturally zoned property for occasional helicopter landings will neither deplete nor diminish the County of Hawai'i's agricultural resources.

In addition, the loss of 0.2 acres of agricultural district land isolated from roadway access will not obviate or be in conflict with the agricultural goals and policies of the General Plan nor remove any active or potentially active agricultural lands from the County's agricultural land inventory.

Impacts to Surrounding Area and Character

The proposed use would not adversely affect surrounding property. The area is abandoned because of lava inundation to the subdivision and roadway access points. There are no other residences within two miles of the subject property. Should the eruption activity cease in the future and subdivision roadways are cleared so that residents could again inhabit this subdivision, the Planning Commission could reconsider the impacts of this activity on this parcel. The nature of the proposed use is such that no vehicular traffic will be generated.

Burdens Upon Public Agencies

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

Water is provided to the site by rainfall and the use of catchment for the residence. No water service is required or requested for the Special Permit operation. No utilities are required for the helicopter landing area. No sewer or drainage improvements are required by the proposed use. The area is not affected by drainageways or floodplains as designated on the Flood Insurance Rate Map (FIRM).

No vehicular traffic is associated with the proposed use. There will be no increase in population that would impact school services or operations. The proposed use will not generate the need for additional police, fire or other public agency services.

Unusual Conditions, Trends, and Needs

Unusual conditions, trends, and needs have occurred since the district boundaries and regulations were established. While the subject property is located within the agricultural district, the site has been isolated by volcanic eruptions that have inundated the subdivision and blocked traditional vehicular access to the site.

Unusual conditions have arisen in this particular area of Puna. With the eruption of Pu'u O'o there is an opportunity for tourism that did not previously exist. The applicants recognize there are unique opportunities presented by this volcanic activity. This area can help sustain tourism in Puna which can benefit this local helicopter company and its 35 employees on the Big Island. This use was not anticipated at the time the property was placed in the Agricultural District.

Suitability of Proposed Use

The land upon which the proposed use is sought is unsuited for the uses permitted within the district. The isolation of the area caused by the lava inundation prevents traditional access to the site and limits its potential for traditional agricultural activities. The proposed use provides the landowner with a reasonable method of access to his property that previously did not exist.

Alteration or Changing the Essential Character

The proposed use will not substantially alter or change the essential character of the land and the present use. The land has been and will continue to be used for residential purposes and a rural life style. The use of a 15 by 15-foot area for a helicopter landing area within a 100 by 100-foot clearing will not alter the land or its basic function and use. Should the eruption stop and the subdivision again obtain road access, the landing platform can be removed with no permanent impact to the agricultural potential of the site or surrounding area.

3.6.3 Hawai‘i County Zoning, LUPAG and Special Management Area

Hawai‘i County General Plan Land Use Pattern Allocation Guide (LUPAG). The LUPAG map component of the *General Plan* is a graphic representation of the Plan’s goals, policies, and standards as well as of the physical relationship between land uses. It also establishes the basic urban and non-urban form for areas within the planned public and cultural facilities, public utilities and safety features, and transportation corridors.

The General Plan Land Use Pattern Allocation guide map designates this area as “extensive agriculture”. With issuance of a Special Permit, the proposed use would not be incompatible with this designation.

The County zoning for the subject area is Agriculture 1-acre (A-1a). Again, with issuance of a Special Permit, the proposed use would not be incompatible with this designation.

The project site is situated outside the County’s Special Management Area (SMA), about two miles from the shoreline.

3.6.3 Hawai‘i County General Plan and Puna Community Development Plan

The *General Plan* for the County of Hawai‘i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai‘i. The plan was adopted by ordinance in 1989 and revised in 2005 (Hawai‘i County Department of Planning). The *General Plan* itself is organized into thirteen elements, with policies, objectives, standards, and principles for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai‘i. The Puna Community Development Plan (CDP) encompasses the judicial district of Puna, and was developed under the framework of the February 2005 County of Hawai‘i General Plan. Community Development Plans are intended to translate broad General Plan Goals, Policies, and Standards into implementation actions as they apply to specific geographical regions around the County. CDPs are also intended to serve as a forum for community input into land-use, delivery of government services and any other matters relating to the planning area.

The request will not be contrary to the General Plan and the Puna Community Development Plan.

The County General Plan ECONOMIC element, goals and polices state the following:

ECONOMIC GOALS

- Provide residents with opportunities to improve their quality of life.
- Economic development and improvement shall be in balance with the physical and social environments of the island of Hawaii.
- The County of Hawaii shall strive for diversity and stability in its economic system.
- The County shall provide an economic environment which allows new, expanded, or improved economic opportunities that are compatible with the County’s natural and social environment.

POLICIES

- The County of Hawaii shall strive for an economic climate which provides its residents an opportunity for choice of occupation.
- The County of Hawaii shall strive for diversification of its economy by strengthening existing industries and attracting new endeavors.

Discussion: The proposed uses provide an economic opportunity for the owner of this agricultural land. In addition it provides opportunities for the owners of the helicopter company to support the tourism activities associated with the volcanic eruption in East Hawai'i. While others in this subdivision have had to abandon their properties, this owner has a unique opportunity to benefit from being one of the few remaining areas where visitors can witness the power and creation of volcanic activity.

Consistency with elements of the General Plan and Puna Community Development Plan related to Noise and Scenic Resources are discussed in other sections of this EA.

PART 4: DETERMINATION

Based on the findings below, and upon consideration of comments to the Draft EA, the applicant considers that the proposed helicopter land area would not significantly alter the environment and expects that the Hawai'i County Planning Department that, as impacts would be minimal, and the agency will issue a Finding of No Significant Impact (FONSI).

PART 5: FINDINGS AND REASONS

Chapter 11-200-12, Hawai'i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

1. *The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost.
2. *The proposed project will not curtail the range of beneficial uses of the environment.* The proposed project expands and in no way curtails beneficial uses of the environment, by providing an economic opportunity with minimal additional impact.
3. *The proposed project will not conflict with the State's long-term environmental policies.* The State's long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project is not major and fulfills aspects of these policies calling for maintaining environmental quality while allowing economic opportunities.
4. *The proposed project will not substantially affect the economic or social welfare of the community or State.* The project will not impose any additional impacts on social welfare.

5. *The proposed project does not substantially affect public health in any detrimental way.* The proposed project involves an addition to an already existing tour that will not pose any additional noise impacts or other public health concerns.
6. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* No adverse secondary effects are expected to result from the proposed action.
7. *The proposed project will not involve a substantial degradation of environmental quality.* The project will not degrade the environment in any substantial way.
8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* No endangered species of flora or fauna are present on the project site or would be affected in any way by the project.
9. *The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* The project is not related to additional activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.
10. *The proposed project will not detrimentally affect air or water quality or ambient noise levels.* The proposed project involves an addition to an already existing tour that will not pose any additional noise impacts.
11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* Although the project is located in an area with volcanic and seismic risk, the entire Island of Hawai‘i shares this risk, and the project is not imprudent to implement.
12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* No scenic vistas and viewplanes identified in the Hawai‘i County General Plan will be adversely affected by the project.
13. *The project will not require substantial energy consumption.* The project involves more energy use because of an additional landing and takeoff on an existing tour that consumes additional fuel, but in the context of visitor tours, the use is not significant.

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ENVIRONMENTAL ASSESSMENT

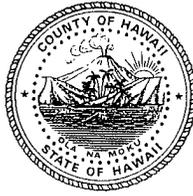
Helicopter Landing Area at Royal Gardens

APPENDIX 1a

Comments in Response to Early Consultation and Correspondence with State Historic Preservation Division

[This page intentionally left blank]

William P. Kenoi
Mayor



Harry S. Kubojiri
Police Chief

Paul K. Ferreira
Deputy Police Chief

County of Hawai'i

POLICE DEPARTMENT

349 Kapiolani Street • Hilo, Hawai'i 96720-3998
(808) 935-3311 • Fax (808) 961-8865

October 14, 2011

Mr. Ron Terry
Principal
Geometrician Associates
P. O. Box 396
Hilo, Hawai'i 96721

Dear Mr. Terry:

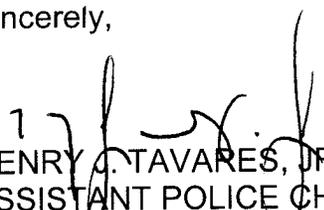
SUBJECT: EARLY CONSULTATION FOR ENVIRONMENTAL ASSESSMENT FOR SPECIAL PERMIT FOR HELICOPTER LANDING AREA; TAX MAP KEY: (3)1-1-114:0422, ROYAL GARDENS SUBDIVISION, PUNA DISTRICT, ISLAND OF HAWAII

Staff, upon reviewing your letter of October 6, 2011, does not anticipate any significant impact to traffic and/or public safety concerns.

Thank you for allowing us the opportunity to comment.

If there are any questions regarding this matter, please contact Captain Samuel Jelsma, Puna District Patrol Commander, at 965-2716.

Sincerely,


HENRY J. TAVARES, JR.
ASSISTANT POLICE CHIEF
AREA I OPERATIONS

SJ:lli
110682

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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

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

In reply, please refer to:
File:
EPO-11-205

October 17, 2011

Mr. Ron Terry, Principal
Geometrician Associates
P.O. Box 396
Hilo, Hawaii 96721

Dear Mr. Terry:

SUBJECT: Early Consultation for Environmental Assessment for Special Permit for Helicopter Landing Area, Royal Gardens Subdivision, Puna District, Island of Hawaii
TMK: (3) 1-1-114:022

Thank you for allowing us to review and comment on the subject document. The document was routed to the various branches of the Environmental Health Administration. We have no comments at this time, but reserve the right to future comments. We strongly recommend that you review all of the Standard Comments on our website: www.hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

The same website also features a Healthy Community Design Smart Growth Checklist (Checklist). The Hawaii State Department of Health, Built Environment Working Group, recommends that State and county planning departments, developers, planners, engineers and other interested parties apply the healthy built environment principles in the Checklist whenever they plan or review new developments or redevelopments projects. We also ask you to share this list with others to increase community awareness on healthy community design.

If there are any questions about these comments please contact the Environmental Planning Office at 586-4337.

Sincerely,

A handwritten signature in cursive script that reads "Genevieve Salmonson".

GENEVIEVE SALMONSON, Acting Manager
Environmental Planning Office

William P. Kenoi
Mayor



Darren J. Rosario
Fire Chief

Renwick J. Victorino
Deputy Fire Chief

County of Hawai'i
HAWAII FIRE DEPARTMENT
25 Aupuni Street • Room 2501 • Hilo, Hawai'i 96720
(808) 932-2900 • Fax (808) 932-2928

October 19, 2011

Mr. Ron Terry
Geometrician Associates
PO Box 396
Hilo, HI 96721

SUBJECT: EARLY CONSULTATION FOR ENVIRONMENTAL ASSESSMENT
FOR SPECIAL PERMIT FOR HELICOPTER LANDING AREA
TMK: (3) 1-1-114:022, ROYAL GARDENS SUBDIVISION

We have no comments to offer at this time in reference to the above-mentioned Early Consultation for Environmental Assessment. No final EA is necessary upon its completion.

A handwritten signature in black ink, appearing to read "Darren J. Rosario".

for **DARREN J. ROSARIO**
Fire Chief

KT:lpc



From: Mento, Quince [mailto:QMento@co.hawaii.hi.us]
Sent: Friday, October 28, 2011 12:30 PM
To: rterry@hawaii.rr.com
Subject: Memo re: Early Consultation for Special Permit (3)1-1-114:022

Aloha Ron,

The area indicated is perpetually under threat from lava inundation as long as the eruption on the southeast flank of Kilauea volcano continues. However, we do not consider it such a significant risk to recommend prohibiting the landing area. We just want it on record that we notified you of the risk.

Thanks,

Quince Mento
Hawai'i County Civil Defense

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
RECEIVED
OFFICE OF CONSERVATION
& COASTAL LANDS



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

2011 NOV -7 P 2:49

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE OF HAWAII

November 4, 2011

MEMORANDUM

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

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

SUBJECT: Early Consultation for Environmental Assessment for Special Permit for Helicopter Landing Area

LOCATION: Royal Gardens Subdivision, Puna District, Hawaii; TMK: (3) 1-1-114:022

APPLICANT: Geometrician Associates, LLC on behalf of Paradise Helicopters

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by November 18, 2011.

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 Darlene Nakamura at 587-0417. Thank you.

Attachments

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

Signed: *[Signature]*

Date: 11.21.2011

cc: Central Files

** No proposed land use in the Conservation District*

-----Original Message-----

From: Gordon.Wong@faa.gov [mailto:Gordon.Wong@faa.gov]

Sent: Monday, November 14, 2011 8:50 AM

To: Ron Terry

Cc: Charles.Cantu@faa.gov; Debbie.Saito@faa.gov; Keith.Lusk@faa.gov; Larry.Tonish@faa.gov; Robert.Rabideau@faa.gov; Ron.V.Simpson@faa.gov; W.Kawehi.Lum@faa.gov; Barry.Brayner@faa.gov; henry.p.bruckner@hawaii.gov; chauncey.wongyuen@hawaii.gov; steven.j.santiago@hawaii.gov; Kandyce.Watanabe@faa.gov; Tyson.Price@faa.gov; Lloyd.E.Lewis@faa.gov; Steve.Wong@faa.gov

Subject: Re: Fw: Early consultation letter for Paradise Helicopters - FAR Part 157 Notice of Landing Area Proposal

Mr. Terry.

If a permanent heliport site will be established, under FAR Part 157, the proponent must notify the FAA through submittal of FAA Form 7480-1 Notice of Landing Area Proposal. The FAA will conduct an airspace study to determine the efficient use of airspace.

If this will be a private facility, the FAA does not have a requirement to review any environmental documentation; however, the State and/or City/County may have a requirement.

Please contact me if you have any questions regarding the Form.

Gordon Wong
FAA Honolulu Airports District Office
T: 808-541-3565
F: 808-541-3566
E: gordon.wong@faa.gov

(See attached file: FAA 7480-1.pdf)

Andrea Kaawaloa-Okita



P.O. Box 16 • Pahoa, HI 96778 • Phone: 808-640-0743 • Fax: NA
E-Mail: akaawaloa@yahoo.com Web: NA

Date: 11/16/11

Mr. Ron Terry
Principal
Geometrician Associates
PO Box 396
Hilo, HI 96721
email: rterry@hawaii.gt.com

Dear Mr. Terry:

It was brought to my attention that you are preparing an Environmental Assessment (EA) concerning a Helicopter Landing Area in the Royal Gardens Subdivision. On behalf of the Kalapana Fishing Council, a grassroots organization formed in September of 2000 to facilitate a longstanding partnership between Hawai'i Volcanoes National Park and the Kalapana Community, we express concern about the precedence of permitting a remote helipad. The Island of Hawaii has been excessively exploited for tour related activities. The island does not need to further exploit remote and inaccessible areas for use by tourist clientele. The approval of remote helipad sites strictly for the purpose of servicing the needs of residents is an acceptable use. The establishment of a helipad for tour activities would create an unnecessary and adverse impact to any pristine and remote area of the island.

Please keep us updated as to the progress of this pursuit and we would kindly appreciate a copy of the EA upon completion.

Sincerely,

Andrea Kaawaloa-Okita
Chairman
Kalapana Fishing Council



United States Department of the Interior

NATIONAL PARK SERVICE
Hawai'i Volcanoes National Park
Post Office Box 52
Hawaii National Park, Hawai'i 96718



IN REPLY REFER TO:
L7621

November 21, 2011

Mr. Ron Terry
Geometrician Associates, LLC
P.O. Box 396
Hilo, HI 96721

Dear Mr. Terry,

Thank you for the electronic transmittal on November 9, 2011 regarding your request for information on the preparation notice for an Environmental Assessment (EA) related to a proposed helicopter landing site on a property directly adjacent to the park.

Hawaii Volcanoes National Park is designated a National Park and World Heritage Site/ Biosphere Reserve due to its volcanic, ecological and cultural significance. Visitors come to their national parks to experience the natural quiet and solitude. Park managers are charged with protecting critically endangered species, designated wilderness and park soundscapes as well as limiting activities that cause unnecessary noise or threaten the natural quiet. The proposed landing site/helipad adjacent to the park boundary will potentially have direct impacts to the national park's resources and visitors. Please specify in the EA the quantity of use that is expected at this site (daily, weekly, time of day). This information will relate directly to the level of impact anticipated to occur due to this action.

Since 2000, the National Park Service (NPS) has been working with the FAA to develop an Air Tour Management Plan and environmental impact statement (ATMP/EIS) for commercial air tour activities within the airspace of Hawaii Volcanoes National Park for 5,000' agl and below including a ½ mile buffer zone beyond park boundaries, in order to mitigate or prevent the significant impacts of commercial air tour operations over the park. Congressional and NPS concerns regarding the impacts of over flights on the national parks led to passage of the National Parks Air Tour Management Act (NPATMA) in 2000. Our concerns for flights over the park include potential impacts to park soundscapes, threatened and endangered species, resources of cultural importance to Native Hawaiians, volcanic hazards, data collection and monitoring, wilderness qualities, and the ground visitor experience. We recently completed public review of preliminary alternatives for the ATMP EIS, including a public meeting in the Puna District.

The final flight routes adopted in the ATMP/EIS will specify routes for commercial air tour travel over park lands including the park's ½ mile buffer. Information on the Air Tour Management Plan process and public meeting comments are available on-line at http://www.nps.gov/havo/parkmgmt/havo_planning_atmp2011.htm

If clients on the helicopter tour would be entering the park from this property on foot, it would be considered a commercial use and Paradise Helicopters would be required to apply for a Commercial Use Authorization from the park. Section 418 of the National Parks Omnibus Management Act of 1998, Public Law 105-391 (Section 418), authorizes the National Park Service (NPS) to issue commercial use authorizations (CUAs) to persons (referring to individuals, corporations, and other entities) to provide commercial services to park area visitors in limited circumstances. The CUA is used to provide for incidental use of park area resources by operators who provide commercial services originating and terminating outside of the park area. The permit system applies to all companies providing commercial visitor services to units of the National Park System.

In addition, the park currently has four fixed wing and ten helicopter air tour companies that have been granted legal operating authority by the FAA to fly over Hawai'i Volcanoes National Park, referred to as an Interim Operating Authority (IOA).

At this time, no other air tour companies are authorized to fly below 5,000' agl over our park and ½ mile buffer of air space beyond the boundary. The CUA permit is not the same as the Interim Operating Authority (IOA) that Paradise Helicopters currently operates under and would be required in addition to the IOA.

There may also be impacts to adjacent park resources from the noise and rotor wash associated with repeated landing and take-off's in a relic forested area. The relic forested areas in this part of the park, harbor bird species such as the federally endangered I'o (Hawaiian Hawk). In addition, any clearing that may occur should consider surveys to ensure no impacts to the federally endangered hoary bat that may be roosting in trees, particularly during the reproductive period. Consultation with US Fish and Wildlife Service is suggested to determine if there are significant floral or faunal resources in the area to be impacted.

The park's acoustic data for soundscapes in this area of new lava flows and relic forests, directly adjacent to the park boundary, is known to be an area trafficked by day-time air tours. Noise from landings will increase the existing ambient noise levels. The natural soundscapes in this area, without the presence of air tours, are known to have very low levels of natural ambient sounds such as wind and insects and have been measured at 10-35 decibels.

The proposed landing site is located adjacent to the Puna-Ka'ū Historic District of the park, which is on the National Register of Historic Places. We recommend that you conduct an archeological survey of the site prior to ground disturbance, or locate the landing site on already disturbed land. The Southeast Rift Zone is associated with the birth and creation of Hawaiian culture, as the sites of new lava flows are felt to be some of the most sacred places. The Kupuna group, an informal group of Hawaiian elders, has stated that they feel the sight and presence of these low-flying aircraft to be culturally inappropriate.

The area within the park that borders your project is a section of 42,000 acres of parklands known as the Kalapana Extension. This section of the park is governed by specific 1938 legislation regarding its use by Native Hawaiians for fishing and homesteading. We encourage you to consult with the Kalapana Fishing Ohana regarding any potential for cultural impacts.

Socioeconomics/environmental justice should also be an impact topic considered in the development of your EA. During our ATMP EIS public meetings, we have received extensive feedback from the public regarding the potential socioeconomic impacts and consideration of environmental justice as related to low-flying aircraft.

If you have any questions regarding data needs or background resources that would help to inform the EA process, please call Danielle Foster, the park's Environmental Protection Specialist at 808-985-6073. Please make sure we are notified of all future actions related to the proposal, including receiving a copy of the EA during the comment period.

Sincerely,

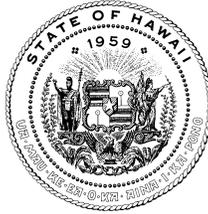
A handwritten signature in black ink, appearing to read "Cynthia L. Orlando". The signature is fluid and cursive, with the first name being the most prominent.

Cynthia L. Orlando
Superintendent

cc:

County of Hawaii Planning Department, Bobby Jean Leithead-Todd
State Historic Preservation Division, William J. Aila, Jr.
State Historic Preservation Division, Theresa K. Donham

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

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

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

December 12, 2011

Mr. Gregory Mooers
Mooers Enterprises, LLC
P. O. Box 1101
Kamuela, Hawaii 96743
(gmooers@hawaii.rr.com)

LOG NO: 2011.3067
DOC NO: 1112TD05
Archaeology

Dear Mr. Mooers:

Subject: **Chapter 6E-42 Historic Preservation Review –
Special Permit Application and Draft Environmental Assessment Preparation Notice
For Periodic Helicopter Landings on Private Property, Royal Gardens Subdivision
Pulama Ahupua‘a, Puna District, Island of Hawai‘i
TMK: (3) 1-1-114:022**

Thank you for requesting our review of this proposed project, which would involve placement of a 225 square foot landing platform in the southwest corner of the c. one acre parcel. We received your letter October 27, 2011.

We have no records of known historic properties, or previous archaeological work within the subject 1.0-acre parcel. The property is adjacent to the east boundary of the Puna-Ka‘ū Historic District (SIHP 50-10-62-5503) which was listed in the National Register of Historic Places in 1974. The proposed landing platform location is approximately 320 feet east of this district boundary.

A site visit and inspection of the project area was conducted November 15, 2011 by SHPD staff, Dr. Robert Rechtman and Ron Terry in connection with EA preparation. The property is currently surrounded on all sides by the current lava flow (less than 10 years old), and is in a *kipuka* that is not accessible by wheeled vehicles. An archaeological inspection of the proposed landing platform location was conducted by SHPD staff archaeologist Theresa Donham and Dr. Rechtman during the November 15 site visit. An area approximately 100 by 100 feet was examined and found to be previously disturbed by bulldozing and boulder stockpiling. Disturbance was apparent based on the presence of piled machinery-scarred boulders along the sloped area. The flat portion of the area examined was cleared of large vegetation and has been previously leveled by machinery.

Based on the findings of the November 15 site inspection, we believe that **no historic properties will be directly affected** by the proposed landing platform. There may be a potential for indirect effects, such as visual or noise impacts, to the Puna-Ka‘ū Historic District if low-flying helicopter traffic traverses portions of the District that contain intact historic properties. We recommend that the applicant work with the Hawai‘i Volcanoes National Park to ensure that the potential for any indirect effects is mitigated. If you have any questions at this time, please contact Theresa Donham at (808) 933-7653 or Theresa.K.Donham@hawaii.gov.

Aloha,

A handwritten signature in black ink, appearing to read "Theresa K. Donham".

Theresa K. Donham
Acting Archaeology Branch Chief
Historic Preservation Division

cc: Ron Terry (rterry@hawaii.rr.com)
Laura Schuster (Laura_C_Schuster@nps.gov)

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ENVIRONMENTAL ASSESSMENT

Helicopter Landing Area at Royal Gardens

APPENDIX 1b

Comments to Draft EA and Responses

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NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 26, 2012

Geometrician Associates
Attention: Mr. Ron Terry
P.O. Box 396
Hilo, Hawaii 96721

via email: rterry@hawaii.rr.com

Dear Mr. Terry:

SUBJECT: Draft Environmental Assessment – Helicopter Landing Area at Royal Gardens, Royal Gardens Subdivision, Puna, Hawaii; TMK: (3) 1-1-114:022

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 (i) the Office of Conservation and Coastal Lands, and (ii) the Engineering Division on the subject matter. Should you have any questions, please feel free to call Kevin Moore at (808) 587-0426. Thank you.

Sincerely,

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

Russell Y. Tsuji
Land Administrator

Enclosure(s)

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



12 MAR 20 11 24 ENGINEERING

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



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 19, 2012

MEMORANDUM

RECEIVED
LAND DIVISION
2012 MAR 27 A 11:06
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

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 – Hawaii District
- Historic Preservation

FROM:

Russell Y. Tsuji, Land Administrator

SUBJECT:

Draft Environmental Assessment – Helicopter Landing Area at Royal Gardens

LOCATION:

Royal Gardens Subdivision, Puna, Hawaii; TMK: (3) 1-1-114:022

APPLICANT:

Paradise Helicopters

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by March 27, 2012.

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 Kevin Moore at 587-0426. Thank you.

Attachments

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

Signed:

Date:

[Signature]

3/19/12

cc: Central Files

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

**DL/KevinMoore
REF.:DEAHelicopterLandingAreaPuna
Hawaii.549**

COMMENTS

- (X) **We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone X. The National Flood Insurance Program does not have any regulations for developments within Zone X.**
- () Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone _____.
- () 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. Robert Sumitomo at (808) 768-8097 or 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. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
 - () Ms. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.
- () The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.
 - () he applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update
 - () Additional Comments: _____

 - () Other: _____

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

Signed: 
CARTY S. CHANG, CHIEF ENGINEER

Date: 3/23/12

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

TM
11-6-197



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



RECEIVED
LAND DIVISION

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

2012 MAR 21 A 9:37

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

March 19, 2012

MEMORANDUM

TO:

DLNR Agencies:

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

RECEIVED
OFFICE OF CONSERVATION
& COASTAL LANDS
2012 MAR 20 A 10:21
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

FROM:

Russell Y. Tsuji, Land Administrator

SUBJECT:

Draft Environmental Assessment – Helicopter Landing Area at Royal Gardens

LOCATION:

Royal Gardens Subdivision, Puna, Hawaii; TMK: (3) 1-1-114:022

APPLICANT:

Paradise Helicopters

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by March 27, 2012.

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 Kevin Moore at 587-0426. Thank you.

Attachments

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

Signed: *R. Tsuji*
Date: 3.20.2012

cc: Central Files

*No proposed land use in the Conservation District.

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

July 3, 2012

Russell Y. Tsuji, Administrator
Hawai'i State DLNR Land Division
P.O. Box 621
Honolulu HI 96809

Dear Mr. Tsuji:

Subject: Comment to Draft Environmental Assessment for Special Permit for Helicopter Landing Area, Tax Map Key: (3)1-1-114:022, Royal Gardens Subdivision, Puna District, Island of Hawai'i

Thank you for your comment letter March 26, 2012, transmitting the no-comment memo from the Office of Coastal and Conservation Lands (based on no proposed land use in the Conservation District) and the from the Engineering Division, confirming the Flood Zone X designation contained in the Draft EA.

Please note that the landscaped property was covered by lava and the home destroyed in March 2012. Although the forested kipuka surrounded by lava surrounding Mr. Thompson's home is no longer present, the stop would still provide visitors an up-close look at the stark contrast of the lava inundation in an area of tropical beauty with scenic vistas of the ocean, and Paradise Helicopters has decided to continue the Special Permit process. They have examined the landing area and determined that it is a safe, stable and appropriate place on which to place a landing platform. No vegetation clearing will be necessary.

We very much appreciate your review of the document, including circulation to various DLNR agencies. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bobby-Jean Leithead-Todd, Planning Department Director, Rob Payesko, Greg Mooers

The only comment the FAA has on the Draft EA is that the proposed heliport requires submittal of FAA Form 7480-1 Notice of Landing Area Proposal.

This is already mentioned in the Draft EA under Section 3.5 Required Permits and Approval.

Gordon Wong
FAA Honolulu Airports District Office
T: 808-541-3565
F: 808-541-3566
E: gordon.wong@faa.gov

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

July 3, 2012

Gordon Wong
FAA Honolulu Airports District Office
E: gordon.wong@faa.gov

Dear Mr. Wong:

Subject: Comment to Draft Environmental Assessment for Special Permit for Helicopter Landing Area, Tax Map Key: (3)1-1-114:022, Royal Gardens Subdivision, Puna District, Island of Hawai'i

Thank you for the comment letter on the Draft EA stating that the proposed heliport requires submittal of FAA Form 7480-1 Notice of Landing Area Proposal, as indicated in the Draft EA. Please note that the landscaped property was covered by lava and the home destroyed in March 2012. Although the forested kipuka surrounded by lava surrounding Mr. Thompson's home is no longer present, the stop would still provide visitors an up-close look at the stark contrast of the lava inundation in an area of tropical beauty with scenic vistas of the ocean, and Paradise Helicopters has decided to continue the Special Permit process. They have examined the landing area and determined that it is a safe, stable and appropriate place on which to place a landing platform. No vegetation clearing will be necessary. If the project receives its land use approvals and proceeds, Paradise Helicopters will contact your agency regarding this requirement.

We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

cc: Bobby-Jean Leithead-Todd, Planning Department Director, Rob Payesko, Greg Mooers

Hi Ron,

I reviewed the Helicopter Landing Area at Royal Gardens DEA today and only had one comment, and hoped I could just submit it via email. We have changed our Hawaiian hoary bat avoidance period to June 1 to September 15 based on new research on the species. Please incorporate these new dates into your final EA.

Thank you.

Rachel

Rachel Rounds
Fish and Wildlife Biologist
Consultation and HCP Program
US Fish and Wildlife Service
Pacific Islands Field Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, HI 96850
(808) 792-9454

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

July 3, 2012

Rachel Rounds, Fish and Wildlife Biologist
Consultation and HCP Program
US Fish and Wildlife Service
Pacific Islands Field Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, HI 96850

Dear Ms. Rounds:

Subject: Comment to Draft Environmental Assessment for Special Permit for Helicopter Landing Area, Tax Map Key: (3)1-1-114:022, Royal Gardens Subdivision, Puna District, Island of Hawai'i

Thank you for the comment letter on the Draft EA stating that indicating that the agency had changed the Hawaiian hoary bat avoidance period to June 1 to September 15 based on new research on the species. The dates in the Final EA have been changed to reflect this, although since lava covered the property in March 2012 there are no longer any trees or shrubs in the affected area.

We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bobby-Jean Leithead-Todd, Planning Department Director, Rob Payesko, Greg Mooers



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

In reply, please refer to:
File:12-032

February 23, 2012

Ron Terry
Geometrician Associates
PO Box 396
Hilo HI 96721

Dear Mr. Ron Terry;

SUBJECT: Helicopter Landing Area at Royal Gardens

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your Draft Environmental Assessment. Thank you for allowing us to review and comment on the subject document. We have no comments at this time, but reserve the right to future comments. We strongly recommend that you review all of the Standard Comments on our website: www.hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

The same website also features a Healthy Community Design Smart Growth Checklist (Checklist). The Hawaii State Department of Health, Built Environment Working Group, recommends that State and county planning departments, developers, planners, engineers and other interested parties apply the healthy built environment principles in the Checklist whenever they plan or review new developments or redevelopments projects. We also ask you to share this list with others to increase community awareness on healthy community design.

If there are any questions about these comments please contact the Environmental Planning Office at 586-4337.

Sincerely,

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

Laura McIntyre AICP
Manager
Environmental Planning Office

c: Paradise Helicopters
Hawai'i County Planning Department

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

July 3, 2012

Laura McIntyre AICP, Manager
DOH Environmental Planning Office
P.O. Box 3378
Honolulu HI 96814

Dear Ms. McIntyre:

Subject: Comment to Draft Environmental Assessment for Special Permit for Helicopter Landing Area, Tax Map Key: (3)1-1-114:022, Royal Gardens Subdivision, Puna District, Island of Hawai'i

Thank you for the comment letter dated February 23, 2012, referencing the DOH Standard Comments and Checklist, which we have reviewed for applicability. We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bobby-Jean Leithead-Todd, Planning Department Director, Rob Payesko, Greg Mooers

March 22, 2012
R. R. 2, Box 4852
Pahoa, HI 96778

Mr. Ron Terry
Geometrican Associates, LLC
P. O. Box 392
Hilo, HI 96721

Re: Helicopter Landing Area at Royal Gardens Draft Environmental
Assessment

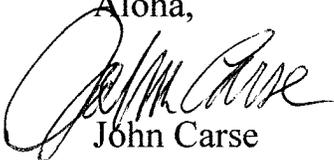
Dear Mr. Terry,

While I have quite a few questions regarding your proposal to establish a heliport in the residential subdivision of Royal Gardens, I am most concerned with the integrity of the Paradise Helicopters management and employees. My neighborhood is already being blasted by Paradise Helicopters' pilots who routinely violate Helicopter Association International guidelines, federal safety regulations, Environmental Protection Agency laws, national park Quiet Technology directives, state statutes and administrative rules, county ordinances, and common decency.

What assurance do citizens have that any additional unregulated use of our airspace will be done in a responsible manner? What type of tracking and monitoring system is currently being used by Paradise Helicopters and how can the public and local government officials access it to confirm that there are no further inappropriate actions by unconscionable pilots?

I'm also concerned that Figure 5 on page 8 shows air tours will begin flying a loop over the densely populated communities of Kalapana and Kaimu when departing from the proposed heliport. Why does your assessment state that these new, highly intrusive, and thunderously disruptive flight paths "do not affect any additional residences"?

The members of my community have many, many more questions concerning locating a heliport in Puna, as well as the current situation of the air tour industry. As I understand it, due to a recent lava flow you will be required to submit an updated Environmental Assessment if you plan on proceeding with this project. If you decide to go ahead, would you please submit a complete Environmental Impact Statement that will allow those whose lives will be significantly impaired by the expansion of the air tour business over our homes to provide their opinions of this project? Thank you.

Aloha,

John Carse

cc: B.J. Leithead-Todd, C. Dorn.

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

phone: (808) 969-7090 PO Box 396 Hilo Hawaii 96721 rterry@hawaii.rr.com

July 3, 2012

John Carse
R. R. 2, Box 4852
Pahoa, HI 96778

Dear Mr. Carse:

Subject: Comment to Draft Environmental Assessment for Special Permit for Helicopter Landing Area, Tax Map Key: (3)1-1-114:022, Royal Gardens Subdivision, Puna District, Island of Hawai'i

Thank you for the comment letter dated March 22, 2012, on the Draft EA. In answer to your specific comments:

1. *Concerns with Paradise Helicopters.* I have provided your letter to Paradise Helicopters. They are unaware of any violations of laws, rules and ordinances.

2. *Flight path.* This is an existing flight path that will not change with the proposed landing.

1. *Lava flow.* The property was covered by lava and the home destroyed in March 2012. Although the forested kipuka surrounded by lava surrounding Mr. Thompson's home is no longer present, the stop would still provide visitors an up-close look at the stark contrast of the lava inundation in an area of tropical beauty with scenic vistas of the ocean, and Paradise Helicopters has decided to continue the Special Permit process. They have examined the landing area and determined that it is a safe, stable and appropriate place on which to place a landing platform. No vegetation clearing will be necessary. There are no additional impacts that would require preparation of any other environmental assessment or environmental impact statement.

We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,



Ron Terry, Principal
Geometrician Associates

Cc: Bobby-Jean Leithead-Todd, Planning Department Director, Rob Payesko, Greg Mooers



United States Department of the Interior



NATIONAL PARK SERVICE
Hawai'i Volcanoes National Park
Post Office Box 52
Hawaii National Park, Hawai'i 96718

IN REPLY REFER TO:
HAVO I.D. (L7621)

March 27, 2012

Mr. Ron Terry
Geometrician Associates
PO Box 396
Hilo, HI 96721

Dear Mr. Terry:

Thank you for your letter dated 02/23/2012 requesting comments on the Draft Environmental Assessment for the proposed Helicopter Landing Area at Royal Gardens. Many of the comments we provided on 11/21/2011 in response to public scoping were addressed, but a few issues remain. As a neighboring land owner to the subject property, and as the agency charged with the protection of natural and cultural resources of Hawai'i Volcanoes National Park for enjoyment by future generations, we submit these comments.

It is unclear if the Special Permit will still be sought since Mr. Thompson's home has since been covered by lava. If the Special Permit will be pursued, a survey should be required to ensure that the landing area is correctly sited on the subject property since boundaries will now be hard to distinguish. In addition, the survey will need to be completed to ensure that the passengers do not come into the park if Paradise Helicopters is not applying for a Commercial Use Authorization (as described in detail in the 11/21/2011 letter).

The map on page 2 depicts an arrow that incorrectly identifies the proposed landing site as being within the park boundary. In addition, the map on page 8 appears to have the western portion of the route and the house as fully within the park boundary. This may be due to the age or scale of the map, but based on landmarks of Kamokuna and Wahaula and the inaccurate dashed line for the park boundary, the western portion of the route and the house needs to be shifted to the east. Please correct these two maps for the Final Environmental Assessment.

Page 26 of the EA requests information on mitigations and potential effects. Information provided previously on the Air Tour Management Plan and Environmental Impact Statement (ATMP/EIS) is one source of potential mitigations. In addition, the NPS just completed public scoping on a Mission Critical Administrative Aviation Plan/Environmental Assessment to evaluate and document any potential impacts of the park's administrative aviation operations. To this end, park staff and partners have started working on a plan that will provide internal park guidance for utilizing aircraft to conduct our work where necessary. This plan will formalize best management practices, define sensitive areas to avoid, and include mitigation measures to reduce any potential impact of the park's operational use of aviation. It is important to note that administrative use of aviation in the park is a very small amount compared to the number of air tours being addressed under the ATMP. These park administrative aviation operations are conducted for public safety and health and for resource protection and restoration. Administrative use of aircraft allows park staff and cooperators to accomplish these activities in a safe, timely, and efficient manner while minimizing the impacts to the park's natural and cultural resources and the visitor

**TAKE PRIDE
IN AMERICA** 

experience. The level of administrative use is much less than commercial air tour operations and the administrative use is more dispersed across the landscape. More information will be posted on our website as we develop the Mission Critical Aviation Plan/EA, <http://www.nps.gov/havo/parkmgmt/plan.htm>.

As stated in our previous letter, Congressional and National Park Service (NPS) concerns regarding the impacts of over flights on the national parks led to passage of the National Parks Air Tour Management Act (NPATMA) in 2000. The National Park Service has been working with the Federal Aviation Administration (FAA) to develop an ATMP/EIS for commercial air tour activities within the airspace of Hawaii Volcanoes National Park for 5,000' agl and below including a ½ mile buffer zone beyond park boundaries, in order to mitigate or prevent the significant impacts of commercial air tour operations over the park. We are concerned about the precedence of allowing a helicopter landing pad within the ½ mile buffer prior to the completion of the ATMP.

On page ii, the last paragraph inaccurately portrays the NPS role in helicopter tour noise abatement. The ATMP will only regulate air tours within the airspace of Hawai'i Volcanoes National Park for 5,000' agl and below including a ½ mile buffer zone beyond park boundaries, as the planning area for the ATMP. Recent public comments on the ATMP preliminary alternatives revealed the dissatisfaction of local residents currently residing under flight paths of local air tours. The flight patterns and altitudes of air tours outside of the designated ATMP planning area are regulated by the FAA. In addition, it is the responsibility of the FAA, the state, and the air tour industry to work with communities regarding noise impacts that are outside the ATMP planning area. The final flight routes adopted in the ATMP/EIS will specify routes for commercial air tour travel over park lands including the park's ½ mile buffer and will incorporate any possible noise reduction model, noise avoidance or state noise abatement program recommendations for residential areas impacted by egress/ingress routes to and from the park airspace.

The NPS recognizes that the commercial air tour industry is important to the economy of Hawaii but also believes that the tourism industry benefits from the continued protection of the superlative resources of its national parks, unimpaired (Federal Register Vol. 59, No. 52). Paradise Helicopters is allotted 1,684 flights per year under the Interim Operating Authority of NPATMA. While helicopter tours do provide visitors with a unique experience, the acoustic footprint or noise impact is very different between an air tour traveling overhead at altitude compared to a helicopter landing that occurs multiple times per day. Noise levels of a single air tour can range from 50 to 87 decibels, depending on height above ground level, while the noise of landing and take-off is up to 120 decibels. Sound levels above 60 decibels begin to interfere with close range conversational speech.

Over a 25 year period, the park has experienced concentrations of visitors, geologists, and NPS personnel on the ground at lava viewing and monitoring sites and in areas offering access to the lava. Crowds of visitors on trails, at parking areas, and at viewing areas average 1,000-3,000 when lava is present. Scientific equipment that is essential for volcanic monitoring is also located in these areas. Current noise issues include aircraft noise interference with scientific equipment data collection, interference with on-the-ground conversation and radio use, and interference with hearing sounds associated with volcanic activity, essential for visitor and staff safety.

The National Park Service manages park soundscapes or "natural quiet" as a park resource, which is based on public law and is defined in NPS policy. In 2007, park studies revealed nearly two-thirds of surveyed visitors rank the ability to hear natural sounds as important to their enjoyment and appreciation of the park and three-quarters of these visitors equate annoyance and negative feelings with human-caused sounds including aircraft and vehicle noise (2007. Social Science Research to Inform Soundscape Management, Steve Lawson, Department of Forestry, Virginia Polytechnic Institute and State University).

The island's large expanses of lava produce landscapes that offer little sound shielding, creating long "time audibles" for human or mechanized sounds. From preliminary acoustic modeling (USDOT, Volpe National Transportation Center 2008), air tours on the Pu'u O'o boundary are audible for 10-15 minutes for 5-10 miles on either side of the flight track. In these areas, noise has the potential for creating an acoustic impact on humans and wildlife.

The Helicopter Landing Area at Royal Gardens EA does not adequately address the cumulative impact of noise/impacts to the soundscape from helicopter tours, which include not just Paradise Helicopters but other companies as well. Paradise Helicopter tours do contribute to the cumulative noise impact. In addition, the increased noise and rotor wash from repeated take-off and landings will further increase the impact of noise on the area soundscapes.

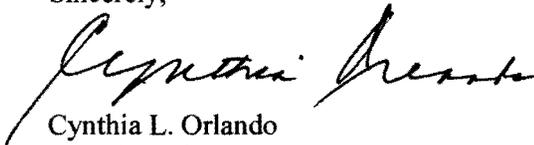
The area within the park that borders your project is a section of 42,000 acres of parklands known as the Kalapana Extension. This section of the park is governed by specific 1938 legislation regarding its use by Native Hawaiians for fishing and homesteading and it is actively used for these purposes.

Visitors come to their national parks to experience the natural quiet and solitude. Park managers are charged with protecting natural and cultural resources, including park soundscapes as well as limiting activities that cause unnecessary noise or threaten the natural quiet.

We are concerned that the noise associated with repeated landing and take-offs will negatively impact the natural quiet of the park and feel that the increased noise is a significant impact to the area. We encourage you to further consider the direct and cumulative impacts of noise on recreational users, wildlife, cultural practitioners, and soundscapes. Mitigations could include items as described in the ATMP information previously provided.

Please ensure we are notified of all future actions related to the proposal.

Sincerely,



Cynthia L. Orlando
Superintendent

cc:

County of Hawaii Planning Department
Paradise Helicopters
State Historic Preservation Division

geometrician

ASSOCIATES, LLC
integrating geographic science and planning

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July 3, 2012

Cynthia Orlando, Superintendent
Hawai'i Volcanoes National Park
P.O. Box 52
Hawaii National Park, HI 96718-0052

Dear Ms. Orlando:

Subject: Comment to Draft Environmental Assessment for Special Permit for Helicopter Landing Area, Tax Map Key: (3)1-1-114:022, Royal Gardens Subdivision, Puna District, Island of Hawai'i

Thank you for the comment letter dated March 27, 2012, on the Draft EA. In answer to your specific comments:

1. *Status of Paradise Helicopters Request.* As you know, the property was covered by lava and the home destroyed in March 2012. Although the forested kipuka surrounded by lava surrounding Mr. Thompson's home is no longer present, the stop would still provide visitors an up-close look at the stark contrast of the lava inundation in an area of tropical beauty with scenic vistas of the ocean. Pilots from Paradise Helicopters have examined the landing area and determined that it is a safe, stable and appropriate place on which to place a landing platform, and Paradise Helicopters has decided to continue the Special Permit process.

2. *Maps on Page 2 and Page 8 show site within Park Boundary.* Our review of the project site's UTM coordinates indicates that the location map of page 2 correctly indicates the location. The National Geographic base map contains an unmarked line that you may be assuming indicates the Park boundary. The route map on page 8 has been revised in the Final EA to shift the flight lines to the east. Please understand that this map is at a very small scale and was meant to depict the flight lines in a broad manner. In any case, let it be clear that the applicant understands that Mr. Thompson's property is not within the National Park.

3. *Effects and mitigation related to Park's use of helicopters.* Thank you for the information on the Mission Critical Administrative Aviation Plan/Environmental Assessment, which will evaluate and document any potential impacts of the Park's administrative aviation operations.

4. *NPS role in tour helicopter noise abatement.* The summary has been expanded to reference the roles of the FAA, the State of Hawai'i, the air tour industry, and affected communities.

5. *Effects of noise on visitors, geologists, NPS personnel, and sensitive activities.* It is agreed that noise levels in the immediate vicinity of a helicopter landing will be louder than that from tours flying over. Anyone in the immediate vicinity of Thompson property would experience somewhat

louder noise for a few minutes several times a day. The farther from the property, the less that difference would be. We are unaware of any visitors, geologists or NPS personnel ever being present in this area. As for scientific equipment data collection, interference with on-the-ground conversation and radio use, and interference with hearing sounds associated with volcanic activity – is this a theoretical consideration, or are such activities occurring within several hundred feet of the lot, where noise could make a significant difference? If so, Paradise Helicopters would appreciate the information so it could make reasonable accommodations such as scheduling, etc. Please email Rob Payesko at rob@paradisecoasters.com if you have any details on this. Again, concerning the soundscape and visitor enjoyment, the only visitors who would conceivably be able to detect a difference in the soundscape attributable to landings at this isolated properties are those who have violated Park policy and hiked over three miles cross-country and/or trespassed across miles of private property in violation of posted County policy into the area directly adjacent to the landing site, an area that already contains significant tour helicopter activity and associated noise.

6. *Cumulative noise impact.* There would be no increase in the number of tours (there might actually be a small decrease) outside the immediate area of the Thompson property, and there are no other activities that we are aware of that would contribute to additional noise in this limited area.

We very much appreciate your review of the document. If you have any questions about the EA, please contact me at (808) 969-7090.

Sincerely,

A handwritten signature in black ink that reads "Ron Terry". The signature is written in a cursive, slightly slanted style. Below the name, there is a small, simple horizontal line that tapers at both ends, resembling a stylized underline or a flourish.

Ron Terry, Principal
Geometrician Associates

Cc: Bobby-Jean Leithead-Todd, Planning Department Director, Rob Payesko, Greg Mooers)