BOARD OF LAND AND NATURAL RESOURCES
State of Hawai‘i
Honolulu, Hawai‘i

REGARDING:
Conservation District Use Application (CDUA) HA-3675
for a Single Family Residence (SFR) & Related Improvements

APPLICANT/
LANDOWNER:
Peter Dungate

LOCATION:
Pahoehoe I, South Kona, island of Hawai‘i

TMKs:
(3) 8-7-007:011

AREA OF PARCEL:
Approximately (=) 6.6-acres

USE:
≈ 2,234-ft²

SUBZONE:
Limited

DESCRIPTION OF AREA AND CURRENT USE (EXHIBITS A, B, C, D & E)
The subject area exists in the South Kona District of the island of Hawai‘i in the makai portion of Pahoehoe I ahupua‘a. The property is approximately 6.6-acres and is dual zoned with the majority of the parcel within the Limited subzone of the Conservation District. The Conservation District follows an average setback of 300-feet from the shoreline. The Agricultural District portion of the parcel is a small area on the southern margin of the property, not readily accessible from other parts of the property.

The property is part of a recent subdivision action that also resulted in the State receiving ownership of a trail. The property abuts the ocean to the west; a private undeveloped parcel is to the north; a State of Hawaii trail and private property owned by the applicant beyond, lies to the east (mauka) and a recently constructed residence is on the adjoining parcel to the south that lies within the Agricultural District. The Kona Paradise subdivision is less than a mile away to the south and can be reached via the public trail.

The lot is located on the western flank of Mauna Loa on lava flows created over 1,000 years ago. A small portion of the parcel is on the 1950 lava flow from Mauna Loa. The soil is noted as predominantly a‘a lava flow and Punalu‘u extremely rocky peat by the US
Soil Conservation Service. The area receives an average of about 40-inches of rain annually and a mean annual temperature of 75°.

There is no county infrastructure to the residence and the site is completely off the grid with no electricity, municipal water or landline phone service. Road access is from a legal driveway on Mamalahoa Hwy and easements on a series of private roads.

There are no water features in the project area such as streams, springs, or anchialine ponds. Plant life is sparse and consists largely of non-native species that include koa haole and kiawe trees. Native flora observed include uhaloa and ilima. A flora survey indicated no rare, threatened or endangered plant species and no sensitive terrestrial ecosystems.

The sparse vegetation offers no habitat for birds. Fauna that may visit the site includes introduced mammals such as goats, feral cats, mongoose and rats. Lizards may also be present. Common shorebirds may be observed on the rocky shoreline. Endangered species such as the Hawaiian Hawk, Hoary Bat, Petrel and Newell’s Shearwater may overfly or be present in the general area like all of West Hawaii.

The applicant has completed an archaeological survey of the property. Two burial sites and several archaeological features will be preserved in accordance with preservation and burial treatment plans approved by the State Historic Preservation Division. The applicant has noted and is aware of the cultural resources and practices of the area such as coastal access, fishing, gathering, hunting and ceremonial sites.

The coastline is periodically used by hikers and fishermen. The State owned trail is mauka of the property and a 10-ft wide pedestrian access easement from the trail to the shoreline exists at the southern end of the property several hundred feet from the site.

OCCL staff visited the site with the landowner and his counsel along with County of Hawai‘i Planning Department staff. The site is bare of soil and the land could be described as sparse, dry shrub land with rough broken rocks and weedy species. There is an 180° view of the ocean and it was very hot. Vandalism of ‘No Drift Nets’ signs and pulled out property and shoreline markers were noted.

The site was chosen within the constraints of the Limited subzone of the Conservation District. Although the applicant may have preferred to locate his home further mauka within the Conservation District, Conservation District rules dictate that within the Limited subzone, a residence must be sited in a flood zone or coastal high hazard area. The house site is set back a minimum of 44-ft from the shoreline and is located in flood hazard zone VE with base floor elevation of 8, however the site is about 35-ft above sea level.

Regarding this area, the USGS’s Atlas of Natural Hazards in the Hawaiian Coastal Zone has rated the overall hazard assessment as moderately high in regards to tsunami, high waves, storms, sea level rise and volcanic/seismic activity. The shoreline certification report describes the shoreline as a west facing, exposed, irregular shoreline characterized by a very steep to vertical basalt bluff. The bluff consists of multiple volcanic deposits
with an apparent blue rock core and a’a surface. The bluff face is highly-fractured with multiple sea caves at the base. The area is exposed to very high wave energy, particularly during large south swells and Kona storms. Discussion with the OCCL Sea Grant Geologist on staff indicated that the ocean resource is under cutting the cliff face. It was further noted that unlike a sandy beach, there is nothing to dissipate the ocean’s wave energy.

Coastal Erosion Study
A coastal erosion analysis was completed by a qualified professional consultant geologist that noted the area is bounded by a steep coastal sea cliff and underlain with prehistoric lava flows consisting of a dense blue rock a’a core overlain with loose a’a rubble. Erosion appears to be caused by storm waves. According to the analysis, in this area, the blue rock core is ‘extremely durable,’ and does not appear to be subject to horizontal erosion.

Inspection of aerial photos indicated that there does not appear to be a change in position of the overall coastal sea cliff or vegetation line since the earliest photo of 1954. The area directly in front of the project site has remained stable and shows no indication of substantial erosion. Based upon this information, the applicant has concluded “no measurable migration of the coastline, nor would it have any effect on shoreline position, as determined by the “highest reach of normal waves”.”

PROPOSED USE (EXHIBITS F & G)
According to the application, the proposed residence would be constructed post on pier and consists of a one-story structure approximately 21-feet in height with 2 bedroom, 1.5 bathrooms of approximately 1,052-ft² with an additional 1,182-ft² of open and covered lanai with a covered entry area. Other improvements include a 12-ft diameter 1,000 gallon catchment water tank, an individual wastewater system, a generator and an improved but unpaved driveway.

Approximately 500-ft² is proposed to be landscaped. Two kiawe trees will be cut and/or trimmed and native or Polynesian trees such as milo, loulu, noni, and akia are proposed to be planted near the home site.

Land clearing activities will take place on less than half an acre in compliance with Federal, State and Hawaii County laws. Standard Best Management Practices will be observed. Within the Environmental Assessment, the applicant has proposed several practices to insure water quality and to prevent hazardous material introduction.

Exterior lights will be shielded to protect avifauna. Authorized access to cultural sites will be allowed for lineal descendants.

The application has stated the owner would agree to a CDUP and/or deed condition that would prevent any future request for shoreline hardening to protect the residence, regardless of hardship and a condition requiring moving or dismantling the home if sea level rise eventually threatens the integrity of the structure.
The applicant believes his presence on the property will decrease vandalism and inappropriate behavior and help in safeguarding preservation sites.

Alternatives
The applicant has not proposed any alternatives to the proposed action other than no action - the residence would not be built and the lot could possibly be used for camping or day activities by the owner. No other uses are desired by the landowner for the property.

SUMMARY OF COMMENTS
The application was referred to the following agencies for their review and comment: the Federal: National Park Service; 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, Engineering, Forestry and Wildlife, Na Ala Hele, Hawai‘i District Land Office, Historic Preservation; and the County of Hawai‘i: Department of Planning, the Fire Department, and Public Works. In addition, this application was also sent to the nearest public library, the Kealakekua Public 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 HAWAI‘I

DEPARTMENT OF HEALTH

Environmental Planning Office
No comment

DEPARTMENT OF LAND AND NATURAL RESOURCES

Division of Conservation and Resource Enforcement
No comments

Forestry and Wildlife
No comments

Na Ala Hele
No comments

Hawai‘i District Land Office
No comments
Office of Conservation and Coastal Lands (OCCL)
Staff noted the house site is in a secluded area on a southern facing rugged coastline susceptible to the elements and seismic volcanic activity. Staff believes the landowners are aware of the inherent challenges and vulnerabilities of potentially having a residence in a location that is isolated, with no municipal services, poor access, and poor emergency response time and shall plan accordingly to insure their own health, safety and welfare.

Applicant’s response
We acknowledge the fact that the house site is in a secluded area on a southern facing rugged coastline susceptible to the elements and seismic and volcanic activity. You are correct in your assessment that the landowner has visited this area since his childhood and has lived on the Big Island for many decades, is aware of the inherent challenges and vulnerabilities of potentially having a residence in a location that is isolated, with no municipal services, poor access, and poor emergency response time. The landowner is indeed prepared to plan appropriately for the health, safety, and welfare of residents and visitors to the proposed home.

The Environmental Assessment (EA) adequately describes the site’s characteristics where the seismic, lava flow, flood zone and wave hazard was addressed in detail along with the lack of public facilities and services in convenient proximity. We have added additional information concerning the property-owners understanding of the implications of these circumstances to the EA.

COUNTY OF HAWAI’I

Fire Department
No comment

Department of Planning, dated October 15, 2013
We have determined that the proposed construction of the single-family dwelling and related improvements, as presented, are exempt from the definition of “development” and shall not require further review against the Special Management Area guidelines. However, any substantive changes to the project will require further review by the County and possibly the submittal of another SMA Use Permit Assessment application.

While further review of a new dwelling against the SMA rules and regulations will not be required, all other applicable code requirements must be satisfied.

ANALYSIS
After reviewing the application, by correspondence dated June 18, 2013, the Department has found that:

1. The proposed use is an identified land use in the Limited subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR) §13-5-23, L-3, SINGLE FAMILY RESIDENCE (D-1), A single family residence in a
flood zone or coastal high hazard area defined by the boundaries of the Federal Insurance Rate Maps (FIRM) that conforms to applicable county regulations regarding the National Flood Insurance Program and single family residential 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.

Satisfaction of the Special Management Area has been met with documentation dated October 15, 2013 from the County of Hawai‘i which states that the proposed construction of the single-family dwelling and related improvements, as presented, are exempt from the definition of “development.”

In addition, a FONSI to the environment was published in the October 8, 2013 Environmental Notice.

CONSERVATION CRITERIA
The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 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 proposed use is an identified land use in the Limited subzone of the Conservation District; as such, it is subject to the regulatory process established in Chapter 183C, HRS and detailed further in Chapter 13-5, HAR. This process provides for the application of appropriate management tools to protect the relevant resources, including objective analysis and thoughtful decision-making by the Department and Board of Land and Natural Resources.

No rare, threatened or endangered plant or animal species or significant habitats are known to exist on the subject property. Archaeological and cultural resources have been identified, treatment and preservation plans have been approved to appropriately manage and protect the features.

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 Limited subzone is to limit uses where natural conditions suggest constraints on human activities. A Single Family Residence is an
identified land use pursuant to the HAR, §13-5-23, L-6, SINGLE FAMILY RESIDENCE (D-1) A single family residence in a flood zone or coastal high hazard area defined by the boundaries of the Federal Insurance Rate Maps (FIRM) that conforms to applicable county regulations regarding the National Flood Insurance Program and single family residential standards as outlined in Chapter 13-5.

Staff has concerns regarding placing a family on a coastline that has been evaluated as having a moderately high overall hazard assessment. The applicant is aware of the potential risk factors associated with the coastline. The applicant shall comply with federal, state and county regulations for building in a flood zone.

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

Staff believes the proposed project complies with provisions and guidelines contained in Chapter 205, HRS regarding Coastal Zone Management. Lateral access along the shoreline will not be impacted; archaeological monitoring will be conducted during construction; no significant public views will be impacted, the project has been designed to minimize grading; and Best Management Practices (BMPs) will be implemented to minimize potential impacts to coastal ecosystems during construction.

An approved wastewater treatment system will be utilized to dispose of wastewater and the residence lighting will be designed so as to not allow artificial light to directly illuminate shoreline and ocean waters.

The proposed residence will be designed and constructed in compliance with the requirements of the Federal Flood Insurance Program. Regarding the Special Management Area, the proposal has been exempted from the definition of development by the County of Hawai‘i.

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

Staff believes the proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community or region provided that mitigative measures are implemented and the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard that the project may cause.

There may be short-term adverse effects on the surrounding area associated with construction activities such as potential noise and air quality.

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 proposal is a basic ‘no frills’ off the grid residence. Grading will be kept to a minimum and the majority of the 6.6-acre parcel; with the exception of the less than half acre home site, will be kept in its natural state.

6. *The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, which ever is applicable.*

The site does not contain unique features either topographically or geologically. Natural or existing vegetation consists of non-native plants and the biological report concluded there is little biological concern due to the non-native plants and the weedy nature of the vegetation of the parcel. The landscaping plan proposes to reintroduce native plantings to replace invasive species in the areas immediately surrounding the residence.

A presence may appropriately manage and protect the cultural resources of the area.

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

No subdivision of land is proposed for this project.

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

Staff believes the proposed land use will not be materially detrimental to the public health, safety and welfare as mitigated. With the incorporation of an appropriately designed and operated individual wastewater system, combined with other BMPs identified, the proposed residential land use will not result in materially detrimental impacts to public health, safety and welfare. Staff notes the landowners are aware of the inherent dangers of living in close proximity to the sea.

**CULTURAL IMPACT ANALYSIS**

An Archaeological Inventory Survey has been completed; two burial sites and several archaeological features will be preserved in accordance with Preservation and Burial Treatment Plans approved by the State Historic Preservation Division. Short term preservation measures will also be observed. Lineal descendants have been identified, consulted and authorized access will be allowed to burial sites.

The applicant has noted and is aware of the cultural resources and practices of the area such as coastal access, fishing, gathering, hunting and ceremonial sites. The applicant has deeded trails in the area to the State of Hawaii for public use and has created a 10-ft wide pedestrian access easement from the trail to the shoreline at the southern end of the property several hundred feet from the proposed site.
According to the applicant, any traditional and customary rights exercised by native Hawaiians on the property will continue. It is believed that the project will not impair, diminish, or preclude customary or traditional native Hawaiian rights and no action is necessary to protect these rights.

DISCUSSION
Staff notes during the processing of this application, no comments were received from solicited agencies other than the County of Hawai‘i in regards to the Special Management Area. The public also did not provide any comments.

The proposed development is a modest post on pier design consisting of a one-story, 2 bedroom, 1.5 bathrooms of approximately 1,052-ft² with an additional 1,182-ft² of open or covered lanai. Approximately 500-ft² is proposed to be landscaped. The residence is proposed to be sited approximately 44-feet from the certified shoreline approximately 34-ft above mean sea level on a coastal bluff.

Staff has reservations upon placing any residence near the coastline. Natural events such as earthquake, tsunami, rogue storm waves, hurricane, may cause challenges to the residence and the ocean/shoreline resources. In addition, the site is remote and should an emergency situation occur the residents and guests would be on their own to insure the health safety and welfare of themselves. However staff notes the applicant acknowledges and is aware of the risks associated with developing near a remote coast. The applicant is familiar with the land and resources of the area. Nevertheless, a condition to execute a waiver and indemnity is recommended.

Regarding the potential effects of the proposed development upon the natural and cultural resources of the area, the area does not contain native terrestrial ecosystems or threatened or endangered plant species. Native plants will be introduced to the area. An archeological monitor will be present during all earth-moving activities associated with the development of the parcel. All work shall stop should any significant cultural deposits be encountered. Archaeological and cultural resources have been identified, treatment and preservation plans have been approved to appropriately manage and protect the features.

The proposal is consistent with Chapter 13-5, Hawaii Administrative Rules, Exhibit 4, Single Family Residential Standards. Compatibility provisions such as the use of earth toned or compatible colors with the surrounding area will be utilized on the exterior of the residence.

Land clearing activities will take place on less than half an acre in compliance with Federal, State and Hawaii County laws. Standard Best Management Practices will be observed. Within the Environmental Assessment, the applicant has identified a number of mitigative measures, conditions and practices to ensure that the proposal will have minimal effects on the natural and cultural resources of the land. Further the applicant has stated the owner would agree to a CDUP and/or deed condition that would prevent any future request for shoreline hardening to protect the residence, regardless of hardship and a condition requiring moving or dismantling the home if sea level rise eventually
threatens the integrity of the structure. As such these proposed measures, conditions and practices are incorporated into the permit.

Staff believes that the project will have negligible adverse environmental or ecological effects provided that best management practices and mitigation measures as described in the application and environmental assessment, and as required by rule or laws, are fully implemented.

RECOMMENDATION
Based on the preceding analysis, staff recommends that the Board of Land and Natural Resources APPROVE Conservation District Use Application HA-3675 for a Single Family Residence (SFR) & Related Improvements located at Pahoehoe I, South Kona, island of Hawai‘i, TMK:(3) 8-7-007:011 subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of this chapter;

2. The permittee, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;

3. The permittee shall comply with all applicable department of health administrative rules;

4. The single family residence shall not be used for rental or any other commercial purposes unless approved by the board. Transient rentals are prohibited, with the exception of wilderness camps approved by the board;

5. The permittee shall provide documentation (e.g., book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;

6. The permittee shall execute a waiver and indemnity prior to submitting construction plans for approval that is satisfactory to the Department;

7. Before proceeding with any work authorized by the department or the board, the permittee shall submit four copies of the construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;

8. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with
construction plans that have been signed by the chairperson, and shall be completed within three years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;

9. All representations relative to mitigation set forth in the accepted application and environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;

10. The applicant shall plan to minimize the amount of dust generating materials and activities. Material transfer points and on-site vehicular traffic routes shall be centralized. Dusty equipment shall be located in areas of least impact. Dust control measures shall be provided during weekends, after hours and prior to daily start-up of project activities. Dust from debris being hauled away from the project site shall be controlled. Landscaping and dust control of cleared areas will be initiated promptly;

11. The permittee shall notify the Office of Conservation and Coastal Lands (OCCL) in writing prior to the initiation and upon completion of the project;

12. Archeological monitoring shall be conducted during construction activities in accordance with the approved Archaeological Mitigation and Preservation Plan;

13. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact SHPD (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;

14. The permittee shall utilize Best Management Practices for the proposed project;

15. During construction, appropriate mitigation measures shall be implemented to minimize impacts to the aquatic environment, off-site roadways, utilities, and public facilities;

16. The single-family residence shall conform to the single-family residential standards included as Exhibit 4 of the Hawaii Administrative Rules, Chapter 13-5;

17. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;

18. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;
19. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;

20. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

21. Obstruction of public roads, trails, lateral shoreline access, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, lateral beach access, or pathways acceptable to the department;

22. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;

23. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;

24. Artificial light from exterior lighting fixtures, including but not limited to floodlights, uplights, or spotlights used for decorative or aesthetic purposes, shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to section 205A-71, HRS. All exterior lighting shall be shielded to protect the night sky;

25. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

26. Failure to comply with any of these conditions shall render this Conservation District Use Permit void under Chapter 13-5, as determined by the chairperson or board.

Respectfully submitted,

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

Approved for submittal:

William J. Aila, Jr., Chairperson
Board of Land and Natural Resources
Dungate Single-Family Residence Environmental Assessment

Approx. Area Affected by Proposed Home Construction

Agricultural State Land Use District
Conservation State Land Use District

EXHIBIT B
Dungate Single-Family Residence Environmental Assessment

Project Site Photos (continued)

▼ View to South

EXHIBIT C
Dungate Single-Family Residence Environmental Assessment

Project Site Photos

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

EXHIBIT C_2
LOT 4
6.600 ACRES,
MORE OR LESS

MAP SHOWING LOCATION OF PROPOSED RESIDENCE, SHORELINE AS CERTIFIED ON MAY 16, 2012 AND FEMA FIRM FLOOD ZONES.

Being Portions of Lot 4 and Grant 2025 to Pumealani At Pahoehoe 1st, South Kona Island and County of Hawaii, State of Hawaii

EXHIBIT D

NOTES:
1. The property boundaries and all other features shown on the map are approximate and may not be exact.
2. The flood zones shown are based on FEMA guidelines.
3. This map is for informational purposes only and does not guarantee the actual suitability of the property for construction.

WEB THOMAS
Dungate Single-Family Residence Environmental Assessment

Floor Plan

EXHIBIT G