STATE OF HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaii

November 9, 2012

180-Day Exp. Date: November 14, 2012

Board of Land and
Natural Resources
State of Hawaiʻi
Honolulu, Hawaiʻi

REGARDING: Conservation District Use Application (CDUA) HA-3626 for a Single Family Residence (SFR) & Related Improvements

APPLICANT/ LANDOWNER: John and Maureen Gapp

CONSULTANT: Sidney Fuke

LOCATION: Makuʻu, Puna, Hawaiʻi
Tax Map Key: (3) 1-5-010:032

AREA OF PARCEL: Approximately (≈) 5.58-acres

USE: ≈ 1 acre

SUBZONE: Resource

BACKGROUND:
The house site originally was part of parcel TMK (3) 1-5-010:011. Parcel 011 originally contained both Agricultural and Conservation District land. Parcel 032 (which is the parcel that is the subject of this application) contained only Agricultural District land. The two parcels were consolidated and then re-subdivided such that parcel 32 now contains Conservation District land and Agricultural land. This land use consolidation and subdivision involving Conservation District land was authorized by the County of Hawaii Planning Director on April 16, 1999 (Exhibit 1 & 2).

OCCL records do not indicate any authorization from the Department of Land and Natural Resources for the above mentioned consolidation and resubdivision. To the best of our understanding, it appears that the County of Hawaii approved the consolidation/resubdivision that resulted in a partition of Conservation District land, which would not normally be permitted within the Conservation District.

In addition, there is another issue with respect to an unresolved Conservation District use violation. On January 13, 2006, the Board of Land and Natural Resources found the Gapps in violation of §13-5-6, Hawaii Administrative Rules and §183C-7, Hawaii
Revised Statutes for unauthorized grubbing and grading; tree removal and pathway improvements. The Gapps were fined $6,000.00 and required to submit a report within 30-days from the Board’s decision regarding the condition of the Conservation District and if required, to submit a maintenance plan to implement the removal of invasive alien species (Exhibit 3).

By August 2006, the fine was paid and the Gapps requested an extension of 12-18 months to submit a maintenance plan as the Gapps stated, “We have engaged an architect to help us develop a house plan, and landscaping plan of the parcel. In order to remove the invasive species and replant with native plants we will need access to the area. In order to construct a road to the area we will need to go through both County and State permitting processes after we developed a building plan.” (Exhibit 4 & 5)

No plans were forthcoming and OCCL failed to follow-up on the status of the matter. As such, it appears that there are two pending unresolved violations on this parcel. Normally, the Department is enjoined from processing any permits for the use of Conservation District land when there is a pending violation because of §13-5-6(c), HAR which states as follows “No permit shall be processed by the department or board until any violations pending against the subject parcel are resolved.”

In regards to the January 13, 2006 violation, staff was unaware of the case when the CDUA was accepted for processing. In regards to the unauthorized subdivision and re-consolidation, staff could have taken the position that the Gapps have no right to apply for a single family residential use in the Conservation District portion of the parcel since the partition was not authorized by the Department or Board, and would not have been approved as it is not an identified use in the Conservation District. However, a decision was made to allow this matter to be deliberated by the BLNR.

DESCRIPTION OF AREA AND CURRENT USE:
Maku’u exists in the Puna District on the east side of the island of Hawaii. The subject parcel noted as TMK: (3) 1-5-010:032 is ≈ 5.58-acres and is dual zoned with the majority of the lot lying within the Agricultural District and about a third of the lot (≈ 1.8-acres) within the Resource subzone of the Conservation District. According to the State Land Use Commission, the Conservation District follows an average setback of 300-feet from the shoreline (Exhibits 6 & 7).

The vicinity can be generally described as southeast of the Hawaiian Paradise Park subdivision. The parcel abuts the Government Beach Road that is to the southwest, private parcels to the northwest and southeast, and the ocean is to the northeast. The sole access to the project site is from the Government Beach Road, an unimproved unpaved public roadway that is not regularly maintained extending from Hawaiian Paradise Park to Kapoho. There are no services or utilities on the subject parcel. However electricity and telephone poles and lines are present on Government Beach Road.

The property is described as densely vegetated with concentrations of archaeological sites. According to the applicant, the overall dominate species of flora was hala within the Conservation District. Coconut trees and scattered patches of naupaka are also present. Existing vegetation also includes a number of exotic and invasive species such as
Albezia, strawberry guava, California grass, maile pilau, melochia and moonflower. No rare, threatened or endangered flora was found in any part of the property. A previously cleared area had ‘early successional weeds’. These include Gunpowder tree and other non-native invasive species as noted above (Exhibit 8).

Introduced common birds are expected on the property. Non-native birds were identified during site visits and it is unlikely that many native forest birds would be expected to use the site due to its low elevation, alien vegetation and lack of adequate forest resources. Common shorebirds such as the Golden Plover, Ruddy Turnstone and Wandering Tattler may be observed on the basalt shelf fronting the property, feeding on shoreline resources.

The endangered Hawaiian Hawk, Hawaiian Hoary Bat and Hawaiian Petrel along with the threatened Newell Shearwater may fly over, roost, nest or utilize resources on the property. Introduced mammals that may be present on site include cats, pigs, mongooses and rats.

A survey of the entire parcel identified and recorded 9 archaeological sites containing 67 features. 6 sites that included 4 burials and 2 habitation sites were recommended for preservation. The draft Environmental Assessment (EA) noted that “The burials and archaeological sites are significant culturally important resources on the property. The investigations of the property and its history did not reveal any cultural resources or practices aside from these resources.” An archaeological inventory survey, burial treatment plan, preservation plan and cultural impact assessment have been prepared for the property. The State Department of Historic Preservation has approved a Preservation and Burial Treatment Plan (Exhibit 9).

According to the applicant, the parcel is fairly level with an average slope of less than 4%. The area has an average rainfall of 120-inches annually with a mean annual temperature of 75° F. Coastal conditions consist of rocky unvegetated boulders and a shelf of pahoehoe 1-2 feet above sea level that is partially inundated by high tides. There is no sandy beach. Tide pools are present on the shore. A ten to twelve-foot high berm of storm-carried boulders are located 75-150-feet inland from the coastal shelf that coincides with the lowest level of coastal vegetation (Hala, naupaka, coconut).

The final EA notes that the property is located on the flank of Kilauea, an active volcano on lava flows dated at between 300-750 years ago. Soil is predominately pahoehoe lava flow and Opihikao extremely rocky muck. Both types of soil are highly drained and have limitations because of the stony nature preclude their use for commercial crops and restrict their use to recreation, wildlife or water supply or for aesthetic purposes.

The property lies within Volcanic Hazard Zone 3 on a scale of 1 to 9 with 1 having the highest risk hazard and 9 the lowest and in terms of seismic risk, the entire island of Hawaii is rated Zone 4 areas at risk from major earthquake damage. According to the Atlas of Natural Hazards in the Hawaiian Coastal Zone,¹ the Maku'u coastal terrace is comprised of Ai-Laaulava flows which are between 350-500 years old. The entire

coastline is within 20-feet of sea level and appears to be getting closer due to steady long-
term and rapid periodic subsidence. In April of 1868, the region sank and was inundated
by a locally generated tsunami after an earthquake occurred on the southeast portion of
the island. In April of 1924, a series of earthquakes caused the nearby Honolulu Landing
to sink. The shoreline area undergoes periodic morphologic changes due to tectonic and
seismic activity associated with Kilauea Volcano.

The Overall Hazard Assessment (OHA) for the Maku‘u coast is high (6), reflecting the
high and moderately high hazards that affect this low-lying region. The tsunami threat is
ranked high. High waves consist generally of refracted north swell, trade-wind waves,
and waves associated with approaching tropical cyclones therefore the high wave hazard
is ranked moderately high. The storm hazard is high where the coast is exposed to both
the tropical cyclone and Kona storm windows. This seismically and volcanically active
coast experiences rapid long-term subsidence which enhances the rate of relative sea-
level rise. For this reason, the sea-level hazard is high. The volcanic/seismic hazard is
high along the Maku‘u coast due to the high lava flow hazard and its proximity to
significant seismic activity generated by volcanic eruptions at Kilauea Volcano (Exhibit
10).

PROPOSED USE: (Exhibits 11, 12, 13 & 14)
According to the applicant, there are a number of important archaeological and cultural
features in the Agricultural district requiring preservation. As such, the applicants are
proposing to site the house and pool within the makai portion of the property within the
Conservation District. According to the plans, the building site is set back about 160-feet
from the shoreline at about 15-feet above sea level. Land clearing and construction
activities would occur over roughly an acre and minimal grading is anticipated. After
actual grading plans are developed, the applicant and engineers would obtain proper
authorizations and shall comply with State and County regulations.

The residence appears to be a slab on grade “semi-open tropical flavor” one-story home
of 4,552-ft² that includes the house, garage and saltwater pool. The residence is proposed
to have 3 bedrooms, 2 bathrooms, 1 kitchen, living room/dens, lanais, garage and a utility
area under roof with a maximum height of 25-feet.

A 462-ft² swimming pool surrounded by deck with a 32-ft² pool equipment shed is also
proposed. Other improvements include an approved septic system, underground utility
line extensions down the driveway, solar water heaters, photovoltaic panels, water-
catchment system, a 12,000-gallon water tank expressly for firefighting purposes, water
well, paved driveway, landscaping, fencing and rock walls. Cellular phones shall be
utilized for telecommunication. All proposed improvements would be consistent with the
requirements and regulations of the State Department of Health and County of Hawaii
Public Works relative to wastewater disposal, drainage, grading and construction related
noise and fugitive dust.

As there is a drop in elevation at the proposed site, low walls with a stairway are
proposed to access this lower elevation that is makai of the house pad area and also as a
decorative element to the yard. Landscaping with an emphasis on native vegetation,
would be incorporated into the project. ≈ 20-30 non-native invasive trees such as Albezia
and Gunpowder and Rose Apple would be removed mostly in the Agricultural District to facilitate implementation of the preservation plans and construction of the driveway access and utility conduits. Any native trees such as Hala that would have to be removed would be replanted elsewhere on the property. Invasive flora will be selectively removed and replaced with trees that were predominant in the area such as naupaka, hala and coconut trees.

Appropriate mitigation would take place pursuant to the approved burial and preservation plans. In the event of any inadvertent finds, work around the area would immediately cease and the County Planning Office and SHPD would be notified and consulted. The applicants would implement a preservation plan and provide descendants access to the burials.

The saltwater pool would need occasional partial or full draining as part of maintenance which would be accommodated in accordance of all regulations in a landscaped area near the home. All drained water would be kept on the property.

As the coastline fronting the site is somewhat rocky with a band of vegetation running parallel to the property, it is believed that the area of the proposed improvements, lateral coastal access would be able to continue unabated, and not result in any diminution of beneficial uses of the area. From the Government Road, coastal views are not expected to be diminished due to existing vegetation.

Police, Fire, emergency medical service are available ≈10 miles away in Pahoa or Keaau. The applicant acknowledges and understands that this lot along with others in this part of the Puna District is remote from emergency services.

Alternatives Analysis
The draft Environmental Assessment (EA) proposal included a 500-ft² open cabana/pavilion to be located ≈ 60-feet from the shoreline. The purpose of the cabana was to be used as a staging and storage area for throw nets, poles and tackle and gardening equipment. This portion of the original proposal was removed out of deference to Hawaii Administrative Rules, Exhibit 4 Single Family Residential Standards compatibility provisions of all structures connected or best alternative.

The draft EA also contained the No Action Alternative in which the residence would not be built. According to the applicant, unauthorized camping and trash dumping could occur. Inappropriate entry into burial features and other sites could also occur. As no other alternative uses for the property was desired by the applicants, the draft EA did not contain other alternatives.

OCCL comments regarding the draft EA was to include siting the proposed residence in the Agricultural District and to consider reducing the size of development to minimize effects on archaeological resources. The applicant was able to place the residence in its same footprint within the Agricultural District without encroaching upon the Preservation areas (Exhibit 15).
SUMMARY OF COMMENTS:
This application was referred to the following agencies for their review and comment: the State: Department of Health; Office of Hawaiian Affairs; Office of Environmental Quality Control; Department of Land and Natural Resources Divisions of: Conservation and Resource Enforcement, Forestry and Wildlife, Na Ala Hele, the Hawaii District Land Office; Historic Preservation and the County of Hawaii: Departments of Planning & Public Works, Fire Department and Malama O Puna. In addition, this application was also sent to the nearest public library, the Pahoa State Library, to make this information readily available to those who may wish to review it.

Responses were received and have been summarized from the following agencies:

STATE OF HAWAII

DEPARTMENT OF HEALTH

No Comment

DEPARTMENT OF LAND AND NATURAL RESOURCES

Conservation and Resource Enforcement

No Comment

Engineering

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.

Hawaii District Land Office

No comments

Office of Conservation and Coastal Lands

Acceptance Letter Comments
The proposed detached cabana with kitchen facilities is not consistent with Chapter 13-5, Exhibit 4 Single Family Residential Standards: August 12, 2012, Compatibility Provisions-All structures connected or best alternative. Residential uses approved by the Board must comply with Exhibit 4. Please review §13-5-41 and Exhibit 4, HAR. Your client may wish to re-site or delete this improvement.

The rockwalls, pool catchment basin, and landscaping needs to be described in more detail. Are the walls decorative, for privacy or for erosion control? What is the native vegetation to be incorporated into the project? Please submit a descriptive topographical map of the Conservation portion of the property discussing the 4-foot drop and siting of
the pool and basin. Regarding the proposed pool, please discuss sanitation and maintenance. How will the pool wastewater be handled?

In addition, please submit legible plans for the residence with dimensions specifically Figure 3 in the CDUA. It is unclear from the plans where the 3\textsuperscript{rd} bedroom and 3\textsuperscript{rd} bathroom are sited. Please site the water catchment system.

Regarding the siting of the residence in the Conservation District versus the Agricultural District, there appears to be ample space to site a residence within the Agricultural District while still maintaining preserved areas. Further the attached correspondence dated April 27, 2007 from the County of Hawaii to your client indicates that the County had no objections to siting a home in the Agricultural District. The Agricultural/Conservation District boundary was established to preserve the scenic coastline. Within the Environmental Assessment, siting the residence in the Agricultural District should be discussed under Alternatives.

**Comments Regarding the Draft EA**

As previously stated, the proposed detached cabana with kitchen facilities is not consistent with Chapter 13-5, Exhibit 4 Single Family Residential Standards: August 12, 2012, Compatibility Provisions-All structures connected or best alternative. Residential uses approved by the Board must comply with Exhibit 4. Please review §13-5-41 and Exhibit 4, HAR. Your client may wish to re-site or delete this improvement.

In addition, as noted in the Acceptance letter, the rockwalls, pool catchment basin, and landscaping needs to be described in more detail. Are the walls decorative, for privacy or for erosion control? What is the native vegetation to be incorporated into the project? Please submit a descriptive topographical map of the Conservation portion of the property discussing the 4-foot drop and siting of the pool and basin. Regarding the proposed pool, please discuss sanitation and maintenance. How will the pool wastewater be handled?

In addition, please submit legible plans for the residence with dimensions specifically Figure 3 in the CDUA. It is unclear from the plans where the 3\textsuperscript{rd} bedroom and 3\textsuperscript{rd} bathroom are sited. Please site the water catchment system.

Regarding the siting of the residence in the Conservation District versus the Agricultural District, there appears to be ample space to site a residence within the Agricultural District while still maintaining preserved areas. The Agricultural/Conservation District boundary was established to preserve the scenic coastline. Within the Environmental Assessment, siting the residence in the Agricultural District should be discussed under Alternatives.

These issues must be addressed in the Final Environmental Assessment for the OCCL to make a determination in regards to declaring a Finding of No Significant Impact.

The OCCL has previously informed you of a subdivision involving Conservation District land authorized by the County of Hawaii Planning Director dated April 16 1999. It appears that parcel 011 that was dual zoned containing both Agricultural and
Conservation District land and parcel 032 that once lied solely within the Agricultural District was consolidated and then subdivided into 2 parcels containing both Agriculture and Conservation District land.

Our records do not indicate any authorization for subdivision at the subject location. Pursuant to the Hawaii Administrative Rules (HAR) §13-5-22, Subdivision of Conservation District land must be for a public purpose and must be approved by the Board of Land and Natural Resources. In this particular case, the County approved subdivision outcome is not an identified land use that could be applied for within the Conservation District.

We wish to bring this to your attention as this matter may come up during the processing of your client’s CDUA.

Applicant’s response

Pavilion with kitchen facilities: The Gapps understand your concerns but still propose to have the pavilion be detached from the main dwelling in an area convenient for their fishing. It is a simple, open pavilion to be used as a staging and storage area for gardening and recreational fishing by the owners, including throw nets, poles and tackle. A location adjacent to the home would not be as appropriate for this element. It would not be lived in or rented. Considering the proposed function of the home, the detached pavilion is the best alternate to an all-connect design. It was never designed to have a kitchen but was to have had a deep sink for cleaning fish; the Gapps are willing to delete the sink. John Gapp desired that we include this statement from him concerning the need for the pavilion and his motivation for the home design:

"Ancient Hawaiians drew their sustenance-physical and spiritual-from the land and sea around them. In Hawaiian culture fishing holds a central role. When I moved to Kalapana in 1978 I learned to fish and throw net in Kaimu Bay and canoe landing. The local fishermen taught me not just how fishing could feed my family but it was a way of life. Fishing gave me a spiritual relationship with the sea. It taught me about the culture of this island I had made my home.

In 2002 I found a property on the ocean in the Maku‘u ahupua‘a. This property for me replaced what we lost in Kalapana and provided an area for myself and my friends from Kalapana to get together and fish. The land is rough terrain ad heavily wooded making it somewhat difficult to access for the older members of my Kalapana ‘Ohana. The property has a ko‘a (fishing ground) accessible along the shoreline. Since we bought the property we have all met down there to fish. I have taught my own son the lessons I was taught and he now makes his living fishing. He has learned to respect the sea and to value the traditions we have passed on to him.

Our plan is to build our home approximately 200-feet up from the shore where the property rises up (about 10 feet) and to build a fishing hale pavilion 60-feet from the shore. It will be 500-sq feet and utilized to store fishing equipment and an area to clean fish."
My dream is to replace my home I lost in Kalapana and to recreate a small easily accessible area for fishing. Where my ‘Ohana and I can come together and fish and to teach our ever growing families to form a spiritual relationship with the sea and to learn the cultural values that make the Big Island special. Those that respect the sea will protect it."

Rock walls, pool catchment basin, landscaping, topography and water supply: The final EA contains improved, detailed site plans that clearly indicate the location and function of landscape elements. The saltwater pool basin overflow/waste water will go to an aerobic septic system. To make the property, most of which is covered densely with non-native vegetation, a more hospitable place to live, the Gapps wish to remove the invasive plants in the conservation district and replace with native, Polynesian and 19th century period trees, with a focus on plants that provide a sustainable resource like mango, ulu and bananas. They will also preserve most of the existing lauhala, coconuts and naupaka. Removing the dense invasive plants will leave the area open to sea breezes and light, which will decrease the heavy mosquito population.

Concerning the topography, the lot has a generally low slope, with a rise of only about 40-feet over 1,000-feet from the ocean to the road. The topography is hummocky. The area for the home is situated at about 25-feet above sea level, and there is a low pali on the makai side that where the topography steps down to an elevation of about 10-15 feet above sea level. There is no problem with erosion or slope stability on the property, and the walls are not for these functions, but merely to mark the edge of the low drop off for safety reasons and provided a decorative element to the yard.

The owners have determined that they will utilize a water well for water supply, as do many residents in this area. The approximate location for the well is now marked on the site plan. The proposed well will be permitted through appropriate government agencies.

Legible plans and location of 3rd bedroom and bathroom: A new floor plan has been developed that clearly indicates the location of all features. There will be only two bathrooms, a change which has been noted in the final EA.

Siting of residence in Agricultural District: The home is sited in the only appropriate location on the property, as the agricultural district contains number of burials sites and a significant and unique archaeological site (the 19th century school remnants) that require preservation with buffers.

It should be noted that when the applicants originally envisioned home on the property prior to detailed investigation of site conditions, they did site it within the Agricultural district. The Gapps applied for a SMA permit and consulted the State Historic Preservation Division (SHPD). No response was received by SHPD and the SMA was granted. As the applicants began site preparation in 2007, they noted archaeological sites and immediately ceased work and consulted with a former planner of OCCL who instructed the Gapps to conduct an archaeological inventory survey, for which they contracted a professional archaeologist. The Gapps have diligently prepared all plans recommended by the archaeologist, including preservation plans and a burial treatment
plan (during which they worked with the lineal descendants), which have been fully accepted. The original planned building site turned out to have the largest of the two grave sites. The area between the school site and the grave sites contains numerous old walls and agricultural pens and has many deep fissures. It is not feasible to build between the school site and the first burial site as this area is a large fissure. The school site provides a valuable resource for the local schools to visit and explore, which the applicants wish to make available in an undisturbed context. The identified lineal descendant for the property visited the site and requested that the Gapps make the grave sites more accessible for their visits. Accordingly, the driveway was designed to pass around one site, as proposed in the burial preservation plan, making both sites accessible to the family. Only the proposed location in the Conservation District, in an area believed to be a former residence, satisfies archaeological and cultural concerns. This explanation for the location of the home will be added to the discussion of alternatives that were considered but rejected because of adverse environmental impact. Please note that the home as designed will have no effect on views to, from or along the coast.

Subdivision never approved by DLNR: The subdivision was done in 1999 by other parties and approved by the County of Hawai‘i prior to the Gapps’ purchase of the property in 2002. The Gapps bought the property unaware of the alleged defect in the subdivision process, and they have been paying taxes on the property for ten years. They have applied for and received approval for construction of a home on the property several times and were never informed of a problem. The Gapps have no ability to rectify the matter.

OCCL notes a single family residence has never been applied for within the Conservation District of this parcel.

Office of Conservation and Coastal Lands

Rejected Final EA
The Office of Conservation and Coastal Lands (OCCL) has reviewed the proposed Final Environmental Assessment and note that our comments were not adequately addressed in the document. Therefore it appears that we cannot issue a Finding of No Significant Impact (FONSI).

The OCCL requested that other alternatives be explored such as siting the residence in the Agricultural District. The response to our Office was, “The home is sited in the only appropriate location in the property, as the agricultural district contains a number of burials sites and a significant and unique archaeological site that require preservation with buffers.”

As previously stated, there appears to be ample room to site improvements in the Agricultural District. Your client may wish to consider reducing the size of development to reduce the imposition on the preservation areas. Please present alternatives other than no action in the final EA.

The OCCL requested a discussion of sanitation and maintenance of the pool and asked how the pool wastewater would be handled. The response was: The saltwater pool basin overflow/waste water will go to an aerobic septic system. The word saltwater was added to section 1.1 Project Description and Location of the final EA but the document does not contain any discussion regarding pool maintenance. While an aerobic septic system is sited on the lot, an Individual
Wastewater System is not sited. The two types of generated wastewater should not be comingled as salt is corrosive and may interfere with the delicate balance of bacteria and waste. Address pool maintenance and wastewater handling in more detail.

In regards to the Fire Department comments, as there does not appear to be any connection to County water, please include discussion of how the proposal will comply with the Fire Department’s minimum of 12,000 gallons of water available for firefighting. Include the siting of improvements as necessary.

Regarding the newly proposed water well in the final EA, please consult with the Commission of Water Resource Management (CWRM) concerning this new proposal.

Regarding the detached pavilion, no proposal to attach the pavilion or to delete the use to comply with the Hawaii Administrative Rules (HAR), Chapter 13-5 Single Family Residential Standards, were included.

The lack of the subdivision approval is of a foremost concern. The subdivision would not have been permitted under our administrative rules. Subdivision of land that may increase density and does not serve a public purpose is inconsistent with the Conservation District. While the OCCL agrees there does not appear to be any method to rectify this situation, the fact remains that the subdivision is unauthorized and a major issue in this case.

Your client should seriously consider locating the structure in the agricultural portion of the property.

Applicant’s response

House within the Agricultural district: Similarly, the revised FEA will include a statement from an archaeologist noting that having a dwelling situated within the Agricultural District area would not be prudent or feasible, given the burials and cultural remains in that area.

The applicant sought the opinion of Dr. Robert Rechtman who prepared the archaeological Inventory Survey and Cultural Impact Assessment for the EA regarding OCCL’s comments to include siting the residence in the Agricultural district as an alternative:

"...there are three large Archaeological/Burial preservation areas containing five sites (SIHP Sites 26659, 26660, 26662, 26663, 26664) within the Agricultural district portion of the parcel. A small portion of one of these preservation areas extends into the Conservation portion of the parcel where there is one additional preservation area containing one site (SHIP Site 26665).

The current proposed location of the house is shoreward of all of the preservation areas, which form a ‘zone of preservation’ occupying roughly the mauka ¾ of the parcel. The current proposed location of the residence was taken into consideration when assessing cultural impacts, and while I did not prepare the Preservation Plan or the Burial Treatment Plan, I would assume that the current proposed location was also a consideration during those planning processes. If the proposed residence is to be relocated, then a reassessment of impact and a reconsideration of preservation buffer sizes will have to be conducted. The current location “beyond” the zone of..."
preservation sites does not present an intrusive visual presence, which might not be the case if the residence was to be placed “within” the zone of preservation sites. As can be seen on the attached figure, and keeping the same configuration, the proposed residence will fit between preservation areas, but given the drastic ‘up and down’ nature of the lave substrate in this area, substantial alteration of the natural terrain and vegetation (grubbing and grading) will have to occur, which will clearly impact the existing natural feel of the zone of the preservation sites.

I am not sure what justification OCCL offered for the suggested relocation, but in my professional opinion, given the archaeological/cultural resources present on the parcel, the most strategic in terms of historic preservation and the most culturally sensitive location of a single family residence on the parcel is in the area shoreward of the zone of preservation sites.”

The final EA was also revised and noted that the Conservation District area previously contained a small house for an unknown number of decades and then as a campsite on and off for at least 10 years, as the site is near a tide pool area popular with picnickers and fishermen. After the applicants purchased the property they were obliged to haul away many tons of garbage and wreckage from the old house site. The relatively pristine part of the property is actually within the Agricultural district.

Swimming pool sanitation and maintenance: The revised final EA included a statement from a registered engineer attesting to how pool discharges will be handled for this project, a method that would comport to any known State and/or county regulations governing discharges.

According to Atlas Engineering, LLC, Only very few times will a swimming pool need to be fully drained as the soil water under the pool creates an upward hydrostatic force (through buoyance) and the pool is lifted out of the ground. There are no federal, County or State regulations that prohibit the draining of residential swimming pool water onto a landscaped area as long as the surface water does not leave the property. It is recommended that when the pool is emptied, the water be pumped and discharged on the ground at an area approximately 175’ from the shoreline and 25’ above sea level. There will be no adverse impact to the environment should the pool water be disposed in this way.

Water for firefighting and domestic uses: The final EA states that a well will require permits from the Commission on Water Resources Management. There are many wells in the area and there are no issues with sustainable yield or contamination, there is no requirement for a prospective well owner to “pre-consult” with CWRM. If a well is for any reason unsuitable, the applicant will simply utilize roof catchment, as most residents in Puna do. A 12,000-gallon water tank has been added and included on the site plan.

The applicant will provide a minimum 10,000 gallon water tank devoted expressly for firefighting purposes. Please note that when water variances to allow the use of water catchment system are issued by the County of Hawaii, based upon inputs from the Water and Fire Departments- require a minimum 9,000 gallon water storage system, 6,000
gallons of which would be for potable purposes and the remaining 3,000 for firefighting and emergency purposes. The location and capacity of the emergency water system, including the necessary compatible connector system, has to meet with the approval of the Hawaii County Fire Department. The applicant will abide by these standards.

**Detached Pavilion:** The applicant has decided to abandon this component.

**Illegally created subdivision:** Unfortunately, we have no way to address this, short of litigation that will affect a number of property owners, the County and possibly the State. Notwithstanding, we believe that the revised FEA should be sufficient for a FONSI determination and would respectfully request such an action so that the matter can continue to be processed and ultimately acted upon by the Board.

**COUNTY OF HAWAII**

*Department of Planning*

According to Chapter 205A-22, HRS and Planning Commission Rule 9 relating to Special Management Area, “development” does not include “Construction or reconstruction of a single-family residence that is less than seven thousand five hundred square feet of floor area and is not part of a larger development. Therefore the construction of the 5,000 square foot dwelling and related improvements may be exempt from the definition of development.

*Applicant’s response*

Thank you for providing OCCL with the information on the status of the SMA.

*Fire Department*

The proposal shall be in accordance with the National Fire Protection Association, Uniform Fire Code, 2006 Edition, in regards to roads, fire apparatus, access and water supply. Minimum water supply for buildings that do not meet the minimum County water standards: Buildings, 3001-6000 square feet, shall have a minimum of 12,000 gallons of water available for firefighting.

*Applicant’s response*

The applicant will conform with all applicable regulations related to single family residences.

**ANALYSIS:**

After reviewing the application, by correspondence dated May 21, 2012, the Department has found that:

1. The proposed use is an identified land use in the Resource subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR) §13-5-24, R-7, SINGLE FAMILY RESIDENCE (D-1), A single family residence that
conforms to design standards as outlined in Chapter 13-5. Please be advised, however, that this finding does not constitute approval of the proposal;

2. Pursuant to §13-5-40 of the HAR, a Public Hearing will not be required; and

3. In conformance with Chapter 343, Hawaii Revised Statutes (HRS), as amended, and Chapter 11-200, HAR, a finding of no significant impact to the environment (FONSI) is anticipated for the proposed project.

In regards to Hawaii’s Coastal Zone Management law (Chapter 205A, HRS) the County of Hawaii has determined that the construction of the 5,000 square foot dwelling and related improvements may be exempt from the definition of development.

A Finding of No Significant Impact to the environment was published in the October 8, 2012 Environmental Notice with reservations.

CONSERVATION CRITERIA:
The following discussion evaluates the merits of the proposed land use by applying the criteria established in §13-5-30, HAR.

1. The proposed land use is consistent with the purpose of the Conservation District.

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

The residence as proposed is a large, on grade development which is sited on the edge of a small pali in an area identified as having high coastal hazards. In this particular area, not only would there be the highest potential for seismic activity due to volcanic processes and subsidence, the ocean is also a force to be reckoned with. There is no off shore reef and unlike a beach, there is nothing to dissipate the ocean’s wave energy that may slam into the shoreline tossing boulders, eroding land and coating things with salt spray. The area is somewhat remote and wild.

The OCCL has not always recommended approval of residential development in similar remote and hazardous locations. Moreover, in this case, we believe that the landowner has a viable option to build a residence in the Agricultural District portion of the parcel, which comprised over 2/3rds of the parcel area.

2. The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.

The objective of the Resource subzone is to develop with proper management, areas to ensure sustained use of the natural resources of those areas. The residence as proposed is a large, on grade development which is sited on the edge of a small pali in an area identified as having high coastal hazards. In this particular area,
not only would there be the highest potential for seismic activity due to volcanic processes and subsidence, the ocean is also a force to be reckoned with. There is no offshore reef and unlike a beach, there is nothing to dissipate the ocean’s wave energy that may slam into the shoreline tossing boulders, eroding land and coating things with salt spray.

3. The proposed land use complies with provisions and guidelines contained in Chapter 205, HRS, entitled "Coastal Zone Management," where applicable.

The proposal has been granted a Special Management Area Exemption by the County of Hawaii as the proposed single family dwelling and related improvements are exempt from the definition of development.

In regards to the policies of Chapter 205A, HRS, staff believes the proposal is not consistent with protecting valuable coastal ecosystems or with reducing coastal hazards to life and property due to the proposed coastal location versus setting the home and all the desired improvements further back outside of the Conservation District. The recreational/cultural value and natural landscape features of the shorefront may be diminished.

4. The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.

The proposed land use increases density of the Conservation District. With the unauthorized subdivision, a 100% increase of density could occur should homes be authorized on both parcel. Previous to the subdivision, only one parcel contained Conservation District land.

5. The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The residence as proposed is a large, on grade development which is sited on the edge of a small pali in an area identified as having high coastal hazards. In this particular area, not only would there be the highest potential for seismic activity due to volcanic processes and subsidence, the ocean is also a force to be reckoned with. There is no offshore reef and unlike a beach, there is nothing to dissipate the ocean’s wave energy that may slam into the shoreline tossing boulders, eroding land and coating things with salt spray.

Conservation Districts were set up for various reasons to protect the ecosystems of the designated areas as well as to discourage building in certain areas. The area is isolated with constraints on the level of service to the area. No utilities are currently available to the property.

6. The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.
Placement of the residence in the Agricultural District would preserve the open space and natural beauty of the coastal area. More often than not, fishermen and coastline hikers are intimidated when previously undisturbed wild areas become developed, limiting enjoyment of what should be a free and open space.

The physical and environmental aspects of the site are a rough, rugged, wave-pounding shoreline that gets the brunt of the trade winds and may be susceptible to seismic activity. Placing a residence near the coast, when there is an alternative to place it away from the coast; will not improve the resource value of the land.

7. **Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.**

Unauthorized subdivision of land has increased the intensity of land uses in the Conservation District. The illegal subdivision potentially allows 2 residences in the Conservation District, on each of the re-subdivided parcels, were prior to subdivision only 1 residence could potentially be allowed within the Conservation District.

8. **The proposed land use will not be materially detrimental to the public health, safety and welfare.**

Should the proposed land use be approved, it would place individuals in a secluded area on an eastern facing rugged coastline susceptible to the elements and seismic and volcanic activity. Staff notes the landowners are aware of the inherent dangers of living in close proximity to the sea and Kilauea.

**CULTURAL IMPACT ANALYSIS**

An archaeological inventory survey, burial treatment plan, preservation plan and cultural impact assessment have all been prepared for the property. The survey identified and recorded nine archaeological sites containing 67 features. 6 sites that include 4 burials and 2 habitation sites were recommended for preservation and accepted by the State Historic Preservation Division. 2 preserve areas are located within the Agricultural district, 1 within the Conservation district and 1 straddles both districts. The applicants would implement the preservation plan and provide descendants access to the burials.

The inventory survey did not identify any mauka-makai trail on the site. While the Cultural Impact Assessment did not identify and specific gathering use of the property or shoreline by consulted native Hawaiian individuals', in the event legitimate claims are made, the Gapps would provide the needed access. To assist with monitoring of the area during construction activities, the applicants have suggested that a qualified archaeologist could be required on site.

**DISCUSSION:**

Pursuant to the Hawaii Administrative Rules (HAR) §13-5-22, Subdivision of Conservation District land must be for a public purpose and must be approved by the Board of Land and Natural Resources. In this particular case, the County approved
subdivision outcome is not an identified land use that could be applied for within the Conservation District.

Prior to the noted consolidation and re-subdivision: subject parcel 032 was designated Agricultural land and TMK (3) 1-5-010:011 was designated both Agricultural and contained all the Conservation District land. The two parcels were consolidated and then re-subdivided such that parcel 32 now also contains Conservation District land. This was essentially an illegal partition of Conservation District land, and based on this condition alone, staff would recommend that the Board not approve this application. This unauthorized subdivision potentially allows 2 residences in the Conservation District, on each of the re-subdivided parcels, where prior to subdivision only 1 residence would have been allowed within the Conservation District.

The property is dual zoned with about 1.8-acres within the Conservation District and about 3.68-acres within the Agricultural district. The applicants have stated a preference to site the home in the Conservation District to preserve archaeological sites in the Agricultural district. However, the applicants have not expressed sufficient mindful management for protection of the Conservation District. As the focus is on protection/management of the sites in the Agricultural District, a presence in the Agricultural portion would be much more conducive to manage the historic sites.

Staff requested that the final Environmental Assessment also include an alternative of siting the home in the Agricultural district and suggested that the size of the residence be reduced to decrease imposition to the preserve sites. The footprint of the residence, pool and other improvements (with no reduction), was placed within the Agricultural district without encroaching upon the preserve areas.

In addition, staff discussed this proposal with the County of Hawaii to determine if a single family residence was a use that could be sited in the Agricultural portion of the property. The County's response was in the affirmative and past correspondence from the County of Hawaii Planning Department indicated that a residence in the Agricultural District was exempt from a SMA permit.

In addition, on January 13, 2006, the Board of Land and Natural Resources found the Gapps in violation of Chapter 13-5, Hawaii Administrative Rules and Chapter 183C, Hawaii Revised Statutes for unauthorized grubbing and grading; tree removal and pathway improvements. The Gapps were fined $6,000.00 and required to submit a report within 30-days from the Board’s decision regarding the condition of the Conservation District and if required a maintenance plan to implement the removal of invasive alien species.

By August 2006, the fine was paid and the Gapps requested an extension of 12-18 months to submit a maintenance plan as the Gapps stated, "We have engaged an architect to help us develop a house plan, and landscaping plan of the parcel. In order to remove the invasive species and replant with native plants we will need access to the area. In order to construct a road to the area we will need to go through both county and State permitting processes after we developed a building plan." No plans were forthcoming and OCCL lost track of the case.
The proposed site does not have any public infrastructure such as municipal water or sewer service. The project as proposed on grade with pool, deck, raised landscaping appears to be better suited in an urban setting rather than an isolated area with no infrastructure or municipal services to the area. The improvements would be located where there is a drop in elevation with the residence, pool, landscaping built at the edge of a small pali where low walls and a stairway are proposed to access the lower makai portion of the property.

Natural events such as earthquake, tsunami, rogue storm waves, hurricane, may cause challenges to the residence and the ocean/shoreline resources. According to the Atlas of Natural Hazards in the Hawaiian Coastal Zone, the entire Maku‘u coastline is within 20-feet of sea level and appears to be getting closer due to steady long-term and rapid periodic subsidence. In April of 1868, the region sank and was inundated by a locally generated tsunami after an earthquake occurred on the southeast portion of the island. In April of 1924, a series of earthquakes caused the nearby Honolulu Landing to sink. The Overall Hazard Assessment (OHA) for the Maku‘u coast is high (6), reflecting the high and moderately high hazards that affect this low-lying region. This seismically and volcanically active coast experiences rapid long-term subsidence which enhances the rate of relative sea-level rise. The shoreline area undergoes periodic morphologic changes due to tectonic and seismic activity associated with Kilauea Volcano.

Given the high seismic hazard rating, this particular site may not be a good location to site the home. Currently, a nearby landowner south of this proposed site is working with the OCCL to relocate his residence as far away from the Maku‘u shoreline within his lot as possible. This nearby residence was recently repaired due to wave damage.

Staff is aware of the representations by the applicant and archeologist in regards to the relocation of the residence into the Agricultural District portion of the parcel and potential effects to cultural and archeological sites. However, staff believes that this option should be explored and given further consideration.

RECOMMENDATION:

Staff recommends that the Board of Land and Natural Resources deny this application for a Single Family Residence and related improvements located at Maku‘u, Puna, Island of Hawaii, TMK: (3) 1-5-010:032, due to the following:

1. There are two outstanding unresolved issues: 1) The unauthorized subdivision and 2) Unresolved enforcement conditions stemming from Enforcement HA 04-37; and

2. Staff believes that a residence of this size and scope is not appropriate for the site given its remoteness, and obvious hazards. Moreover, a residence can be designed to fit into the Agricultural District portion of the parcel.
Respectfully submitted,

[Signature]

K. Tiger Mills, Staff Planner
Office of Conservation and Coastal Land

Approved for submittal:

[Signature]

William J. Aila, Jr., Chairperson
Board of Land and Natural Resources
EXHIBIT I

http://www.hawaiipropertytax.com/Forms/MapDatalet.aspx?sIndex=0&idx=1&LMparent... 10/26/2012
Consolidation of
Parcels 2-A-1 and 2-B

Portions of
R.P. Grant, 10-3-4-Ap-1 to D.W. Maigu
And Resubdivision of said Consolidation
Maigu, Papa, Island of Hawaii, Hawaii

Survey and Plan by Murray, Smith & Associates, Ltd.
Dear Mr. and Mrs. Gapp,

SUBJECT: Enforcement File No. HA-04-37 Regarding Alleged, Unauthorized 1) Grubbing and Grading; 2) Tree Removal; and 3) Pathway Construction, Subject Parcel TMK: (3) 1-5-010:032, Puna District, Island of Hawaii

This is to inform you that on January 13, 2006, the Board of Land and Natural Resources (Board) found you to be in violation of Title 13-5 Hawaii Administrative Rules, and Chapter 183C, Hawaii Revised Statutes by failing to obtain the appropriate approvals for unauthorized: 1) grubbing and grading; 2) tree removal; 3) pathway construction, Subject Parcel TMK: (3) 1-5-010:032, Puna District, Island of Hawaii, subject to the following:

1. That John and Maureen Gapp violated the provisions of Chapter 183C, Hawaii Revised Statutes (HRS), and Chapter 13-5, Hawaii Administrative Rules (HAR), in three (3) instances by failing to obtain the appropriate approval for the alleged unauthorized: 1) grubbing and grading action; 2) tree removal; 3) construction of a pathway on subject parcel TMK: (3) 1-5-010:032 within the Conservation District. John and Maureen Gapp are fined $5,000.000 for three (3) conservation District violations;

2. That John and Maureen Gapp are fined an additional $1,000.00 for administrative costs associated with the subject violations;

3. That John and Maureen Gapp shall pay all fines $6,000.00 within thirty (30) days of the date of the Board's action;

4. That the Gapps submit a report to the OCCL, within 30 days from the Boards decision, regarding the condition of the land located in the Conservation District. If required a maintenance plan shall be implemented to remove invasive, alien species.

5. No further work shall occur on the subject parcel within the Conservation District, without the Board of Land and Natural Resources approval; Chairman's approval
and/or OCCL approval. If further work occurs in the Conservation District without approval; the alleged will be fined an additional $2,000 a day;

6. That in the event of failure of the parties to comply with any order herein, the parties shall be fined an additional $2,000 per day until the order is complied with; and

7. That in the event of failure of the parties to comply with any order herein, the matter shall be turned over to the Attorney General for disposition, including all administrative costs.

Please call Dawn Hegger at the Office of Conservation and Coastal Lands at 587-0381, should you have any questions on this matter.

Aloha,

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

c: HDLO
County of Honolulu Planning Department
DOCARE Hawaii Branch
Attention: Dawn Hegger,

Aloha Dawn,
This letter is a follow up to your letter dated May 9, 2006 and our conversation on May 10, 2006. I have contacted the Invasive Species Counsel here on the Big Island. They have agreed to consult on how to remove the invasive species on our property.

I have mentioned in previous letters and submitted photos showing what the property looked like before and after the grubbing. Both our property Parcel 2-A-1A and the parcel to the north side Parcel 2-A-1B were covered with Albezia and weeds. After the grubbing, the property again is covered with the same weeds. I have included a map that shows the road on the adjacent property that was used to access the property in January 2003. The parcel with the road has since been sold and is now blocked off with concrete barriers by the new owners.

I have explained before, that the bottom part of the property closest to the ocean has been bulldozed in the past, prior to us purchasing the property. The top of the property is beautiful old forest. It is our desire to save as much of the old forest as possible, and to try to limit the invasion of noxious weeds to this area. We have engaged an architect to help us develop a house plan, and landscaping plan of the parcel. In order to remove the invasive species and replant with native plants we will need access to the area. In order to construct a road to the area we will need to go through both county and State permitting processes after we develop a building plan.

That said we would like an extension of 12-18 months to submit a maintenance plan.

If you have any questions please call me at 808-966-6567.

Thank you,

Maureen M. Gapp
John and Maureen Gapp  
P.O. Box 1128  
Pahoa, Hawaii, 96778

Dear Mr. and Mrs. Gapp,

SUBJECT: Enforcement File No. HA-04-37 Regarding Alleged, Unauthorized 1) Grubbing and Grading; 2) Tree Removal; and 3) Pathway Construction, Subject Parcel TMK: (3) 1-5-010:032, Puna District, Island of Hawaii

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) would like to reiterate the conversation on January 31, 2007 held with you.

Enforcement Case JHA-04-37, Condition #4 notes, “that the Gapps submit a report to the OCCL, within 30 days from the Boards decision, regarding the condition of the land located in the Conservation District. If required a maintenance plan shall be implemented to remove invasive, alien species.”

The OCCL notes the maintenance plan that was submitted was not adequate. You have requested a copy of a botanist report, which you may show to prospective botanical experts; one has been enclosed. The OCCL notes preliminarily a botanist report should be submitted to identify the native and non-native species on the subject parcel, with an analysis if whether a maintenance plan is required. The OCCL requests you submit the report by March 1, 2007.

Please call Dawn Hegger at the Office of Conservation and Coastal Lands at 587-0381, should you have any questions on this matter.

Aloha,

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

c: HDLO
County of Hawaii Planning Department
DOCARE - Hawaii Branch
Location Map
Gapp Single-Family Residence Environmental Assessment

Figure 2  Project Site Photos

Typical Vegetation on Project Site ▲  ▼ Shoreline in Front of Project Site

Page 4

EXHIBIT 8
Figure 13. Archaeological sites recorded during the inventory survey of TMK:3-1-5-010:032.

* The boundaries of SIHP Site 26666 conform to the project area boundaries.
EXPLANATION

For explanation of hazard types, see "Notes on Specific Hazards" in the introduction.

G - Geology:
B - Beach; S - Stream; R - Rocky; H - Headland; D - Developed
fr - fringing reef; br - barrier reef; e - embayed coast; w - wetland

CS - Coastal Slope
<0% - 1 2 3 >45%

T - Tsunami
Low - 1 2 3 4 - High

SF - Stream Flooding

W - High Waves

S - Storms

E - Erosion

SL - Sea Level

VS - Volcanic/Seismic

- No Data

Overall Hazard Assessment (OHA)
Low [1 2 3 4 5 6 7] High
Proposed Residence, pool, and landscaping for John and Maureen Gapp, using and highlighting existing agriculture, topography and preservation areas.

Page 1: House floor plan
Page 2: Landscaping plan and site plan
Page 3: House elevations

EXHIBIT 11
NEW RESIDENCE FOR:
John & Maureen Gapp
TINR # 3-1-5-010-032
Drawn by: Matt Purvis
808-960-4555
metpurvis@gmail.com

SITE PLAN

LANDSCAPING PLAN

SECTION 1 = 50'

ocean

LEGEND

1.50 ft. pool drainage area at
ocean and 25' least cram

12" native fan

pine ground cover

flame ground cover

coconut palm

preserved features

natural corridor

NEW RESIDENCE FOR:
John & Maureen Gapp
TINR # 3-1-5-010-032
Drawn by: Matt Purvis
808-960-4555
metpurvis@gmail.com

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EXHIBIT 13
Alternative house site locations.