

RES24-151
Testimony

MISC. COMM. 371

PLANNING AND THE ECONOMY (P&E)

PLANNING AND THE ECONOMY (P&E) Meeting

Meeting Date: Aug 22, 2024 @ 09:00 AM

Support: 4

Oppose: 17

I wish to comment: 4

Name: Jana Schroeder	Email: daysevens@gmail.com	Zip: 32514
Representing: Self	Position: Oppose	Submitted: Aug 17, 2024 @ 12:16 PM
Name: Ralph Schroeder	Email: r.schroeder110@protonmail.com	Zip: 96734
Representing: Self	Position: Oppose	Submitted: Aug 19, 2024 @ 05:46 AM
Name: Bryan Mick	Email: bkmick@gmail.com	Zip: 96734
Representing: Self	Position: Oppose	Submitted: Aug 19, 2024 @ 08:45 AM
Testimony: Aloha Councilmember Kiaaina and Committee members, I was fortunate enough to grow up on Kalaheo Hillside and my family still owns property there. I have concerns over the proposed DHHL project, but if it is to proceed I also have some suggestions. My concerns stems from the fact that our property, like so many of our neighbors, have experienced serious shifting of the soil resulting in cracks to fences, pools, home walls and even home foundations. This is the rule not the exception on Kalaheo Hillside. I fear any new homes are going to experience the same issues down the road. Therefore I would rather see DHHL build elsewhere in Kailua, or even better purchase existing housing units where people could move into them immediately. It is great irony that the Council is pursuing an empty homes tax while at the same time trying to spur a large single family home development. If the project is to proceed I suggest two amendments. (1) I oppose the land being a gift, rather the City should receive fair market value. If DHHL was strapped for cash, perhaps I would support the gift. But actually they had to got to the Legislature and ask for a two year extension to spend the money they already have. The City should take the funds from the sale of this land and plow it into its affordable housing programs, which are open to everyone. (2) I believe the City or DHHL needs to somehow indemnify the 50 homes that are along the project's border or directly downhill from the project. DHHL/City should pay to survey the homes, and absent any construction activity by the homeowners, DHLL/City should pay to fix any cracks to fences, pools, walls, or foundations that arise in the next 20 or 30 years. The residents should not be forced to take DHHL or the City to court and hope they prove that the project contributed to the damage. Thank you for considering my testimony.		
Name: Wynn Miyamoto	Email: wrm74@yahoo.com	Zip: 96734
Representing: Self	Position: Oppose	Submitted: Aug 19, 2024 @ 04:55 PM

Testimony:

I would like to thank you for allowing me to provide testimony on this issue. I am a resident of Kalaheo Hillside downslope of the proposed location. I am not in favor of the resolution and have had issues with settlement on my property, such as uneven floors, cracking sidewalks, retaining walls, and floor tiles, as well as soil erosion exposing irrigation piping on the hill behind my home. I feel it would be a disservice to the existing homeowners and DHHL constituents to build homes on land that have a history of poor soils.

I am a licensed civil engineer and am aware that there are measures that can be done to mitigate the problems caused by expansive soils. These measure can be expensive and make construction costs unreasonable. The measures also are not guaranteed to resolve soil problems and may only delay problems. Delaying problems would also be a disservice to homeowners because repairing foundation problems would be a financial burden to future generations. Remediation costs would need to be considered for the entire 10 acre property. For residential properties, roadways, and utilities. I understand DHHL will be performing studies to help determine if the project site is appropriate for constructing of residential properties. The results of the studies are only as good as the scope of work provided to the consultants. Geotechnical investigations should include expansive index testing. Boring depths should be sufficient to reach firm surfaces, such as basalt. If the land and construction costs are found to be acceptable for residential properties, if additional Geotechnical borings are recommended by the consultants, they should be performed. I would encourage DHHL to stay involved in the design and construction process and not just hand the project off to a developer to provide the best services and product to their constituents. Permitting agencies require the property owner to sign off on applications for accountability and to take responsibility for the activities occurring on their property. We all would like the best for any future DHHL homeowners and the Department owes it to them to be fully involved and invested in the entire process.

Name:

David Pound

Email:

david.scott.pound@gmail.com

Zip:

96734-1832

Representing:

Self

Position:

Oppose

Submitted:

Aug 19, 2024 @ 09:26 PM

Name:

Sara Izen

Email:

marigold.sara@gmail.com

Zip:

96734

Representing:

Self

Position:

Oppose

Submitted:

Aug 19, 2024 @ 10:41 PM

Name:

Corbett Aaron Kamohaikiokalani Kalama

Email:

corbettkalamaks@aol.com

Zip:

96734

Representing:

Self

Position:

Support

Submitted:

Aug 20, 2024 @ 06:40 AM

Testimony:

Aloha my name is Corbett Aaron Kamohaikiokalani Kalama lifelong resident of Koolaupoko Moku of Oahu, corporate Executive. Community Leader, Cultural

Leader, Paddling coach and resident of Kailua.

My family, like many of the Hawaiian families of Kailua, who'd lived here for many generations- "perpetuators of the Hawaiian culture: mo'olelo (stories), mo'oku auhau(genealogy), mele(songs) , and oli(chants)were not able to live in Kailua , due to being displaced as a result of housing developments that they were unable to access due to the inability to qualify for financing. I'm here in support of the efforts being proposed for consideration. The Department of Hawaiian Homelands has developed

Financing programs which will significantly improve the opportunity for many Hawaiian families to own a home.

Home ownership provides the family with stability , the opportunity to build generational wealth, and sustain the cultural richness of Kailua.

Me ka pu'uwai ha'a ha'a(it's with a humble heart, we say thank you). Corbett Kamoā Kalama

Name:	Email:	Zip:
Jon White	jonwhite.hawaii@yahoo.com	96734
Representing:	Position:	Submitted:
Self	Support	Aug 20, 2024 @ 05:40 PM

Testimony:

I am a lifelong resident of Kailua and grew up on Iliaina St. I believe the selected location will be a blessing for those who qualify for Hawaiian Homes.

I was a former heavy equipment operator for 15 years and can attest to the fact that this type of project is very plausible on the hillside.

I stand in support of this resolution

Name:	Email:	Zip:
Barbara Germann	4beege@gmail.com	96734
Representing:	Position:	Submitted:
Self	Oppose	Aug 20, 2024 @ 09:21 PM

Name:	Email:	Zip:
Judy Mick	ppchawaii@yahoo.com	96734
Representing:	Position:	Submitted:
Self	Oppose	Aug 20, 2024 @ 09:27 PM

Name:	Email:	Zip:
LeGrand Pound	lpound4031@gmail.com	96734
Representing:	Position:	Submitted:
Self	Oppose	Aug 20, 2024 @ 10:14 PM

Name:	Email:	Zip:
Shelley Miyamoto	gammiekerms@hotmail.com	96734

Representing: Self	Position: Oppose	Submitted: Aug 20, 2024 @ 10:21 PM
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Testimony:

Aloha Chair Kia'aina and members of the committee,

I appreciate the amendments made regarding the drainage easements, and also regarding conducting due diligence for DHHL and City & County of Honolulu prior to the conveyance. However, I still cannot support this resolution.

I live on the 600 block of Iliaina Street, the proposed development will be on the slope, directly above/behind my home.

I want to convey the true nature and conditions of the proposed ten-acre site. It is portrayed as vacant land that is just “sitting and waiting” to be developed. However, the truth is the proposed area is up on a sloping hillside with problematic soils (kokokahi clay soil). There are many homes below and around the proposed area that have the same stories of cracking foundations/leaning, or gaps in walls/extensive repair work/uneven floors/signs of hillside slippage.

Because we as homeowners have been paying for extensive repairs (and it is on record that the original landowner Kaneohe Ranch sold the properties at a discount because of the soils), we want to protect our homes and any future homeowners. This could be a potential safety issue, and even having a thorough engineering report cannot 100% guarantee that the hillside will be stable. We are trying to prevent potential hillside slippage problems such as Palolo Valley's Kuahea Street. Per KHON article dated 9/29/23, "Palolo area notorious for landslides set to reopen after \$24 Million stabilization project." "Palolo resident Bill Chismar has lived in the area for over three decades. 'It started as a small slide and just kept growing and growing...'" The City condemned six homes, and spent \$24 million to stabilize the hillside from Kuahea Street to Waomao Road. This is an example of building homes on an unstable foundation.

The proposed site is land on a hillslope that will need to be stabilized and graded, as the topography is steep and not "gently sloping." The sloping degree could be likened to St. Louis heights in Honolulu. I was able to get a Property Tax assessment discount from City and County Real Property Tax Division Case #136363 in 2021, when the Real Property Tax Assessor told me that I could get a tax reduction due to the Kalaheo hillside slope after examining that it could not be developed. There will need to be extensive grading work. I would prefer the hillside not be disturbed, or "treated" with soil amendments affecting its drainage (cement slurry making it less permeable and more water movement downhill into my home). I am concerned about the hillside moving downslope toward my home. My retaining walls (fairly new) along the hillside have cracks in them. I had the walls painted and cracks sealed last year 2023, and some of the cracks have already returned. I am concerned about the effects of grading a hillside with unstable soils for everyone's safety, and to protect everyone's homes.

I please request that any engineering reports or findings be sent or made readily available to the surrounding homes, and propose 60 days period for the affected citizens to review and provide concerns.

Thank you for the opportunity to provide testimony.		
Name: lois crozer	Email: lbc@hawaiiantel.net	Zip: 96734
Representing: Self	Position: I wish to comment	Submitted: Aug 21, 2024 @ 08:46 AM
Testimony: I think this is a stupid idea, and we will find it a waste of money to learn what everyone knows, the ground is extremely unstable.		
Name: Kali Watson	Email: nicole.l.kinilau-cano@hawaii.gov	Zip: 96707
Representing: Department of Hawaiian Home Lands	Position: Support	Submitted: Aug 21, 2024 @ 09:20 AM
Name: Sharon Sawdey	Email: olona@mac.com	Zip: 96734
Representing: Self	Position: Oppose	Submitted: Aug 21, 2024 @ 11:38 AM
Name: James Hancock	Email: eljimb0@comcast.net	Zip: 96734
Representing: Self	Position: Oppose	Submitted: Aug 21, 2024 @ 11:52 AM
Name: Evan Weber	Email: evanlweber@me.com	Zip: 96734
Representing: Self	Position: Support	Submitted: Aug 21, 2024 @ 03:46 PM
Testimony: As a born and raised Kailua resident, I stand in strong support of the exploration of DHHL development in Kailua, and the resolution as amended. Though I testify today in a personal capacity, I am also a member of the Kailua Neighborhood Board, which passed a resolution after receiving input from the residents of Kalāheo Hillside. The residents who shared those concerns will speak for themselves, and I do not speak for the full Neighborhood Board, but I personally feel those concerns are well reflected in the amendments to this resolution by balancing the concerns of the community and due process with the goals of seeing DHHL development in Kailua.		

I ran for the neighborhood board to represent a younger generation of Kailuans who are critically concerned about keeping Kailua affordable so that we can continue to raise the next generation there, especially Kānaka Maoli and Kama'āina. I already know so many who have left Kailua or can't currently imagine coming back, many of them Hawaiian.

In a time of rapid change for our town, there has been a rallying cry for many in our generation of Kailuans: "Keep Kailua, Kailua." To me, that means Keeping Kailuans in Kailua, and critically, Keeping Kānaka in Kailua.

The Native Hawaiian people and cultural institutions of Kailua greatly enhance our community and are a huge part of what make Kailua such a special place. As a non-Hawaiian kama'āina, I feel particularly called to speak up about the ways in which preserving Hawaiian people and culture in Kailua benefits me and others like me, and is not just to the benefit of Kānaka Maoli. From the paddling clubs that raised me, to the hula halau that were formative to my sister and partner, to the Hawaiian Civic Clubs and organizations that protect our culture, history, and place names, to the kia'i who preserve our 'āina, wai, and kai, to the everyday friends and generational keepers of mo'olelo and traditions of days past and present — Hawaiian people, institutions, and leaders greatly enhance our Kailua community to all of our benefit. It truly excites me to think about the cultural richness and immeasurable benefit that a DHHL community would bring to Kailua at a time when so many Kānaka and Kama'āina are being pushed out by the cost of living. Given the historical importance of Kailua to the Hawaiian people, and as a wahi pana our illegally overthrown Queen, it also seems spiritually critical to have Kailua play a role in one of the few forms of reparations afforded by the government of the United States.

With all that said, I do hope the city and DHHL will take seriously some of the concerns raised by the community and conduct sufficient and substantial due diligence in evaluating the land's suitability. If, as some fear and suggest, this particular land does not end up being suitable for DHHL development, I hope that the city, state, private landowners, and broader community will continue to work together to find a way to have Kailua be a part of fulfilling our collective Hawaiian Homelands trust obligations, and I am grateful to Vice-Chair Kia'āina and Chair Waters for injecting urgency into this critical objective that I hope we can see come to pass.

Name:	Email:	Zip:
Christopher Evans	cwevans727@gmail.com	96734
Representing:	Position:	Submitted:
Self	I wish to comment	Aug 21, 2024 @ 04:39 PM

Name:	Email:	Zip:
Ryan Agee	r_agee@hotmail.com	96734
Representing:	Position:	Submitted:
Self	Oppose	Aug 22, 2024 @ 06:57 AM

Testimony:

I purchased my home in 2021 on the 600 block of ILIAINA ST. My property is abutted to the property in the proposal. I strongly oppose this resolution due to the unsuitability of the soil, the already stressed utilities of our neighborhood, and

the risk that will be pushed upon future residents.

Since 2021 we have had to address numerous MAJOR repairs on our home as a result of the shifting soil. Our retaining wall in the backyard collapsed, the easiest of repairs and the most obvious. In addition, we've had to add another retaining wall to push back against the sliding hill, replaced sewer lines UNDER OUR SLAB AND BACKFILLED the trenches with ROCK. That repair was in the \$45K realm. We also have falling fences, cracked floors, broken tiles, and sunken flooring. The kitchen plumbing was rerouted before we purchased the home, and that too is due to the shifting soil.

During the KNB hearing, one member questioned our plea to not build, stating that the current homeowners all took on a known risk when purchasing these homes. Although this is true, we did not have an entire room full of current home owners warning us about the EXTENT of the cost we would incur. The grossly tone deaf comment further underscores the need for current homeowners to disclose the extent and cost of our repairs. Mine are in the \$75K range to date, and that's barely 3 years of ownership. I would have had second thoughts on signing my purchase agreement with this amount of testimony made on this resolution.

The utilities are already outstretched. The state of the road intersection of Mokapu and Onewa, littered with potholes since the winter, is just the beginning. The utilities are barely sustained for current residents to include epoxy lined sewer lines and exploding water mains.

My biggest concern is that future residents will incur similar costs in their home ownership experience. The soil is shifting, not just for my home, but my neighbors as well. It is almost certain that these future owners will have costs similar to ours. And for what, because we are more concerned about developing this parcel that has been reviewed numerous times and found unsuitable. Let's move forward with a park that can benefit our community, and build DHHL lots in a more suitable location to give the peace, pride, and pursuit of happiness to qualified citizens.

Name: Ferne Fegley	Email: ferne554@gmail.com	Zip: 96715
Representing: Self	Position: Oppose	Submitted: Aug 22, 2024 @ 07:20 AM

Testimony:
"Plausible, ability to deny responsibility"
What may seem to be a blessing to native Hawaiians would turn out to be a curse.
A dwelling on this land is a constant expense.
I am an original owner of a lot on Ilimano Street and can attest to continuing problems.
Give the Native Hawaiians some good land.

Name: Matthew Darnell	Email: mdarnell@gmail.com	Zip: 96734
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Representing: Self	Position: Oppose	Submitted: Aug 22, 2024 @ 07:35 AM
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Testimony:

I do not think that DHHL has the ability or processes to take care of this property. Unlike other properties that DHHL owns, this one needs regular maintenance to clear brush and keep the culvert clear.

I would like to see that DHHL has budgeted and hired a company to maintain the property the same way the state does today.

If not properly maintained it would be a huge liability for DHHL.

Name: Jason Garrett	Email: garrett.round.two@gmail.com	Zip: 32571
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Representing: Self	Position: I wish to comment	Submitted: Aug 22, 2024 @ 08:02 AM
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Testimony:

Ladies and Gentlemen,

I'm Jason Garrett, and I'm opposed to this resolution as written... our home is the last house on Ilimano Street and the homes in this proposed development would be built directly beside ours. We deal with issues related to the shifting ground on this hillside constantly, and I can tell you, that building on this hill would be a disservice to the already established residents, as well as the Native Hawaiians you have in mind for this development, unless...the resolution is edited...

-For one...it should be edited to read that this community will absolutely NOT be built to relaxed standards...not on this hillside...the ground is too unstable, and no amount of bolstering the terrain will prevent homes built to relaxed standards to survive a few years...much less decades. Affordable housing shouldn't mean substandard housing.

-We also want Amendment D to have specific language requiring the homes to reflect the surrounding community, to the exclusion of duplexes or larger multifamily buildings.

-And for Amendment L, we need to make sure due diligence is conducted to the required standards. All stakeholders need to know the truth about this land, in sufficient detail, so that the best plans can be made, otherwise, the entire community is taking on risks that can cost us all in the future. Don't rush this...do it right, the first time...and that might ensure we only have to go through this once. We all know the parable about the foolish man who built his house on a foundation of sand, just to watch it collapse...none of us want to be remembered in that way...do we?

Thank you.

Jason and Kristen Garrett

Name:

L Simao

Email:

simaobl@hawaiiantel.net

Zip:

96734

Representing:

Self

Position:

Oppose

Submitted:

Aug 22, 2024 @ 08:27 AM

Testimony:

The land on the hillside where the property is located is not suitable for development of any kind. The soil is unstable and over time causes significant damage to the structures built on it. Countless homeowners on Kalaheo Hillside have had to spend tens of thousands of dollars each just to mitigate the damage done to their homes by the moving soil. Studies have already been done which show that this area is not suitable to be developed.

The land intended for this transfer is very steep. There is concern for potential damage to the homes below this parcel of land due to soil erosion or flooding during heavy rains if the hillside were to be graded and developed.

As a homeowner who has spent a significant amount of time and money fixing my home, I feel that Hawaiian Homelands would better serve the Hawaiian people by building homes in an alternate area which would not require so much cost to build. That way they would be able to build more homes with the same amount of money which would translate to helping more people.

Name:

Kyle Smith

Email:

pkylesmith@me.com

Zip:

96734

Representing:

Self

Position:

Oppose

Submitted:

Aug 22, 2024 @ 08:43 AM

Name:

Choon James

Email:

ChoonJamesHawaii@gmail.com

Zip:

96762

Representing:

Self

Position:

I wish to comment

Submitted:

Aug 22, 2024 @ 08:57 AM

To: Mrs. Kia' Aina and Honolulu City Council
<https://hnlldoc.ehawaii.gov/hnlldoc/testimony>

From: Jana Schroeder, August 17, 2024,
Owner 603 Ilimano Street 96734

RE: Testimony in Opposition of Resolution 24-151 & Amendments.

I do appreciate Mrs. Kia'aina and Honolulu City County taking time to work together and address many public concerns regarding potential conveyance of 10 acre parcel to DHHL.

I oppose Resolution 24-151 & Amendments based on history of unstable soil, flooding, fires & negative impact development has on environment, property, people in Kalaheo Hillside & future residents.

Amendments D, I, L and M need to be amended to include specifics for clarification:

Resolution Amendment D, zoning to be consistent with character of surrounding neighborhood revised to include Single Family Homes, with lot land sizes 7560 square feet to 10,591 SQ FT. Research from Honolulu Real Estate MLS website, Hicentral.com, Kalaheo Hillside 14 Homes & 1 lot for sale and sold in 2024. All are Single Family homes, 9 out of 15 lots 9,200 SQ FT or greater in size.

Amendment Resolution I, Development consistent with character of surrounding neighborhood revised to include Single Family Homes, 3 to 8 bedrooms, 2 to 4 baths with living area 1223 sq ft to 4235 sq ft. or larger. In 2024 Single Family homes 14 for sale & sold in Kalaheo Hillside. Research from Hicentral.com mls.

Amendment L, City Council to do due diligence Engineer reports to determine suitability of proposed development to include City Council to provide any and all Due Diligence Engineer reports to the Pubic & Kailua Neighborhood and allow a minimum of 65 days for public review, consideration and comment. All to be done prior to any conveyance of subject parcel to DHHL.

Amendment M, City & County Due diligence Impact on proposed development prior to conveyance to DHHL needs revision to include: City and County due diligence reports to include Structural engineer, Infrastructure, Geological, Fire Hazard, Public Safety & Utilities, Waste Management, Environmental impact studies. C & C to provide any and all reports to Public and Kailua Neighborhood Board and allow a minimum of 65 days for review, consideration and comments prior to any conveyance of property to DHHL. Should the City & County Honolulu and DHHL proceed with development and it results in damages to existing homes & structures on Kalaheo Hillside, the C&CH and DHHL are financially liable to make all repairs to make all properties and owners whole as well as covering any and all litigation costs.

Sincerely,

Jana Schroeder

TO: Honolulu City Council Vice Chair: Ms. E Kia'Aina
<https://hnl.doc.ehawaii.gov/hnl/doc/testimony>

19 August 2024

FROM: Ralph Schroeder, Owner 603 Ilimano Street Kailua 96734

RE: Oppose Resolution 24-151 and Amendments

I oppose Resolution 24-151 and Amendments in current words.

My concern is the Honolulu City Council is considering conveying a parcel surrounded with known severe soil settlement which also is an area identified on USGS map for moderate risk susceptibility landslide Hazard. Additionally, the parcel is in a Fire hazard as adjacent preservation land has had many fires. Also, as you are aware, the environmental damage is significant. This is the exact type of development that contributes to climate change and the associated negative impacts. If the C&CH and DHHL care about these issues (as they claim they do), then this development will not proceed.

Developing this land will produce negative impact to surrounding homes and structures, specifically through settlement, flooding, stress to driveways and retaining walls, etc. What assessment is planned to address and mitigate this threat. Full financial liability for damages to properties or people caused in Kalaheo Hillside development, particularly after being made aware by numerous concerned citizens of possible impact, will be on the City & County of Honolulu and DHHL.

Amendment D

It is imperative that there be an additional language in proposal that the City & County to provide all and any reports to the Public and K.N.B. and allow minimum 90 days for them to review, consider and make comments on reports prior to any conveyance of parcel to DHHL.

Amendment I

Development consistent with character of surrounding neighborhood needs to include. Custom built 3-8 bedrooms and 2-4 baths similar to homes in the neighborhood that would be valued between \$1,130,000 and \$2,115,000. Per Honolulu Realtor MLS 9 single family homes sold in Kalaheo Hillside neighborhood this year. 6 of the 9 homes were on 10,000 sq ft plus lot size, 1 of the 9 homes was on 9375 sq ft. lot, 1 of the 9 was on a 7,809 sq ft. lot. and one was on a 7,560 sq.ft. lot

Amendment L revise to include:

All and any Due Diligence Engineer reports to determine suitability of Kalaheo Hillside proposed development be provided to the Public and KNB along with allowing 90 days for Public review, consideration and comments on reports prior to any conveyance of subject parcel to DHHL.

Amendment M to revise to include:

City and County Due Diligence any and all reports to include environmental impact statement, Fire hazard, Infrastructure Engineer, Waste management, Geological to be provided to Public and Kailua neighborhood review and allow 90 days for Public review, consideration and comments prior to any conveyance of parcel to DHHL.

Thank you,
Ralph Schroeder

Subject: Written Testimony of David S. Pound to the Committee for Planning and the Economy (P&E) Meeting, August 22, 2024, concerning City Council Resolution 24-151 (Conveyance of Kalaheo Hillside Parcel (Tax Map Key 4-4-033:018) to the Hawai‘i Department of Hawaiian Home Lands [DHHL]) to include changes and amendments in 24-151 CD1.

- 1) **Bottom Line:** as a homeowner along the Kalaheo Hillside, I greatly appreciate the amendments and modifications that have been made to Resolution 24-151 CR1 (hereinafter, “the Resolution”). However, I remain opposed the Resolution and the Amendments as currently written because, taken together, the Resolution does not provide sufficiently explicit protections for existing homeowners abutting the Kalaheo Hillside parcel (the “Site”) or the potential homeowners who may live in homes developed on the Site.
- 2) **Requested Action by the P&E Committee.** In addition to final Resolution, language indicating that the City will not convey the Site to DHHL until both the City and DHHL complete more thorough surveys and “due diligence,” the P&E Committee should further modify and strengthen the proposed Amendments to the Resolution explicitly protecting existing homeowners, residents, properties, and potential Homesteads along the Kalaheo Site.
 - Further, the Resolution should reasonably direct both the City and DHHL to provide these assessments or “due diligence” reports to residents and the public with sufficient time for public review, comment, and testimony. Only then should the P&E Committee begin to consider recommending the approval of the Resolution for full City Council approval and possible conveyance of the Site to DHHL.
 - Additionally, any final version of the Resolution should specify that DHHL fully acknowledge (in writing) DHHL’s inherent responsibility to assume all of the City’s current responsibilities and financial liabilities for the Site as part of the land’s conveyance.
 - Lastly, any final version of the Resolution should stipulate that should either party determine the Kalaheo Site unsuitable for development, or that the City no longer desires to convey the Kalaheo Site to DHHL, then the City administration and the Department of Planning and Permitting (DPP) must act expeditiously to “down-zone” the parcel’s “Residential” zoning designation to “Preservation” in keeping with the other preservation lands throughout Kalaheo Hillside and to prevent further attempts to “develop” the Kalaheo Site.
- 3) **Proposed Revisions to Existing Amendments.** There are currently thirteen (13) proposed amendments (A through M) to Resolution 24-141 CR-1. The following paragraphs provide modest re-wording recommendations – and supporting rationale – for three (3) of those amendments (I, L, and M) which are of significant interest to ensure the protection of existing homeowners and current/future residents along Kalaheo Hillside. Two (2) additional proposed amendments are provided to strengthen protection-oriented wording for existing homeowners and residents along Kalaheo Hillside.

○ Amendment “I”.

- Amendment I, as written: “Amends the 22nd WHEREAS clause to clarify that conveyance of the Kalaheo Site to the DHHL for the development of affordable single-family housing consistent with the character of the surrounding neighborhood serves a public purpose and is in the interest of the residents of the City.”
- Amendment I (proposed changes): “Amends the 22nd WHEREAS clause to clarify that conveyance of the Kalaheo Site to the DHHL for the development of affordable single-family homes on parcel sites equal to, or greater than, 10,000 ft² or larger in size to remain consistent with the character of the surrounding neighborhood. Duplexes or multi-family dwellings will not be constructed on the Site. Such development serves a public purpose while respecting the concerns of the current residents along Kalaheo Hillside and the City.”
- Rationale: R-7.5 zoning (as well as R-10, according to the C&C Department of Planning and Permitting (DPP) Land Use Ordinance (LUO) revised version, dated February 6, 2024) indicates that duplexes, “dwellings, detached, one-family,” and “dwellings, detached, two-family” are permitted, and could (hypothetically) be built within smaller sub-divided parcels within the Site. An overwhelming majority of existing homesites along the entirety of Kalaheo Hillside are $\geq 10,000$ ft² (0.22 acres) in size. Hence, for any development of the Site to remain “consistent with the character of the surrounding neighborhood,” very specific language should be added to Amendment “I” specifying ONLY single-family homes may be developed on the Site or any sub-parceled lots, **and** any sub-parceled lots must be 10,000 ft² or larger in size.

○ Amendment “L”.

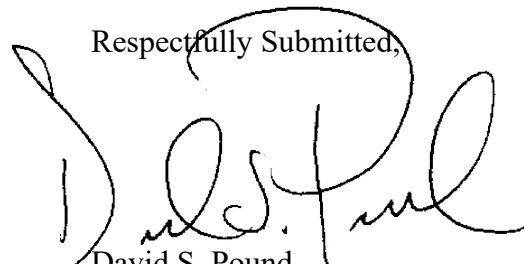
- Amendment L, as written: “Amends the 24th WHEREAS clause to provide that the portions of the Kalaheo Site that are being conveyed will be conveyed (instead of sold) in an “as-is,” “where-is” condition, and that the DHHL will need to conduct due diligence prior to the conveyance to determine the suitability of the Kalaheo Site for the proposed development, including preparation of a Preliminary Engineering Report (PER) detailing utility and infrastructure availability, topography, soils, physical constraints and access restrictions, and other pertinent information.”
- Amendment “L” (proposed changes): While there is only change to the existing wording is needed, an additional sentence should be added to strengthen the Amendment: **Any DHHL due diligence assessment(s) and/or a related PER(s) must be made available to Kalaheo Hillside homeowners, residents, and the public, with sufficient time (not less than 60 days) for full consideration and comment before any conveyance of the property is made by the City to DHHL.**
- Rationale: The findings of any DHHL assessment, associated “due diligence” efforts, and/or any PER(s) must be made available to the public (“Sunshine Laws”) with

- sufficient time for Kalaheo Hillside homeowners and residents, and the public, to consider, review, and comment to their elected officials (e.g., the Kailua Neighborhood Board, 3rd District Representative) before final conveyance decision concerning the Kalaheo Site by the City.
- Amendment “M”.
 - *Amendment “M”, as written*: “Adds a new 25th WHEREAS clause to provide that the City will also need to conduct due diligence prior to the conveyance, including evaluation of the potential impacts of the proposed development to the surrounding neighborhood, such as impacts to traffic and infrastructure, as well as a survey of any existing soil-related damage to the homes abutting the Kalaheo Site.”
 - *Amendment L (proposed changes)*: While no change to the existing wording is needed, an additional sentences should be added to clarify and strengthen the Amendment: **The City and County will provide all due diligence study(ies), evaluation(s), and/or assessment(s) regarding existing soil-related damage to existing homes abutting the Kalaheo Site and/or the sufficiency of existing, and future, physical infrastructure required to support any proposed development of the Kalaheo Site by DHHL (e.g., sanitary sewer capacity; traffic studies; roadway additions/improvements; storm water management; provision of potable water, gas, electric, or other utilities; wildfire prevention, etc.). The City and County will make these reports available to Kalaheo Hillside homeowners, residents, and the public, with sufficient time (not less than 60 days) for full consideration and comment before any conveyance of the property is made by the City to DHHL.**
 - *Rationale*: Any findings contained in any City assessment(s) and/or “due diligence” efforts concerning the Site must be made available to the public (“Sunshine Laws”) with sufficient time for Kalaheo Hillside homeowners and residents, and the public, to consider, review, and comment to their elected officials (e.g., the Kailua Neighborhood Board or the 3rd District Representative) before final conveyance decision concerning the Kalaheo Site by the City.
 - Proposed Additional Amendments. Proposed Amendment “N” mitigates the absence of sufficient language in the current Resolution indicating the incurred financial liability of the City and/or DHHL resulting from damages to existing homes abutting the Kalaheo Site should the City convey the parcel and DHHL proceed with development. Proposed Amendment “O” reflects statements concerning reaching a “final” resolution of the Site’s suitability for development previously made by 3rd District Representative Ikaika Anderson a previous 2016 attempt to develop the Site, and reiterated by the current 3rd District Representative, Esther Kia‘āina, during the August 1, 2024, Kailua Neighborhood Board meeting.
 - *Proposed Amendment “N”*: Would add a new 26th WHEREAS clause to provide that, upon conveyance, the City and DHHL incurs full financial liability for the expedient repairs to any damages to the existing homes and lands abutting the

Kalaheo Site resulting from the City's conveyance and DHHL's development of the Kalaheo Site.

- *Proposed Amendment "O":* Would add a new 27th WHEREAS clause to provide that should the City and/or DHHL's diligence/assessments lead to a decision by either party that the Kalaheo Site is not suitable for development or that the City no longer desires to convey the Kalaheo Site to DHHL, then City administration and the Department of Planning and Permitting (DPP) will immediately initiate the re-zoning process to alter the parcel's current R-7.5 zoning designation to Preservation P-1 zoning which is in keeping with other preservation lands along Kalaheo Hillside, and will prevent future attempts to develop the lands. [*Note: again, this WHEREAS clause is entirely consistent with the concluding comments made by Rep. Kia 'āina's Kalaheo Hillside constituents at the August 1, 2024, Kailua Neighborhood Board meeting.*]
- 4) **Summary.** More specific and detailed language such as proposed in this testimony should be included in the final version of Resolution 24-151 to alleviate the rational and logical concerns of existing homeowners and residents along the Kalaheo Hillside.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'David S. Pound', written over a large, stylized circular flourish.

David S. Pound
605 Ilimano Street
Kailua, Hawai'i

Enclosures:

- 1 – Examples of other City and State properties in Windward Oahu that could/should be considered for development into Hawaiian Homestead locations.
- 2 – Written Testimony of David Pound, submitted for the July 25, 2024, City Council P&E Committee Meeting.

1. The following screen-captures from the City and County of Honolulu, Department of Budget and Fiscal Services, Real Property Assessment Division's Website, URL: <https://qpublic.schneidercorp.com/Application.aspx?AppID=1045&LayerID=23342&PageTypeID=1&PageID=0>. There are multiple parcels of unused land in Windward Oahu that appear similarly suitable (and considerably larger) than the Kalaheo Site for the Development of Hawaiian Homesteads.
2. In the following three (3) examples – there is more than 900 acres of property that appears to be reasonably available, closely located to physical infrastructure and, **that combined, are 90 times larger than the 10-acre Kalaheo Hillside plot.** Why is DHHL not using the \$600 million dollars allocated by the State of Hawaii in its 2022 budget to develop these lands and truly make a substantive impact on the 11,000 Native Hawaiians current on the wait list?
 - a. Example 1. Owner: City and County of Honolulu: 375.97 acres @ 48-225 Waikane Valley Road. Agriculture zoned, but the City and State have both indicated that current zoning is waivable for to address the State's housing crisis and lack of Native Hawaiian Homesteads. There's no tax revenue received from it.



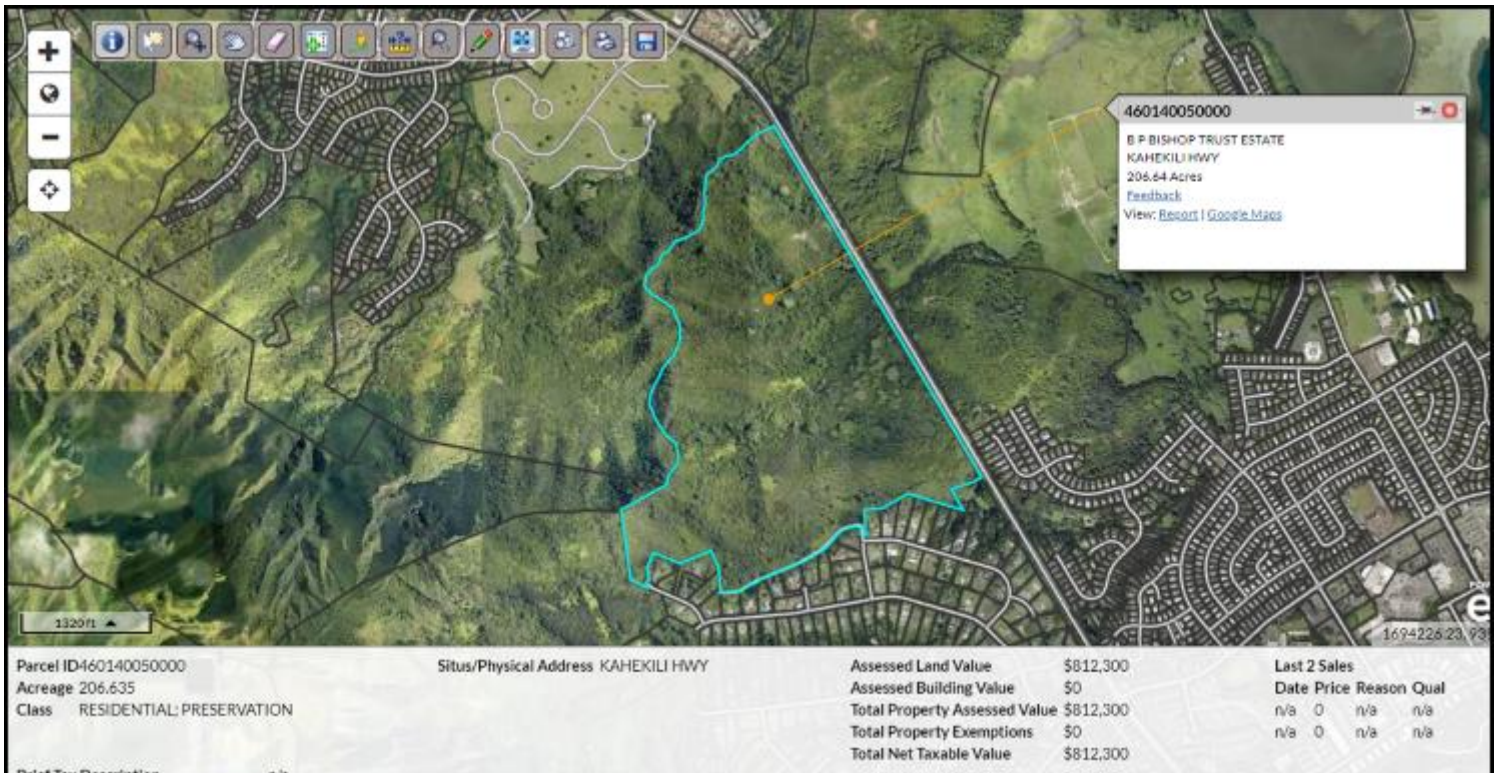
- b. Example 2. Owner: Hawaii Community Development Authority (HCDA): 385.69 acres @ 46-206 Ahuinani Place. It is zoned preservation. Again, there's no tax revenue from that land either.



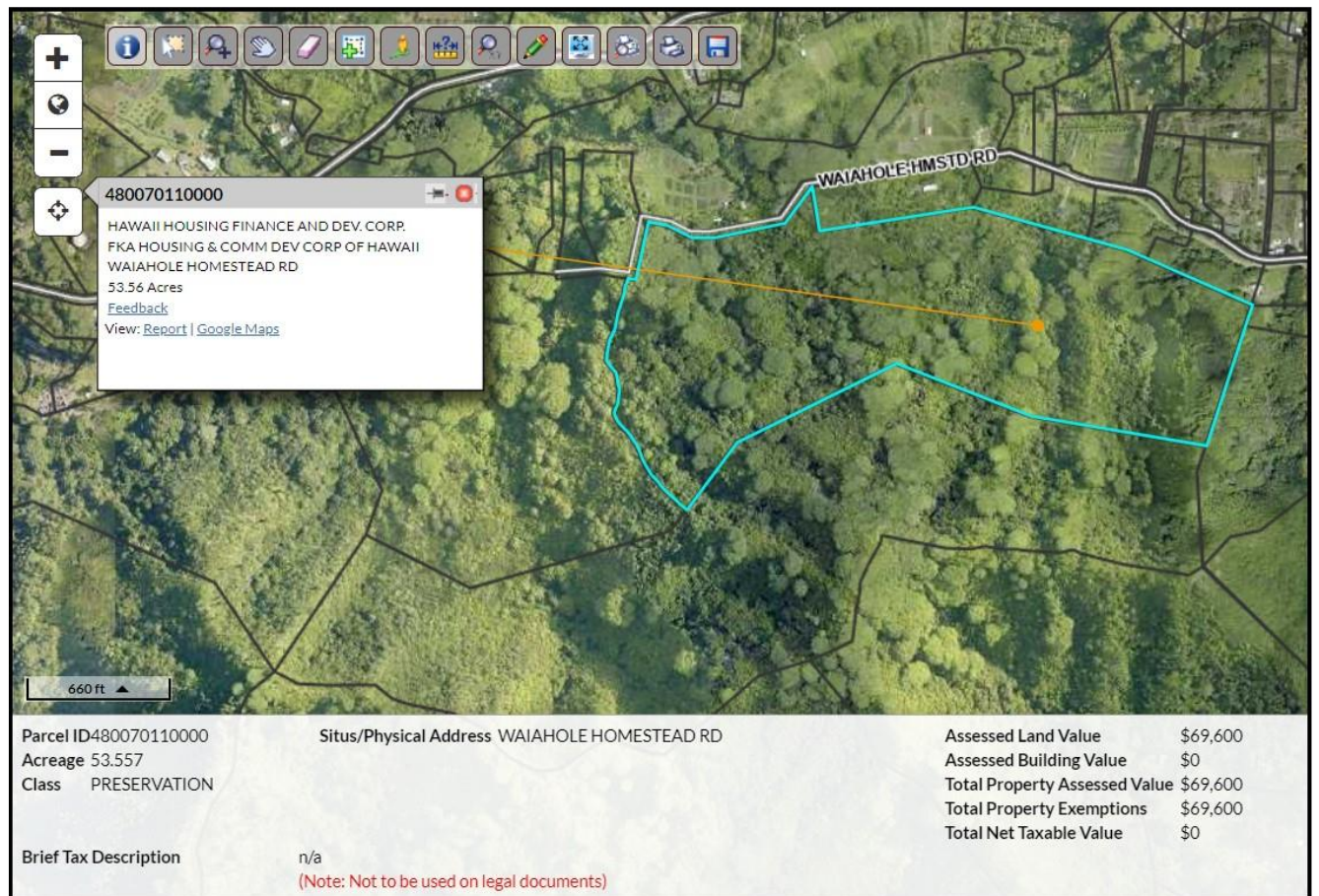
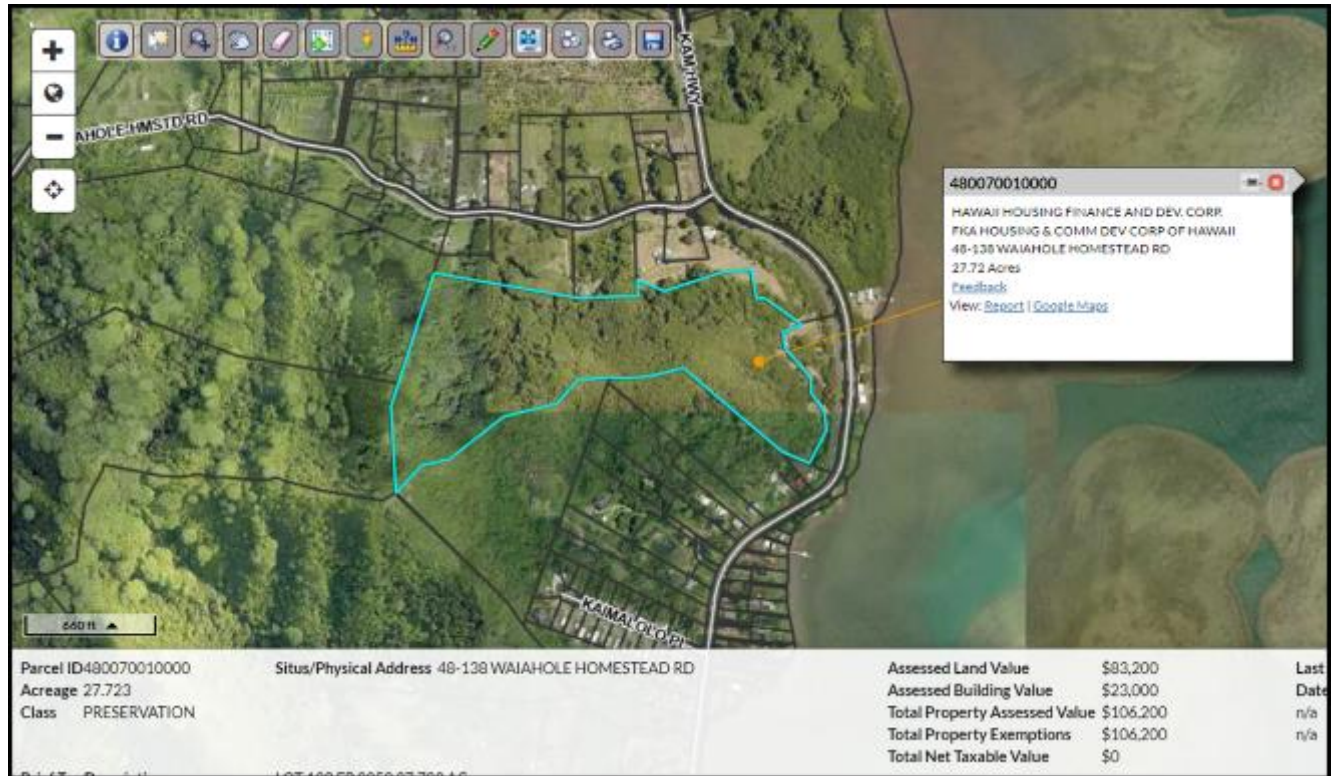
- c. Example 3. Owner: DHHL. 136 acres along Haiku Plantation Drive; Zoned preservation.



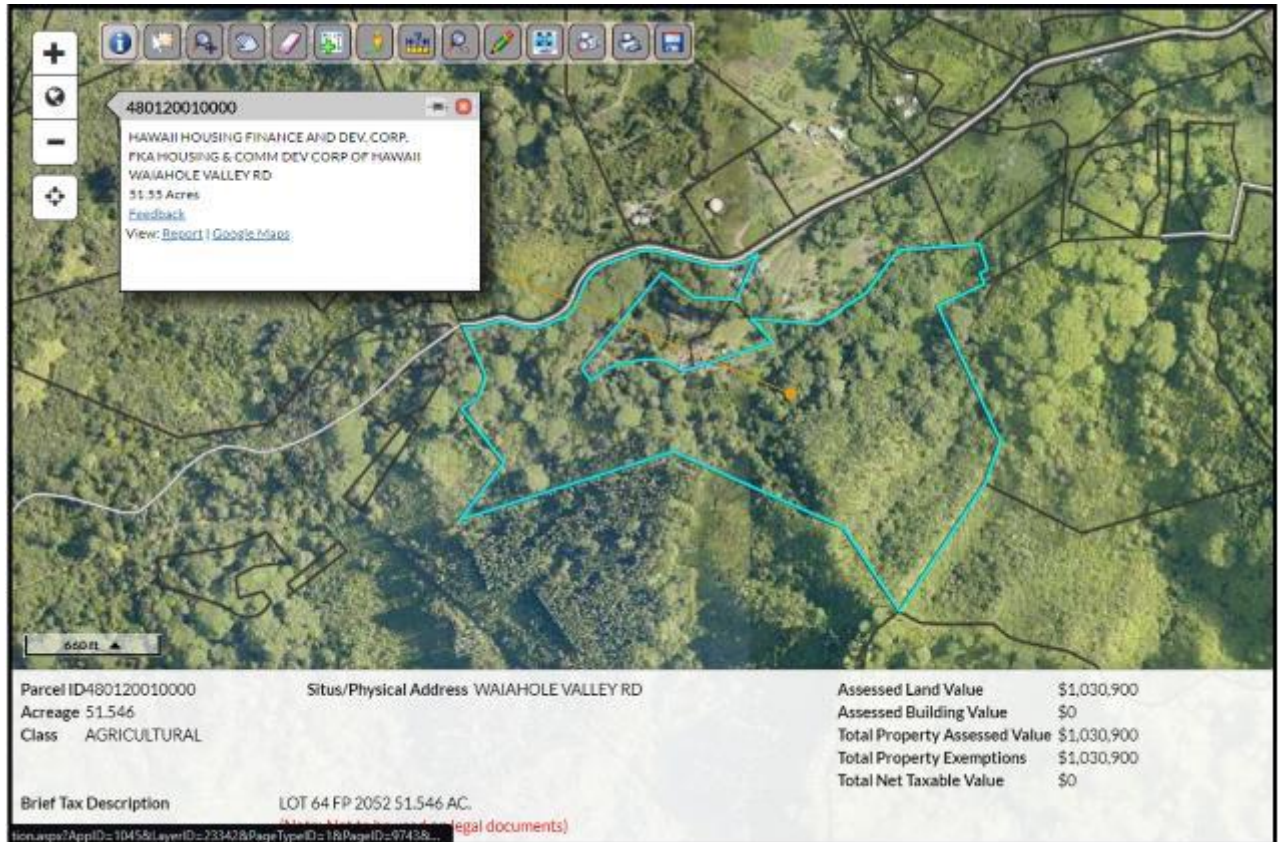
d. Six (6) similar examples:



ENCLOSURE 1 to the Written Testimony of David S. Pound
in support of the August 22, 2024 P&E Committee Meeting



ENCLOSURE 1 to the Written Testimony of David S. Pound
in support of the August 22, 2024 P&E Committee Meeting



Why are the State and/or DHHL not pursuing these options?

July 23, 2024

Subject: Written Testimony of David S. Pound to the Committee for Planning and the Economy (P&E) Meeting, July 25, 2024, concerning City Council Resolution 24-151 (Conveyance of Kalaheo Hillside Parcel (Tax Map Key 4-4-033:018) to the Hawai‘i Department of Hawaiian Home Lands [DHHL]).

- 1) **First and foremost** – the community’s expressed concerns over the potential development of the Kalaheo Hillside parcel (the “Site”) are **not** a NIMBY issue nor reflect any objections **whatsoever** to rightfully seeking the provision of lands for homesteads or agricultural purposes for Native Hawaiians.
 - The community’s testimony to date reflects our sincere concerns about State and City resource stewardship and governmental process transparency. We, the homeowners, citizens, and District 3 constituents, want to ensure Resolution 24-151– and any actions resulting from an approved Resolution, to include future development of the Site – “do no harm” (intentionally or unintentionally) in the process of rightfully wanting to “do good” for Native Hawaiians.
- 2) **Requested Action by the P&E Committee.** Any final version of Resolution 24-151 (hereinafter, “the Resolution”) must explicitly state that the City will not convey the Site to DHHL until DHHL has completed a thorough geologic and urban infrastructure availability, suitability, and impact survey. Further, that DHHL must provide these reports with sufficient time for public review, comment, and testimony. Only then should the P&E Committee begin to consider recommending the approval of such a Resolution for full City Council approval and subsequent conveyance of the Site to DHHL. In any proposed Resolution, the City must specify that DHHL fully acknowledge (in writing) their inherent responsibility to assume **all** of the City’s current responsibilities and liabilities for the Site as part of the land’s conveyance
- 3) **Additional Context and Discussion.** As currently written, the Resolution is replete with emblematic and historical citations justifying the rapid actions proposed in the Resolution. However, the Resolution is significantly lacking in substantive, meaningful provisions, and detailed safeguards to formally ensure and legally codify any pre- and post-conveyance protection of the Kalaheo Hillside’s existing lands, associated properties (homes) and property owners and residents, and to mitigate and prevent the almost certain negative impacts resulting from the Site’s development to the same.
 - What perhaps is most troubling is that many Community members have attempted to directly communicate these concerns with supporting documentation to Ms. Kia‘āina via oral testimony presented during two Kailua Neighborhood Board meetings (June and July), in-person meetings, and multiple attempts by email or telephonic communications– most of which have never been acknowledged. In reading the proposed amendments to the Resolution, there are **none** that support the Hillside homeowners’ and residents’ expressed concerns – instead, just that the City’s will retain any roads created in the development of the Site while divesting (canceling) four (4) drainage easements.
 - Constituent homeowner and resident concerns are further exacerbated by the manner by which most learned of the Resolution. For some, it was the presence of local TV reporters literally walking along the periphery of the Site seeking video to accompany their evening news reports on the matter just a day after it was announced. For others, it was a long and detailed

Opinion/Editorial in the *Honolulu Star Advertiser* – published the morning following the Resolution’s announcement; still others found out via an internet story posted at the Honolulu Civil Beat’s website (<https://www.civilbeat.org/2024/06/honolulu-city-council-proposes-kailua-land-sale-for-hawaiian-homelands/>).

- Two days following the Resolution’s announcement, Ms. Kia’āina briefly discussed her proposed Resolution during the June 6, 2024 Kailua Neighborhood Board (KNB). With only a two-day notice and no previous discussion or notice of intent provided by Ms. Kia’āina to the Hillside community, there were obviously few residents present at June’s KNB and fewer still with sufficient knowledge to express their concerns over the Resolution to the KNB and Ms. Kia’āina.
 - Subsequently, during a June 19, 2024 “walk about” along the 600-block of Iliaina Street – Ms. Kia’āina and an office assistant provided some Hillside residents with one-page hand-out providing some details concerning her Resolution and the ensuing process, creating only more questions for Hillside homeowners and residents.
 - During the July 11, 2024 KNB, additional Kalaheo Hillside homeowners and residents voiced their significant concerns to the KNB, and requested the KNB draft a motion and letter of concern to the P&E committee. Unfortunately, the KNB cannot approve this motion until their next meeting, August 1, 2024, which occurs after the July 25, 2024 P&E Committee meeting. Additionally, during July’s KNB, Ms. Kia’āina joined via Zoom and did not offer any response to the oral testimony concerning her Resolution. She did provide brief comments concerning her proposed amendments, and answered one question during her portion of the KNB agenda.
 - Unfortunately, the resulting perception of many within the Hillside community is that Ms. Kia’āina – the co-author of the Resolution, and perhaps not coincidentally, the Chair for the City Council’s P&E committee – appears to be expediting it for full City Council’s approval prior to the November 2024 general elections. In fact, Ms. Kia’āina has made such actions a significant issue and stated achievement as part of her re-election campaign. (See: <https://onyourballot.vote411.org/candidate-detail.do?id=68574170#c26847420&ui-state=dialog>)
- 4) **Therefore**, it is more than prudent for the homeowners and residents of Kalaheo Hillside to provide their detailed observations and significant concerns regarding the proposed Resolution and its current amendments as offered by Ms. Kia’āina.
- 5) **Primary Concern**. There is no specified requirement to conduct and complete a detailed and thorough soil and physical infrastructure analysis **before any City conveyance of the land to DHHL**. The Resolution’s wording makes it appear that the City desires to convey the lands **BEFORE** the completion of any Preliminary Engineering Report (PER) or conduct of necessary Urban Management Assessments. **Language must be added to any final Resolution that expressly states the City will not convey the Site to DHHL until DHHL conducts a thorough geologic and infrastructure survey, provides these reports to the public with sufficient time for review, and fully acknowledges (in writing) DHHL’s inherent responsibility to assume all the City’s current responsibilities and liabilities for the land Site as part of the land’s conveyance from the City to DHHL.**

- Principal Related Matter – Inherent soil instability within the Site. – the “soil” along Kalaheo Hillside is primarily *Kokokahi* clay. Its inherent instability, and the resultant level of physical infrastructure damage, and resulting monetary impact from the ever-shifting land mass to existing home owners and residents on the east side of Kalaheo Hillside due to the soil’s instability **are significant**.¹ Hillside homeowners, particularly those down-hill from the Site along the 600-block of Iliaina, will be placed at significant risk of soil shifting should the limited, shallow-rooted grasses and Koa-Hale trees be scraped away as part of the Site’s development. The City’s canceling and absolving itself of the four (4) drainage easements would only exacerbate stormwater runoff management and compound the impact of soil instability.
 - The incredibly poor soil conditions and lack of soil stability within the Site is a historically established fact. Such facts are documented in multiple soil surveys and the current and historical evidence of homeowner “settlement” issues going back to the establishment of the Hillside home parcels in the 1950s.²
 - In more recent history, and within the last decade, there have been two attempts made by the City to sell the Site to a commercial developer – both of which failed due to the excessive costs to establish supporting infrastructure (water, sewer, storm water drainage, electrical) and the Site’s significant soil instability.
- 6) **Other significant areas of concern.** During both the June 6, 2024 KNB, and her subsequent “walk about” along Kalaheo Hillside on 19 June 2024, Ms. Kia‘āina *reiterated that the DHHL did not plan to build multi-family buildings on the site to ensure it remained in keeping with the character of the surrounding neighborhood* (e.g., single-family homes). She further stated that there were estimates that 35 to 60 homes could eventually be built, but exactly how many housing lots are actually created there could be dependent on a number of factors.
 - Parcel Sizes. Examination of the existing parcel sizes via the C&C Department of Budgeting and Financial Services (BFS) Graphic Information Site (GIS) (<https://cchnl.maps.arcgis.com/home/index.html>) indicates that along the 600-block of Iliaina Street, and throughout most of the Kalaheo Hillside, land parcels are approximately 10,000 ft² in size. Mirroring the existing parcel footprint fronting the Site along Iliaina Street and replicating it onto the upslope Site indicates there are approximately 27, 10,000 ft² similarly-sized parcels that could possibly be developed on the Site. (See Figure 1.)

¹ See the submitted testimony of Ms. Judy Mick, which includes a 1952 “*Soil Conservation Study of the Territory of Hawai‘i*” conducted by the United States Department of Agriculture describing the Kokokahi clay soils in detail.

² See the submitted testimony of Ms. Judy Mick which includes Hillside Residents statements concerning the soil instability impact on their homes and monetary expenditures to conduct soil survey and property repairs.

- The Resolution indicates no specified zoning or deed restrictions (e.g., rezoning to R-10 vs. current R-7.5; no duplexes allowed) from the City to DHHL upon conveyance that would protect against future over development of the Site. Current homeowners and Hillside residents should be protected from any developer “stuffing” the maximum number of dwellings into each parcel, or further sub-dividing parcels, resulting in a homestead completely inconsistent with the existing nature of the long-standing, single-family parcels, further exacerbating the impact to an already overburdened physical infrastructure network, and negatively impacting the soil conditions on the Site.



Figure 1. Comparative Development of Kalaheo Hillside

- While possibly outdated, the *existing R-7.5 zoning allows for duplexes on smaller (7000 ft²) lots* – meaning DHHL could potentially subdivide each 10,000 ft² sub-parcel into ~50 x 5,000 ft² lots, that could also include accessory dwelling units (ADU). Expressed community concerns over the certain impacts to such an outcome appear to have been ignored in the drafting of the Resolution’s amendments, and specified development restrictions must be included to prevent such an outcome.
- Insufficient Supporting Physical Infrastructure. During a press conference regarding the Resolution introduction, Ms. Kia‘āina’ stated that exactly how many housing lots could be created on the Site could be dependent on a number of factors including sewer capacity and availability of potable water, traffic and drainage issues that DHHL would need to address. There is no specified requirement within the Resolution or its proposed amendments for DHHL or the City to consult existing, or develop a new, Urban Management Plan(s) for essential physical infrastructure, and the following paragraphs address each of these issues.
- Land Suitability and Infrastructure Availability. The Resolution, and Ms. Kia‘āina’s June 19, 2024, information paper, indicate that a “*suitability*” and infrastructure “*availability*” assessment for the land will be provided as part of the PER. Any final Resolution must specify that any “*suitability*” and “*availability*” assessment must include the conduct of traffic surveys, neighborhood density surveys, sanitary sewer impacts, stormwater runoff impact, etc., to fully assess the *impact* and *sustainability* of any development and the resultant impact of increased physical and human infrastructure to an existing and established, and increasingly population-“dense”, suburban, single-family home neighborhood.

- **Stormwater Runoff.** It appears significantly negligent that while the Resolution indicates City will retain the ownership of any developed roadways within the Site – it will cancel/abandon its responsibility for the 4 existing Drainage Easements (A, E, F, and V) to the homeowners that border the Site. This requires homeowners bordering the Site to maintain and upkeep these drainage easements, which if not accomplished, risks great impact to the unstable soil conditions along the Hillside. This provision must be stricken from the final Resolution unless explicitly transferred to DHHL upon conveyance of the Site. [NOTE: this issue appears to be resolved in the current version of the Resolution.]
- **Wastewater Treatment Facility Capacity.** From January 1, 2024 to July 21, 2024, there have been four (4) brown water alerts issued concerning brown water/waste water alert “Exceedance of daily maximum permitted fecal indicator bacteria level” reported from the Kailua Regional Wastewater Treatment Plant. (See Figure 2, source: <https://eha-cloud.doh.hawaii.gov/cwb/#!/landing>). What will the impact of any parcel development be to the Kailua Regional Wastewater Treatment Plant that currently experiencing a labor shortage of over 30 personnel? An assessment of this impact must be specified in the Resolution.

Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	Jul 10, 2024	Jul 10, 2024	Completed	>
Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	Jul 11, 2024	Jul 11, 2024	Completed	>
Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	Jun 1, 2024	Jun 4, 2024	Completed	>
Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	May 15, 2024	May 23, 2024	Completed	>
Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	Apr 26, 2023	May 6, 2023	Completed	>
Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	Apr 11, 2024	Apr 11, 2024	Completed	>
Exceedance	Exceedance of daily maximum permitted fecal indicator bacteria level at Kailua Regional Wastewater Treatment Plant, Oahu	Oahu	Feb 28, 2021	Mar 5, 2021	Completed	>

Figure 2. Brown water Alerts - Kailua Regional Wastewater Treatment Plant

- **“Reduction of the City's Liability and Maintenance Costs for the Site.”** By “reduction,” the Resolution certainly means abandonment and elimination. From personal observation from over 21 years as a resident of the Kalaheo hillside, there is little maintenance performed on the Site. C&C crews infrequently check the ditches and drainage easements only when significant rain or storms are due, and firebreak maintenance (“weed whacking”) is episodic at best. What is most concerning is that there is no stipulation or requirement within the Resolution requiring DHHL, upon conveyance, to perform these essential maintenance and upkeep tasks, that, however periodic and episodic they have been executed in the past, should not be passively sloughed off to homeowners with properties bordering the Site. Who, and how, will DHHL (an unelected body) be held accountable for failure to perform these tasks and mitigate related liabilities (e.g., fire breaks)?
- **Content and Extent of the Preliminary Engineering Report (PER).** The information paper provided to some Hillside residents during Ms. Kia‘aina’s June 19, 2024 walk-thru, mentioned a survey to be conducted by R.M. Towill that will inform a PER regarding multiple aspects of the Site. Questions concerning the survey, and critical components for what should be conducted as part of the survey include:
 - When is the expected start date for the survey(ies)? When are they expected to be completed?

- Does the P&E Committee assess the PER will be complete prior to the final committee hearing in August 2024 and any subsequent full city council hearing? [Note: I assess this outcome is highly unlikely given the timelines provided in Ms. Kia‘āina’s information paper.]
 - The information paper provided by Ms. Kia‘āina also indicates that R.M. Towill will “. . . *take a total of four 20-foot core samples for analysis.*” What was R.M. Towill’s decision criteria for only drawing 4 core samples?
 - Most on-line examples of commercial core samplers indicate a ~3-4” in diameter. A simple assessment using 4 x ~3-4” holes over 10 acres indicate: 10 acres = 435,600 ft² | 1x 4” core sample = .09 ft² | $(.09 \times 4) / 435,600 \times 100 = .00008\%$ of the Site.
 - The Oahu-based civil and geological engineering firms contacted by Hillside residents concerning survey and core sampling across a large 10-acre plot strongly expressed that 4 samples were woefully insufficient – regardless the sample depth – to judge the suitability of soils across the entire 10-acre Site and for the certain scale of the proposed development.
 - Should the PER indicate the Site “unsuitable” or questionable for development – will the Council still recommend the City “gift” the Site to DHHL?
- 7) **Future Indemnity.** Ultimately, if the Site is conveyed, how will land and property / homeowners hold DHHL responsible for their (in)actions as the new Site land owner or that result from DHHL’s development and construction? DHHL is an unelected body – with very little accountability to the residents and constituents along Kalaheo Hillside. The current resolution provides no city/county protections and no other recourse or remedy aside from costly litigation against the City and/or DHHL for any resulting damages resulting from the City’s conveyance of the property and DHHL’s potential construction and development of the Site.
- 8) **Summary.** Detailed and sufficient answers to relatively simple questions must be provided. Specific language must be included in the final Resolution to alleviate the rational and logical concerns of existing homeowners and residents along the Hillside.

Respectfully Submitted,

//ORIGINAL SIGNED//

David S. Pound
605 Ilimano Street
Kailua, Hawai‘i

Sara A Izen
639 Iliaina Street
Kailua, Hawaii 96734

August 22, 2024

Dear Chair Kia'ina, Vice Chair Cordera, and members of the Committee on Planning and the Economy:

RE: Resolution 24-151

My name is Sara Izen and I live at 639 Iliaina St., the first house mauka of the right-of-way that would become a street should the resolution be fully implemented. My family has been living on this property for 45 years. I am testifying in opposition to this resolution as it is currently written.

Sincere thanks and appreciation to the Kailua Neighborhood Board for their resolution in support of the community's concerns regarding the suitability of the proposed parcel for housing development and to Chair Kia'aina for respecting the community's concerns by adding several amendments to this resolution.

The detrimental effects of the clay soil in the proposed area for development have already been well documented. The potential for further damage to current property should the development be built are unknown but could be devastating. Therefore, in order to protect the current community from further damage to our structures and our quality of life, certain language in amendments D, I, L, and M needs to become more specific.

For Amendments D and I, we would like the language to specifically state that only single family homes may be built consistent with the character of the surrounding neighborhood.

For Amendment L we would like the assurance that the results of the Department of Hawaiian Home Lands due diligence assessments and Preliminary Engineering Report will be made available to the public for review and comment for a minimum of 60 days prior to any conveyance of the property or for two Kailua Neighborhood Board meeting cycles.

In Amendment M we would like the same assurance that any due diligence assessments conducted by the City and County of Honolulu will also be made available

for public review and comment for a minimum of 60 days or for two Kailua Neighborhood Board meeting cycles. We also want to be assured that the City and County will take into consideration impacts to traffic, power, sanitary waste water, storm water runoff, and so on.

Should the development proceed, I would like specific language to state that the City and County of Honolulu will continue to maintain not only the roads, but also the drainage ditches and any other rain water mitigation efforts in existence on the property.

Additionally, both Amendments L and M need to include language that expressly states that if the property in question is developed and damage to the existing homes next to or downhill of the development occurs, then the City and County of Honolulu and the Department of Hawaiian Homelands acknowledge financial liability to the homeowners affected for repair of their homes.

Should the land be found unsuitable for development and conveyance does not occur, then the process to rezone this property to Preservation P-1, which is the zoning designation of the other preservation lands along Kalaheo Hillside, needs to be initiated immediately, to avoid further efforts to develop this parcel.

Thank you for the opportunity to express my views in opposition to Resolution 24-151 as it is currently written.

Respectfully submitted,

Sara Izen
808-429-7053

My name is Barbara Germann. My husband and I have been homeowners on Kalaheo Hillside for 31 years. I am against any further development of the hillside by any group unless the proper soil studies are done first before building can be considered.

Like the majority of residents in our neighborhood, we have a list of issues that we have had to repair over the years due to the instability of the soil- from major plumbing issues, when a pipe cracked & leaked in the slab due to ground movement, cracked walls, doors that no longer close properly, fences that list, uneven floors due to settling, tile that cracked and needed to be replaced due to slab movement and replacing the sewer line from the house to the street when that too cracked. I could go on and on. Some of these issues happened years ago and some as recently as the past few months.

Some history -**In 2015** when Kirk Caldwell was mayor, the City administration proposed the sale of the city owned 10 acre Kalaheo Hillside parcel adjacent to Kalaheo high school. The administration concluded after a review that the parcel was surplus and should be disposed of. At that time, the parcel was zoned for residential use. Ikaika Anderson was the District 3 councilmember at that time. He sent out a survey to 600 area property owners that would be directly or indirectly affected by any changes to the property. The results were listed in his May 2016 newsletter, but that all soon became a moot point **when soil testing was done in that area and the report indicated that the soil condition was not conducive to building or development. The Hillside was unstable. The proposal was dropped.**

Fast forward to today- **What has changed that now makes the development of this property feasible? It would seem that the enormous cost of stabilizing the hillside for development would end the likelihood of “affordable housing”.**

If the Conveyance to DHHL does go through, and development occurs, the new Hawaiian homeowners will need to have access to large amounts of cash that most likely will be needed for repairs to their property and homes. This is the sad reality.

Testimony of Judy Mick – as part of the August 22, 2024 P&E Committee Meeting.

I am a resident of Kalaheo Hillside in Kailua.

I oppose Resolution 24-151 that would convey a 10-acre parcel on the hill for home construction.

A 1952 soil study revealed clay soil of this caldera's slope shrinks and swells with weather conditions capable of uplifting foundations and slabs. Dry soil cracks into blocks a foot across and soil creeps downhill when disturbed.

Hawaiians listen to the land- mainland contractors did not and built 500 homes on this unstable land. Residents have paid the price ever since.

Kaneohe Ranch (the original land lease owners) sold hillside properties at a discount when faced with a lawsuit for poor land condition.

Any future construction on the hill will cause more damage to existing homes.

New homeowners will face future damage.

This deceit must stop NOW.

The following was provided in my previous testimony, but bears repeating. It provides the referenced 1952 study, more recent geological surveys indicating the same soil conditions 72+ years later, written evidence Kaneohe Ranch negotiated with Lease-Hold property owners like me in the early 1980's when it was revealed that Kaneohe Ranch had suppressed the 1952 Soil Study, and our own findings of home damage that has resulted from the instable clay soils all along Kalaheo Hillside.

Soil Survey of the TERRITORY OF HAWAII

Islands of
Hawaii, Kauai, Lanai, Maui, Molokai,
and Oahu

Report by

M. G. CLINE, in Charge
Soil Conservation Service
United States Department of Agriculture

"no slab
on
grade"

With Section 8 by

A. S. AYRES, Hawaiian Sugar Planters' Association
WILLIAM CROSBY, Hawaii Territorial Board of Agriculture and Forestry
PERRY F. PHILIPP and RALPH ELLIOTT -
Agricultural Extension Service, University of Hawaii
The late O. C. MAGISTAD, of Libby, McNell, and Libby
J. C. RIPPERTON, E. Y. HOSAKA, M. TAKAHASHI, and G. D. SHERMAN
Hawaii Agricultural Experiment Station
C. K. WENTWORTH, Honolulu Board of Water Supply

Field Work by

Z. C. FOSTER, in Charge and
M. G. CLINE, L. R. SMITH, F. R. LESE,
FRED KAWAMURA, and MASAO KOGA
Division of Soil Survey
United States Department of Agriculture

Area Inspected by

MARK BALDWIN, Soil Scientist
Division of Soil Survey

(Field work for this survey was done while the Division of Soil Survey was part of the Bureau of Chemistry and Soils. Soil Survey was transferred to the Soil Conservation Service on November 15, 1952)

UNITED STATES DEPARTMENT OF AGRICULTURE ,
In cooperation with the
HAWAII AGRICULTURAL EXPERIMENT STATION

599.8

Aug. 1972

H 3254

SOIL LEGEND

The first capital letter is the initial one of the soil name. The next letter is a capital if the mapping unit is one of the low intensity of reconnaissance surveys, " is a small letter if the mapping unit is one of the high intensity survey. The last letter, a capital A, B, C, D, E, F, or G, indicates the slope. Most symbols with "h" or "b" slope letter are those of soils and land types that have a considerable range in slope. A final number, 2 or 3, in the symbol indicates that the soil is eroded or severely eroded. The small letter "m" precedes the symbols for soils of the reconnaissance survey.

HIGH AND MEDIUM INTENSITY

SYMBOL	NAME
KnoB	Keohua cobbly silty clay loam, 3107 percent slopes
Knoe	Keohua cobbly silty clay loam, 710 15 percent slopes
KnoD	Keohua cobbly silty clay loam, 15 to 25 percent slopes
KnbD	Keahua very stony silty clay loam, 710 25 percent slopes
KncC	Keahua silty clay, 71015
KnhC	Keahua cobbly silty clay, 710 15 percent slopes
KnsC	Keahua stony silty clay, 710 15 percent slopes
KoA	Kekaha silty clay, 0102 percent slopes
KoB	Kekaha silty clay, 2 to 6 percent slopes
KobA	Kekaha clay, 0 to 2 percent slopes
KpB	Kemoo silty clay, 2 to 6 percent slopes
KpC	Kemoo silty clay, 610 12 percent slopes
KpD	Kemoo silty clay, 121020 percent slopes
KpE	clay, 201035 percent slopes
KpF	Kemoo silty clay, 35 to 70 percent slopes
KrB	Koele silty clay loam, 3 to 7 percent slopes
KrC	silty clay loam, 7 to 15 percent slopes
KrD	Koele silty clay loam, 15 to 25 percent slopes
KsB	Koko silty loam, 210 6 percent slopes
KsC	Koko silty loam, 6 to 12 percent slopes
KsD	Koko silty loam, 12 to 25 percent slopes
KtC	Kokokohi clay, 6 to 12 percent slopes
KuE	Kolekole silty clay loam, 1 to 6 percent slopes
KuC	Kolekole silty clay loam, 6 to 12 percent slopes
KuD	Kolekole silty clay loam, 12 to 25 percent slopes
KvB	Koloa stony silty clay, 3 to 8 percent slopes
KvC	Koloa stony silty clay, 81015 percent slopes
KvD	Koloa stony silty clay, 15 to 25 percent slopes
Kw	Kolokolo clay loam
KxC	Kula loam, 4 to 12 percent slopes
KxD	Kula loam, 12 to 20 percent slopes
KxoD	Kula cobbly loam, 12 to 20 percent slopes
KxbE	Kulo very rocky loam, 12 to 40 percent slopes
KyA	Kunia silty clay, 0 to 3 percent slopes
KyB	Kunia silty clay, 3 to 8 percent slopes
KyC	Kunia silty clay, 8 to 15 percent slopes
LaA	Lahaina silty clay, 0 to 3 percent slopes
LaB	Lahaina silty clay, 310 7 percent slopes
LaB3	Lahaina silty clay, 310 7 percent slopes, severely eroded
LaC	Lahaina silty clay, 710 15 percent slopes
LaC3	Lahaina silty clay, 7 to 15 percent slopes, severely eroded
LaD	Lahaina silty clay, 1510 25 percent slopes
La03	Lahaina silty clay, 15 to 25 percent slopes, severely eroded
LaE3	Lahaina silty clay, 25 to 40 percent slopes, severely eroded
LcB	Lowoi silty clay, 0 to 8 percent slopes
LcC	Lowoi silty clay, 8 to 15 percent slopes
LcD	Lowoi silty clay, 15 to 25 percent slopes
LoB	Lellehuo silty clay, 2 to 6 percent slopes
LcC	Leilehuo silty clay, 6 to 12 percent slopes
LhB	Lihue silty clay, 010 6 percent slopes
LhC	Lihue silty clay, 8 to 15 percent slopes
LhD	Lihue silty clay, 15 to 25 percent slopes
LhE2	Lihue silty clay, 25 to 40 percent slopes, eroded
LiB	Lihue gravelly silty clay, 0 to 8 percent slopes
LiC	Lihue gravelly silty clay, 810 15 percent slopes
LoB	Lolekoo silty clay, 3 to 8 percent slopes
LoC	Lolekoo silty clay, 810 15 percent slopes
LaD	Lolekoo silty clay, 15 to 25 percent slopes
LoE	Lolekoo silty clay, 2510 40 percent slopes
LoF	Lolekoo silty clay, 4010 70 percent slopes
LuA	Luoluolei clay, 010 2 percent slopes
LuB	Luoluolei clay, 210 6 percent slopes
LuA	Luoluolei stony clay, 010 2 percent slopes
Lve	Luoluolei stony clay, 2 to 6 percent slopes

HIGH AND MEDIUM INTENSITY

SYMBOL	NAME	SYMBOL
MaC	Mohollo silty loam, 61012 percent slopes	PoC
MaD	Mahana silty loam, 1210 20 percent slopes	PbC
MaD3	Mahana silty loam, 12 to 20 percent slopes, severely eroded	PcB
MaE	Mahana silty loam, 201035	Pee
MaE3	Mahana silty loam, 20 to 35 percent slopes, severely eroded	PcC2
	Mahana silty clay loam, 610 12 percent slopes, eroded	PdA
	Mahana silty clay loam, 121020 percent slopes, eroded	PdC
McD2	Mahana silty clay loam, 121020 percent slopes, eroded	PeB
McE2	Mahana silty clay loam, 201035 percent slopes, eroded	PeC
MdB	Mokolopo clay, 2106 percent slopes	PeD
MdC	Makalapa clay, 610 12 percent slopes	PeE
MdD	Makalapa clay, 1210 20 percent slopes	PeF
MeB	Makapili silty clay, 010 8 percent slopes	PrS
MeC	Makapili silty clay, 61015 percent slopes	PfC
MeD	Makapili silty clay, 15 to 25 percent slopes	PfO
MeE	Makapili silty clay, 25 to 40 percent slopes	Ph
MfB	Makawae silty clay, 310 7 percent slopes	PkB
MfC	Makawae silty clay, 710 15 percent slopes	PkC
MgB	Makawae silty clay loam, 0106 percent slopes	PIB
MgC	Makawae silty clay loam, 6 to 12 percent slopes	PIO
MgD	Makawae silty clay loam, 1210 20 percent slopes	PmB
MgE2	Makawae silty clay loam, 20 to 35 percent slopes, eroded	PmC
MhB	Mokoweli stony silty clay loam, 010 6 percent slopes	PmD
MhC	Makaweli silty clay loam, 6 to 12 percent slopes	PmE
MhD	Makaweli stony silty clay loam, 1210 20 percent slopes	PnA
MhE	Makaweli stony silty clay loam, 20 to 35 percent slopes	PnB
MkA	Makiki clay loam, 0102 percent slopes	PnC
MIA	Mokiki stony clay loam, 0 to 3 percent slopes	PnD
MmB	Mala silty clay, 010 3 percent slopes	PnE
MmC	Mala silty clay, 3 to 7 percent slopes	PoB
MnC	Mamala stony silty clay loam, 010 12 percent slopes	PoaB
MoB	Manana silty clay loam, 2 to 6 percent slopes	PpA
MaC	Manana silty clay loam, 6 to 12 percent slopes	PpB
MoD2	Manana silty clay loam, 12 to 25 percent slopes, eroded	PrA
MpB	Manana silty clay, 3 to 8 percent slopes	PrB
MpC	Manana silty clay, 810 15 percent slopes	PrC
MpD	Manana silty clay, 151025 percent slopes	PrD
MpD2	Manana silty clay, 12 to 25 percent slopes, eroded	PrE
MpE	Manana silty clay, 251040 percent slopes	PrF
Mz	Mokulele fine sandy loam	PrG
Ms	Mokulele loam	PrH
M	Mokulele clay loam	PrI
Mfo	Mokulele clay loam, poorly drained variant	PrJ
Mtb	Mokulele clay	PrK
MuA	Molokoi silty clay loam, 0 to 3 percent slopes	PrL
MuB	Molokoi silty clay loam, 3 to 7 percent slopes	PrM
MuB3	Molokoi silty clay loam, 3 to 7 percent slopes, severely eroded	PrN
MuC	Molokoi silty clay loam, 710 15 percent slopes	PrO
MuC3	Molokoi silty clay loam, 7 to 15 percent slopes, severely eroded	PrP
MuD	Molokoi silty clay loam, 15 to 25 percent slopes	PrQ
MvD3	Molokoi silty clay loam, shallow variant, 15 to 25 percent slopes, severely eroded	PrR
NeC	Niu silty clay loam, 610 12 percent slopes	PrS
NeD	Niu silty clay loam, 12 to 20 percent slopes	PrT
NcD2	Niu silty clay loam, 610 20 percent slopes, eroded	PrU
NcE2	Niu silty clay loam, 2010 35 percent slopes, eroded	PrV
Nh	Nohili clay	PrW
NnC	Nonopahu clay, 2 to 10 percent slopes	PrX
NoC	Nonopahu stony clay, 2 to 10 percent slopes	PrY
010	Ofi loam, 12 to 20 percent slopes	PrZ

level land of the coastal plains or alluvial flats. They occur on the islands of Molokai and Oahu at elevations less than 200 feet above sea level, receive an annual precipitation of 10 to 40 inches, and are in vegetation zones A and B.

Modal profile of the

- A1 2 to 5 inches, very dark-gray clay; massive; extremely hard when dry; but very plastic when wet; pH 7.0 to 8.0; roots present.
- B 5 to 36 inches, dark olive-gray clay (medium gray when wet); massive; extremely hard when dry; and very plastic when wet; pH 7.0 to 8.0; material feels soapy when wet; very few roots are present (this could be considered part of the A1)
- C 36 inches+, dark yellowish-brown to dark olive-gray clay, less plastic and sticky than the material above; weak medium blocky structure in place; pH 6.5 to 8.0; gypsum crystals are commonly present; includes some gravel and stone fragments; alluvium.

These soils are essentially structureless. Even the surface layer is massive in most places. When is dry, it may have a very thin layer of hard, angular crumbs or granules on the top, but, this is rarely more than a fraction of an inch thick. When it dries the soil cracks into huge blocks a foot or more across. When it is wet, no evidence of these blocks remains. The lower lying layers are rarely as completely desiccated as is the surface layer. The surface blocks may be pried out with a shovel, and the dark soapy, sticky, plastic clay beneath it is thus exposed. Most roots penetrate only the surface 6 or 8 inches, but roots of shrubs may reach well into the B horizon.

when it dries, the soil

olive gray, massive,

islands of Molokini and Oahu

Kokokahi clay, phases undifferentiated (0 to 20 percent slopes) (KKu).- This soil occurs on the Molokai. The profile, and its variations, has been described of the series. The unit may have a few loose stones on the surface or in the soil mass.

None of this unit is cropped; most of it is useful for pasture. In most places it supports a good stand of algaroba growing in association with annual grasses and some shrubs. Because the soil occurs near the seashore, the stands of algaroba are commonly heavier than on the adjacent slopes, and the fruit provides moderate amounts of feed when the pods are dropped. On the island of Molokai the algaroba also provides excellent "bee pasture." During the winter months some forage is provided by the annual grasses that spring up after rains. These shallow-rooted plants dry up quickly after the rains stop, however, and furnish a small amount of forage. The carrying capacity of this soil is low, and the growth highly seasonal, but the forage is of exceptionally high quality. In some places koahole has been introduced on this soil and provides a fair amount of feed. This soil is probably more productive of forage than soils of the uplands in the same climatic zone.

Kokokahi very stony clay, phases undifferentiated (5 to 20 percent slopes) (KKV).- This soil occurs mainly on talus slopes; large amounts of stones and boulders have accumulated on the surface and in the soil mass. Except for stoniness, the soil profile is similar to that described for the Kokokahi series.

This soil is stony beyond the limits of cultivation, and its extremely poor physical properties make clearing of the stones too expensive in

Koko silt loam, 6 to 12 percent slopes (KsC).-On this soil, runoff is medium and the erosion hazard is moderate. Workability is slightly difficult because of the slope.

This soil is used for homesites and pasture. (Capability classification IIIe if irrigated, VIe if nonirrigated; pasture group 2)

Koko silt loam, 12 to 25 percent slopes (KsD).-This soil is similar to Koko Silt loam, 2 to 6 percent slopes, except that it is on fans on foot slopes of volcanic craters. Runoff is medium to rapid, and the erosion hazard is moderate to severe. Workability is difficult because of the slope.

This soil is used for homesites and pasture. (Capability classification IVe if irrigated, VIe if nonirrigated; pasture group 2)

Kokokahi Series

This series consists of moderately well drained soils on talus slopes and alluvial fans, on the island of Oahu. These soils developed in colluvium and alluvium derived from basic igneous rock. They are moderately sloping to steep. Elevations range from nearly sea level to 125 feet. The annual rainfall amounts to 20 to 35 inches. The mean annual soil temperature is 74° F. Kokokahi soils occur in the vicinity of Kaneohe and Pearl Harbor and are geographically associated with Alaeha and Jaucua soils.

These soils are used for pasture and homesites. The natural vegetation consists of kiawe, koa haole, kulu, mostly foxtail, piligrass, and bermudagrass.

Kokokahi clay, 6 to 12 percent slopes (KtCl).-This soil is on talus slopes and alluvial fans. Included in mapping were small areas where the slope is 2 to 6 percent and small areas along drainageways where the slope is 20 to 35 percent. Also included were wet soils within drainageways.

In a representative profile the surface layer is very dark gray and dark gray clay about 14 inches thick. The first layer, about 12 inches thick, is dark grayish-brown clay that has subangular blocky structure. The substrate is grayish-brown and light brownish-gray clay 14 to 18 inches thick. **These soils are very sticky**

very plastic, and the crack widely upon drying. They are slightly acid to neutral in the surface layer and slightly acid to mildly alkaline below.

Permeability is slow to moderately slow. Runoff is medium, and the erosion hazard is slight to moderate. The available water capacity is about 1.6 inches per foot of soil. In places roots penetrate to a depth of 5 feet or more. Workability is difficult because of the sticky, plastic nature of the clay and the narrow range of moisture content within which the soil can be cultivated. **The shrink-swell potential is high.**

Representative profile: Island of Oahu, lat. 21°25'48" and long. 157°45'52" W.

All 0 to 2 inches, very dark gray (10YR 3/1), moist and dry, clay; strong, fine, granular structure; extremely hard, very firm, very sticky and very plastic; abundant fine and very fine roots; common, very fine, tubular and interstitial pores; common, fine, black concretions; few, fine, angular fragments of basalt; moderate effervescence with hydrogen peroxide; slightly acid; clear, smooth boundary. 1 to 3 inches thick.

A12-2 to 14 incllCs, dark-gray (10YR 4/1), moist and dry, clay; strong, fine, structure; very hard, very firm, very sticky and very plastic; plentiful very fine roots and few medium roots; common, very fine and fine, tubular pores; few, fine, block concretions; few, fine, angular fragments of basalt; moderate effervescence with hydrogen peroxide; neutral; gradual, smooth boundary. 8 to 12 inches thick.

AC-14 to 26 inches, dark grayish-brown (2.5Y 4/2), moist and dry, clay; irregularly shaped large blocks that break to moderate, fine, subangular blocky structure; extremely hard, very firm, very sticky and very plastic; common very fine roots and few medium roots; many, very fine, tubular pores; many distinct slickensides; common black stains; slight effervescence with hydrogen peroxide; few pebble-size fragments of basalt; mildly alkaline; gradual, smooth boundary. 10 to 14 inches thick.

C1-26 to 38 inches, grayish-brown (2.5Y 5/2), moist and dry, clay; large irregularly shaped blocks that break to moderate, fine and medium, subangular blocky structure; extremely hard, very firm, very sticky and very plastic; few very fine roots; few, very fine, tubular pores; common deeply grooved slickensides; common black stains; few pebble-size fragments of basalt; common fine gypsum crystals; slight effervescence with hydrogen peroxide; neutral; abrupt, smooth boundary. 8 to 14 inches thick.

C2-38 to 44 inches, light brownish-gray (2.5YR 6/2) clay, olive brown (2.5YR 4/3) when dry; weak, medium, subangular blocky structure; hard, friable, slightly sticky and slightly plastic; few very fine roots; common, very fine and fine, tubular pores; slightly acid.

A few stones occur throughout the profile. The AC horizon ranges from 2.5Y to 5Y in hue, from 3 to 5 in value when moist, and from 2 to 4 in chroma. Wide, deep cracks (2 inches or more wide and 20 to 80 inches deep) are common when the soil is dry.

This soil is used for pasture and homesites. (Capability classification VIe, nonirrigated; pasture group 3)

Kokokahi very stony clay, 0 to 35 percent slopes (KtKEL).-This soil is similar to Kokokahi clay, 6 to 12 percent slopes, except that there are many stones and boulders on the surface and throughout the profile. In most places the slope ranges from 10 to 25 percent. Runoff is medium to rapid, and the erosion hazard is moderate to severe.

This soil is used for pasture. It is generally too stony for cultivated crops. (Capability classification VIe, nonirrigated; pasture group 3)

very sticky

Kolekole Series

crack widely upon drying

This series consists of well-drained soils on uplands on the island of Oahu. These soils developed in old gravelly alluvium mixed with volcanic ash. They are gently sloping to moderately steep. Elevations range from 500 to 1,200 feet. The annual rainfall amounts to 35 to 50 inches, most of which occurs between November and April. The mean annual soil temperature is 71° F. Kolekole soils occur on the windward slopes of the Waianae Range. They are geographically associated with Kunia, Mahana, and Wahiawa soils.

These soils are used for sugarcane, pineapple, and pasture. The natural vegetation consists of guava, lantana, bermudagrass, and Natal redtop.

Kolekole silty clay loam, 1 to 6 percent slopes (KuB).-This soil occurs on smooth slopes. Included in mapping

Soil Character Code	I	II	III	IV	V	VI	VII	VIII
Description	Nonexpanding Soil \$011 Nonrocky Surface Well-Drained	Nonexpanding Soil Rocky 3/ Surface Well-Drained	Expanding Soil Nonrocky Surface Well-Drained	Expanding Soil Rocky 3/ Surface Well-Drained	Marshy Soil Nonrocky Surface Poorly-Drained	Coral Sands Nonrocky Surface Well-Drained	Coral Sands Rocky 3/ Surface Well-Drained	As Lava Rocky 3/ Surface Well-Drained
General Characteristics	1. Slight expansion and contraction on wetting and drying. 2. Well-drained surface and subsurface, generally suitable for cesspools. 3. Good bearing capacity. Suitable for one-to two-story structures with minor foundation work. 4. Land till stable when properly compacted. 5. Vertical cuts usually stable.	1. Considerable expansion and contraction on wetting and drying. Cracks as wide as (1/2 inch) may develop on drying causing shifting and settling. Color on the surface is usually dark gray to black. Sometimes referred to as "adobe". 2. Soil puddles easily, hence surface drainage depends almost entirely on slope. 3. Internal permeability low, cesspools possible but questionable. 4. Bearing capacity good if soil is properly insulated to maintain relatively constant moisture content. Under these conditions, generally suitable for one-to two-story structures with minor foundation work. Extensive foundation work probably necessary for multi-story structures depending on depth to consolidated material. 5. Optimum moisture content must be carefully maintained for maximum till compaction. 6. Cuts usually unstable and will slump after a few wetting and drying cycles. Soil likely to creep down slope after it is disturbed.	1. Ground water at or near the surface. Poorly suited for cesspools, usually close to sea level, hence land fill and/or forced drainage is probably necessary for any extensive development program. 2. Bearing capacity poor. Poorly suited for any structure, although small localized areas probably have one-story wooden structures. 3. Soil is usually of the expanding type and if drained, will retain the proper properties. Organic content is usually high and will subside on drying. 4. If adjacent to the ocean, salt in the soil will affect underground utilities. 5. Depth to consolidated material generally 15 feet or more.	1. Surface drainage and internal permeability good although the ground water may be relatively close to the surface. Depth to ground water will determine the feasibility at cesspools; the greater the depth, the more feasible it is for cesspools. 2. Bearing capacity is good if the soil is properly contained. Suitable for one-to two-story structures with minor foundation work. Extensive foundation work probably necessary for multi-story structures depending on depth to consolidated material; the shallower the depth to consolidated materials, the less foundation preparation required. 3. Hardly any expansion and contraction on wetting and drying.	1. Loo--- clinkery -- lava rock with virtually no soil material or other binder. 2. No expansion or contraction on wetting and drying. 3. Well-drained, highly porous surface and subsurface. 4. Excellent bearing characteristics. Generally suitable for multi-story structures with minor foundation work. 5. Land fill stable with little or no compaction. 6. Vertical cuts stable. 7. Suitable for burrow material. 8. Lava tubes (subsurface voids) possible, but not likely unless the lava flow is underlain by pahoehoe flows at shallow depths. 9. Ground surface usually completely abrupt ups and downs. 10. Clinkers can be readily pushed by bulldozers to form road platform etc. 11. The ground surface is usually very rough; consequently, it probably requires smoothing and grading to be made more usable.			

Underlying Material Code	C	L	J
Material	Consolidated Coral	Consolidated Lava	Ground Water Seasonally Within 5' of the Surface
Characteristics	1. Often vesicular and cavernous -- thus allowing internal drainage. Cesspools possible. 2. More easily fractured than lava. Usually does not require blasting. 3. Thickness depends on the various past stands of the sea the coral may overlie. Unconsolidated (soft) material. 4. Bearing characteristics good if thick. 5. Where the coral is hard and at the surface, it may be suitable for coral veneer work in the buildings.	1. As and pahoehoe are usually intermixed and were not differentiated in the underlying material. They are differentiated when they occur on the surface. 2. Thick, dense and difficult to fracture. Usually requires blasting. 3. Bearing characteristics excellent. Usually no unconsolidated material beneath. 4. Poor percolation in pahoehoe, thus cesspools may not function satisfactorily.	1. This category identifies areas where the water table may seasonally be within 5 feet of the surface. If the area is adjacent to the surface, it will affect underground utilities.

Depth
Mat

Survey done on 1132 Hikala Pl
(on canal)

Diagnosed conditions at Mick Residence
September 3, 2020

2. We encountered groundwater in our borings at depths of about 9.5 and 9.6 feet below the existing ground surface at the time of our field exploration. However, due to the proximity of the project site to Kawainui Canal, groundwater levels are expected to vary in response to the water level in the canal. In addition, groundwater levels may change due to seasonal precipitation, surface water runoff, and other factors,

3. Based on the results of our laboratory testing, the on-site clayey soils have very high expansion potential when subjected to moisture fluctuations and are often referred to locally as "adobe" clays. These clayey soils tend to swell significantly when exposed to moisture and shrink when dried. Such soils are potentially capable of uplifting foundations and slabs, with resulting distress to the structures they support. In addition, these soils can settle significantly if saturated and/or poorly compacted.

4. Based on our site observations and the results of our field exploration, we anticipate the affected foundations bear directly on the highly expansive clayey surface fill materials and alluvial soils encountered in our borings. In general, we believe the building structure is exhibiting signs of distress caused by settlement/heave of the existing building foundations bearing on the underlying highly expansive clayey soils.

5. We believe the existing distressed foundations can be mitigated and stabilized to a certain level by installing an underpinning system consisting of either helical piers or micropiles. In addition, a chemical injection soil stabilization system, such as CONDOR® Soil Stabilizer, may be considered under the slab to reduce the swelling potential of the underlying highly expansive clayey soils.

6. We recommend underpinning the most severely affected house foundations at approximately 28 locations. It should be noted that we believe six of these proposed underpinning locations may be performed as part of a Phase 1 work plan, while the remaining 22 proposed underpinning locations may be performed as part of a Phase 2 work plan, if desired.

Although the observed distresses were generally limited to the western portion of the building structure, the results of the floor level survey indicate apparent settlement/heave throughout the majority of the building structure. In general, we believe these areas should be monitored for additional signs of distress. Phase 2 work may be performed if additional signs of distress are observed after a monitoring period.

7. We recommend installing Chance® helical piers conforming to Type RD2875.262 [G] 16/14/12 to a minimum depth of 20 feet below the existing ground surface.

EXAMPLES

the 1952 Survey was used
to get reduced lease → fee
prices from Kaneohe Ranch
(1980's)

Canal Lot

- 1) Base Price: \$3.25 for first 10,000 square feet
\$1.62 for allover 10,000 square feet

Example: Assume lot size 12,800 square feet
 $\$3.25 \times 10,000 \text{ square feet} = \$32,500$
 $\$1.62 \times 2,800 \text{ square feet} = 4,536$
Total = \$37,036 or \$2.89 sq.ft.

- 2) **Soil Condition Discount**

\$2.65 for first 10,000 square feet
\$1.32 for allover 10,000 square feet

Example: Assume lot size 12,800 square feet
 $\$2.65 \times 10,000 \text{ square feet} = \$26,500$
 $\$1.32 \times 2,800 \text{ square feet} = 3,696$
Total = \$30,196 or \$2.36 sq. ft.

- 3) Difference between examples: \$6,840 or \$0.53 square foot

Interior Lots

- 1) Base Price: \$2.95 for first 10,000 square feet
\$1.47 for all over 10,000 square feet

, Examples:

- A) Assume lot size of 7,840 square feet
 $\$2.95 \times 7,840 = \$23,128$ or \$2.95 square foot
- B) Assume lot size of 11,198 square feet
 $\$2.95 \times 10,000 = \$29,500.00$
 $\$1.47 \times 1,198 = 1,761.06$
Total = \$31,261.06 or \$2.79 square foot

- 2) **Soil Corrdition Discount:**

\$2.35 for first 10,000 square feet
\$1.17 for allover 10,000 square feet

Examples:

- A) Assume lot size of 7,840 square feet
 $\$2.35 \times 7,840 = \$18,424$ or \$2.35 square foot
- B) Assume lot size of 11,198 square feet
 $\$2.35 \times 10,000 = \$23,500.00$
 $\$1.17 \times 1,198 = 1,401.66$
Total = \$24,901.66 or \$2.22 square foot

1
3 KALAHEO HILLSIDE FEE PURCHASE PROPOSAL

1. Base Offer Price:

Price:

1. Canal Lots:

- a. \$3.25 per square foot for first 10,000 square feet.
- b. 1.62¢ per square foot for excess.

2. All Other Lots:

- a. \$2.95 per square foot for first 10,000 square feet.
- b. 1.47¢ per square foot for excess.

2. Deductions,

2. All land areas subject to easements which are open concrete drainage ditches (approximately 59 interior lots affected) would be sold for 0.74¢ per square foot.

- b. Soil conditions: For lots affected by unstable soil conditions:

- 1. Deduct \$.60 per square foot from square foot price for base lot and \$.30 per square foot from price for excess square footage if lessor requires release of claims against lessor for soil conditions.

3. Financing:

- a. Only for lots held by Marital Deduction Trust.
- b. Minimum 20% down, 5-year term, 15-year amortization, IRS rate plus 1% floating, no prepayment penalty, due-on-sale clause {but home improvement loans allowed}.

4. Closing Costs:

Lessee to pay all closing costs.

5. Conveyance by Hawaii Housing Authority Deed

but lessor will issue a side letter containing limited warranties of trustees.

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name:

[REDACTED]

Address:

[REDACTED]

ULIAINA ST

When did you purchase your land in fee?

2021

Did you apply for and receive a soil condition discount because of instability?

No

Have you received a reduction on your property tax due to structural damage?

No

Did you sign a document preventing you from future lawsuits against the seller?

No

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

2021 - retaining wall collapse in backyard.
2021 - Sewer line pooling and collapse

likely due to settling. \$19K repair
previous owner: rerouted kitchen
waste lines due to cracking
and settling of slab.

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name:



Address:



11.2 mile SE Kilauea HI

When did you purchase your land in fee?

1990

Did you apply for and receive a soil condition discount because of instability?

No

Have you received a reduction on your property tax due to structural damage?

No

Did you sign a document preventing you from future lawsuits against the seller?

No

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

Foundation cracks

some wall damage

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name: [REDACTED]

Add [REDACTED]

Iliaina St.

808 [REDACTED]

When did you purchase your land in fee? 2013

Did you apply for and receive a soil condition discount because of instability?

we were not aware of this

Have you received a reduction on your property tax due to structural damage?

we were unaware of this

Did you sign a document preventing you from future lawsuits against the seller?

No - unaware

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

- cracks in back retaining wall

- cracks in home walls

- gate would close some days and be completely off the next. We have had to remove that gate/fence.

- front door get stuck and we are not able to open from inside on some days.

- huge^{deep} cracks on our hillside

- cracks in driveway / carport

- rocks falling and of rock wall b/c of shift

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name

808-

Address:

Iliaina St.

When did you purchase your land in fee?
When it was first offered - ~1981 or so.

Did you apply for and receive a soil condition discount because of instability?

I don't remember.

Have you received a reduction on your property tax due to structural damage? I never applied for any. I don't know.

Did you sign a document preventing you from future lawsuits against the seller?

Don't remember. Bought house in 1979.

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

Home was renovated in 2019. Contractors found foundation had lifted in the middle  - Whole foundation had to be leveled. Had to inject substance into soil so won't expand & contract under the foundation.

Where nothing was injected (outside the house) ^{new} slabs have cracked, rock wall has cracks - Pretty scary. Before the renovation, doors & gates →

askew + gates virtually unusable.
~~Windows & screens were~~

no glass doors would get stuck +
Sliding come off ~~go~~ track,

5 R

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

808 - [REDACTED]

Name: [REDACTED]

Address: [REDACTED]

Iliaina St, Kailua 96734

When did you purchase your land in fee?

December 2009

Did you apply for and receive a soil condition discount because of instability?

No. Not aware of any such program. No instability or soil concerns identified in home purchase Disclosure Statement

Have you received a reduction on your property tax due to structural damage? No.

Did you sign a document preventing you from future lawsuits against the seller?

No.

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

Permitted retaining walls constructed in 1994

are failing due to obvious hillside erosion & slippage:

• CMU retaining wall cracks, leaning, and partial failure;

Two

• ACM retaining walls separation and leaning;

• Cracking, separation, leaning of concrete stairs & slabs;

• Metal fence posts leaning and slipping downhill.

Recent preliminary quotes from contractors for ~~discussing with contractors regarding~~

repair of CMU wall alone are for \$30K - \$50K,

with caution that area is unstable and the same issue will likely occur again.

(over)

Over the past 15 years of living at this address, we ~~have~~ ^{frequently} inspected the drainage easement bordering our mauka property line. The soils exhibit strong shrink/swell characteristics aligning with seasonal dry and wet periods. Large cracks appear in the soil when dry and there are indications they connect to subsurface drainage voids. When wet, the soil is very sticky and clayey. ~~During heavy rains~~

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name: _____

Address: _____

Iliaia

When did you purchase your land in fee?

My parent purchased the fee - I don't know the amount

Did you apply for and receive a soil condition discount because of instability?

No

Have you received a reduction on your property tax due to structural damage? *No*

Did you sign a document preventing you from future lawsuits against the seller?

No

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

1. *front porch is separating from house*

2. *Kitchen Floor tile cracking*

3. *Walls in back of house have cracks + separate*

4. *Patio has major crack + separation in several places*

5. *Sliding Glass door no longer works due to house sagging*

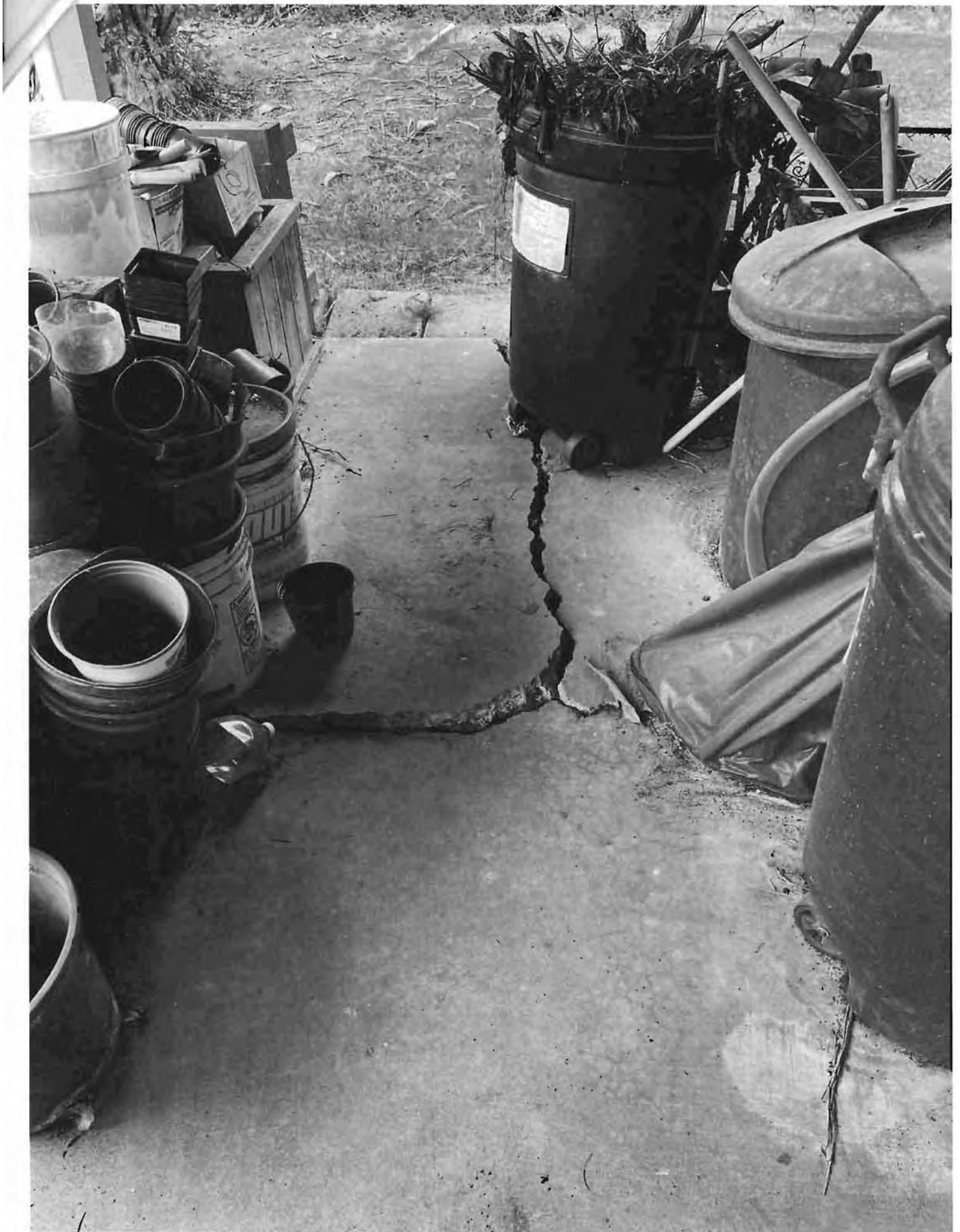
6. *foundation in back family room is cracked + separating.*



Kitchen Floor
19110



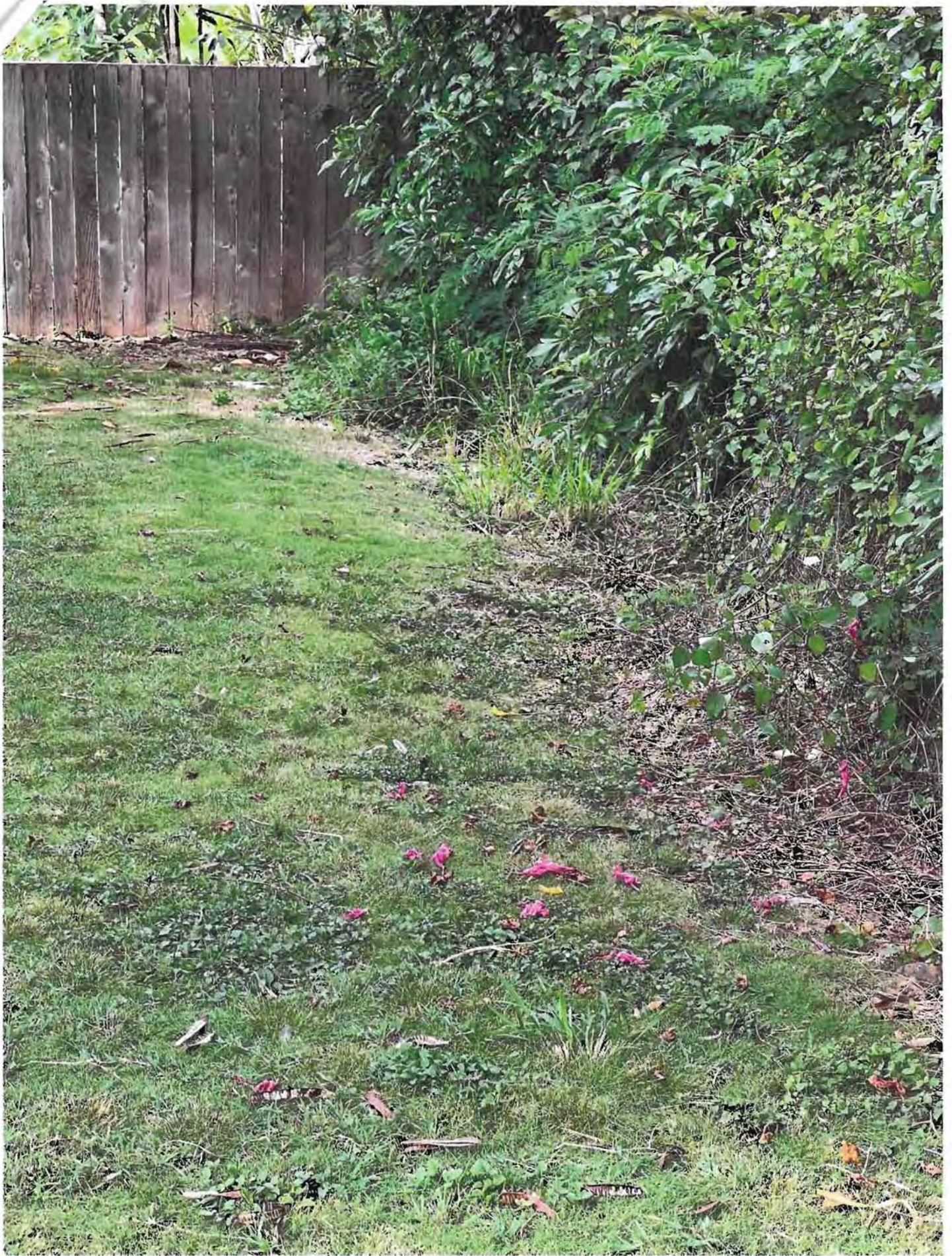
Patio



Patio



Patio



Backyard Sliding

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name:

Address:

Iliana St

When did you purchase your land in fee?

May 2017

Did you apply for and receive a soil condition discount because of instability?

NO

Have you received a reduction on your property tax due to structural damage? NO

Did you sign a document preventing you from future lawsuits against the seller?

NO

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

wall separation from slab - separation around
perimeter 1-1.5"

wall cracks

concerned of future construction as hill
has coral which could shake & excavation

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name: [REDACTED]

Address: [REDACTED]

Iliaina St

When did you purchase your land in fee?

bought 1989 (fee included in purchase)

Did you apply for and receive a soil condition discount because of instability?

no

Have you received a reduction on your property tax due to structural damage? no

Did you sign a document preventing you from future lawsuits against the seller?

no

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

1988/89 house foundation completely redone prior to our ownership due to cracks

2012 put in retaining wall and it had to be redone in 2019 due to movement
lanai slab continues to crack

interior wall in master has gap in corner

front bay window area sinking

Horrible soil - this hill is backfill

of a clay material that will never be settled.

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name:

Address:

Ilikala Place

When did you purchase your land in fee?

Did you apply for and receive a soil condition discount because of instability?

Have you received a reduction on your property tax due to structural damage? No

Did you sign a document preventing you from future lawsuits against the seller?
No

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

— huge crack in workshop floor. I
— paid \$20,000 in 2016 to
— stabilize the foundation - It is
— still moving and I continue to have
— to repair the walls
— ~~crack~~ crack through floor of kitchen and living room
— front door won't open
— cracks in drive way

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name: [REDACTED]

Address: [REDACTED]

Ilikala Place

bought house 1974

When did you purchase your land in fee?

1982

Did you apply for and receive a soil condition discount because of instability?

yes

Have you received a reduction on your property tax due to structural damage? yes

Did you sign a document preventing you from future lawsuits against the seller?

yes

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

Living room walls (2) detached - renovation included repour of slab with dirt base cost \$50,000

cracks on driveway

\$3000 soil survey (Sustainable Systems) in 2020 revealed unstable clay and running water 9 1/2 feet under property

KALAEHO HILLSIDE PROPERTY DAMAGE SURVEY

Name:

[REDACTED]
[REDACTED] Ilimano & [REDACTED]

When did you purchase your land in fee?

June 2003

Did you apply for and receive a soil condition discount because of instability?

no

Have you received a reduction on your property tax due to structural damage? no

Did you sign a document preventing you from future lawsuits against the seller?

no

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

entire front end of slab repoured to make level

replaced sanitary lines

routine cracks in wall

doors don't close over time

in summer (dry) holes 6" wide in yard

when very rainy = standing water in yard

drainage system overflows

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name: _____

Address: _____

Ilimano St

When did you purchase your land ~~in fee?~~

Jan. 2008

Did you apply for and receive a soil condition discount because of instability?

Have you received a reduction on your property tax due to structural damage? Yes

Did you sign a document preventing you from future lawsuits against the seller?

No

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

cracked wall near hill

cracked retaining wall on side

cracks living on wall - keep spreading

Severed sewer line (10' down) - emer. rpr \$10,000

shifting under Ohana

front driveway surface + house foundation separated by 3"

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

Name:

[REDACTED]

Address:

[REDACTED]

Iliana St

When did you purchase your land in fee?

May 2017

Did you apply for and receive a soil condition discount because of instability?

NO

Have you received a reduction on your property tax due to structural damage? NO

Did you sign a document preventing you from future lawsuits against the seller?

NO

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

wall separation from slab - separation around
perimeter 1-1.5"

wall cracks

concerned of future construction as hill
has coral which could shake & excavation

KALAHEO HILLSIDE PROPERTY DAMAGE SURVEY

~~Name~~ 400 block Ilimano Street

~~Address~~ block on street

When did you purchase your land in fee?
1999

Did you apply for and receive a soil condition discount because of instability?
No

Have you received a reduction on your property tax due to structural damage? No

Did you sign a document preventing you from future lawsuits against the seller?
No

Please detail structural and/or land damage on your property (i.e. Cracks in slabs and walls, wall separation, windows and doors that no longer close, sinkholes, etc.) Use other side, if necessary:

— Large crack in slab running the full width of the house, running under both bathrooms causing problems with toilets, leaky bathtub and shower, broken main sewer lines plus other cracks in main slab.

and still isn't level — Drop of 8 inches in floor from one side of house to other, have had to level twice in 25 years, main sewer line doesn't drain. — Had to replace all plumbing lines

— Broken windows, sliding glass door fell out of frame because of foundation sagging and damage. Have had to realign door locks to the frames multiple times. Have had to rebuild window frames and walls multiple times because of foundation problems.

— Finally installed 15 micropiles, injected foam under slab and jacked up the foundation, and pumped 5000 gallons of clay stabilizer →

under the house to try to stop the house from shifting so much at a price of \$120,000. Then spent another \$50,000 fixing the house to where it was liveable again and that doesn't come close to fixing other things like a sagging roof, fences and walls falling over, etc., all because of the problems of having a house and property on clay soil.

Still have a 6 foot high rock wall on my side and 7-8 foot on neighbor's side that is leaning over towards neighbor's yard and starting to come apart. It is probably 40-50 feet long and could fall over into neighbor's property. The only way to fix it would be tear it down and start over again but don't have the money or time to do that.

The other property lines all have fences that are also falling over because of clay soil that is shifting and moving. Even if one replaces them you can't stop the ground from moving so it is only a matter of time where one has to completely redo the fences again or live with them leaning ~~over~~ and falling over.

1. I do not support Resolution 24-151 (the “Resolution”) conveying a Site on the Kalaheo Hillside parcel (the “Site”) for development by DHHL.
2. Why? As written, the Resolution and proposed amendments provide insufficient safeguards to protect the existing landowners and residents along the Site from certain impacts resulting from the development of the Site with its extremely poor soil conditions, and principally down-slope on homeowners and residents along the 600-block of Iliaina Street, but also to other homes abutting the parcel.
3. Any final Resolution language must indicate that the City will not convey the Site to DHHL until both the City and DHHL complete more thorough surveys and “due diligence” on the matter. The P&E Committee should further modify and strengthen the proposed Amendments to Resolution 24-151 explicitly protecting existing homeowners, residents, properties – and those of the potential Homesteads – along the Kalaheo Site.
 - a. The final Resolution should (and, reasonably be expected to) direct both the City and DHHL to provide their assessments or “due diligence” reports to residents and the public with sufficient time for public review, comment, and testimony.
 - b. Any final version of the Resolution should also specify that DHHL fully acknowledge (in writing) DHHL’s inherent responsibility to assume all of the City’s current responsibilities and financial liabilities for the Site as part of the land’s conveyance.
 - c. Any final version of the Resolution should also stipulate that if either party determine the Kalaheo Site unsuitable for development, or that the City no longer desires to convey the Kalaheo Site to DHHL, then the City administration and the Department of Planning and Permitting (DPP) must act immediately to re-zone the parcel from its current Residential 7.5 zoning designation to P-1 Preservation in keeping with other preservation lands along Kalaheo Hillside and to prevent further such attempts to “develop” the Kalaheo Site.
 - This solution was stated by 3rd District Representative Ikaika Anderson in 2016 following another attempt by the City to divest itself of the Hillside parcel. Rep. Anderson mailed out a survey to ≈600 area property owners that would be directly or indirectly affected by any changes to this property. He received ≈400 responses in total. Many respondents commented, in great detail, on the various options as well as making suggestions of their own. Over 78% of the respondents indicated the parcel should be either re-zoned to preservation prior should not be sold and remain as-is. See: https://www.honolulu.gov/rep/site/cld3/Newsletter_May_2016.pdf.
4. Why are residents and homeowners concerned? Simply put – the soil on the Site is inherently and incredibly unstable; history and time have not changed this fact. Since the neighborhood was first developed in the mid-1950s, homeowners’ properties continue to suffer significant damage resulting from unstable composition of the soils on the land where their homes are built. This will only be magnified with any residential development of the Site.

5. There are multiple studies and surveys concerning the soils comprising the Kalaheo Hillside Site spanning 70+ years.
 - a. The earliest – a very comprehensive study conducted in 1952 by the U.S. Department of Agriculture in cooperation with the Territory of Hawai'i Agriculture Experiment Station – describes the unstable nature of the soil along Kalaheo Hillside in great detail:
 - Page 73 of the study indicates that the *Kokokani* clay soil is: “. . . *sticky and plastic when wet, and they crack widely upon drying . . . Permeability is slow to moderately slow . . . The shrink-swell potential is high.*”
 - An unnumbered page further indicates: “*When it dries, the soil cracks into huge blocks a foot or more across. When it is wet, no evidence of these blocks remain.*”
 - There is also a table in the report that indicates: “*Cuts usually unstable and will slump after a few wetting and drying cycles. Soil likely to creep downslope after it is disturbed.*”
 - To summarize this study – the soil on the site is highly unstable; rainy seasons cause the clay to swell; dry seasons cause the clay to shrink significantly. The soils are not permeable – and will tend to run off. Finally, any cuts into the soils are “unusually unstable,” “*slump*” (in geology, downward intermittent movement) after several seasons of rain and dry cycles.
 - Most disturbing is the 1952 study’s finding that the soil is “*Cuts usually unstable and will slump . . . Soil likely to creep downslope after it is disturbed.*”
 - Unfortunately – the 1950s developer of homes along Kalaheo Hillside (Kaneohe Ranch) did not disclose the findings of the 1952 study to homebuyers. However, in the early 1980s when properties were being transferred from “Lease-Hold” to “Fee Simple,” Hillside residents had discovered the 1952 soil study and presented the evidence of negligence to Kaneohe Ranch, who quietly negotiated significant discounts to the Lease-Hold” property owners to prevent the inevitable lawsuits and negative press against Kaneohe Ranch.¹
 - b. A more recent 2020 study conducted by Kokua Geotech, LLC, and financed by a home owner further corroborates the findings of the 1952 study. This study indicates the following:
 - “*Based on the results of our laboratory testing, soils very high expansion potential when subjected to moisture fluctuations and are often referred to locally as "adobe" clays. These clayey soils tend to swell significantly when exposed to moisture and shrink when dried. Such soils are potentially capable of uplifting of foundations*

¹ See written testimony of Judy Mick for a detailed listing of discounts offered by Kaneohe Ranch.

and slabs with resulting distress to the structures they support. In addition, these soils can settle significantly if saturated and/or poorly compacted.

- *Based on our observations and the results of our field exploration, we anticipate the affected foundations bear directly on expansive clayey surface fill materials and alluvial soils . . . [the home's distressed infrastructure is] caused the settlement/heave of the existing building foundations bearing on the underlying highly expansive clayey soils."*

- c. Most recently, residents of the Kalaheo Hillside community have conducted our own informal survey over the past 60 days since the announcement of this Resolution in June of 2024 to capture the current magnitude of the damage that has occurred to our neighbors' homes and property.² Bottom line, and as expected – the impact of the soil instability remains widespread and devastating. Homeowners are currently paying upward of \$50,000 to \$170,000 to shore up and repair their homes, moss-rock walls, and underground utility connections (water, sewer lines) as a result of the constantly shifting soils along the Site, and the Kalaheo Hillside as a whole.
 - d. History is a great teacher, and the preceeding is exactly will occur with the disturbance on the soil on the sites resulting from the extensive physical infrastructure development required to establish a homestead on the Site (e.g., roads, stormwater runoff, sanitary sewer lines, potable water supply, etc., etc.). It should be blindingly obvious that any major construction on the Site will create significant risks to both the existing homes and new homes being built.
 - e. Geotech firms contacted informally by Hillside residents strongly advised homeowners to conduct soil analysis on their properties stating that whomever conducts the Site's survey, and recommends DHHL development can be held financially liable when the inevitable soil shifting begins. Other firms anonymously cautioned us that some Oahu-based geoen지니어ing firms and civil engineers will deliver the results the customer wants, not what they study indicates.
6. Again, to summarize my issues with the Resolution:
- a. Principally, historical geologic and engineering studies accurately describe the **known and established** risks to existing homes, land parcels, and residents down slope along Kalaheo Hillside – the exact conditions the proposed Site for development along the 600-block of Iliaina Street.
 - b. Secondly, the lack of water permeability of the clay soil indicates stormwater runoff riak and absolutely necessitates the maintenance and sustainment of the drainage easements that the Resolution cancels, and passes off to the homeowners and residents,

² See the written testimony of Judy Mick which contains the result of this informal survey of Kalaheo Hillside residents and homeowners. You will see photographic documentation of the damages in Ms. Mick's written testimony.

- c. Thirdly – does anyone really assess that 4 core samples from across a 10-acre parcel will provide sufficient evidence to DHHL to accept this parcel, and assume the inherent sustainment of the parcel (e.g., firebreaks, drainage easements) from the City?
 - d. Fourth – the City must conduct its own damage survey to “baseline” the conditions of the homes and land on Kalaheo Hillside, particularly those homes/lots abutting the Kalaheo Stie.
 - e. Fifth, any final resolution must require and stipulate the conduct of a detailed civil and geological survey whose results must be provided to the public for review, study, and comment **BEFORE** any decision is made by the City to convey the Site to DHHL. DHHL needs to know the junk land they are getting, and the City should not be looking to “dump” this property off on DHHL in the name of “. . . *reducing the City's liability and maintenance costs for the Propert;*” assist Native Hawaiians obtain homestead lands and homes, or to “*provid[e] housing for the City's residents while addressing the City's affordable housing crisis.*” (see the first “BE IT FURTHER RESOLVED” clause in the Resolution)
7. The following pages again provide summaries of some of the informal feedback provided by current Kalaheo Hillside homeowners, principally along Iliaina Street. These comments are updated with new photos indicating the impact of soil “slippage” down-slope from Iliaina Street. They have asked that their names and specific addresses be excluded for their privacy.

Summary of Informal Homeowner Survey on Kalaheo Hillside – June-July 2024
See Also the Testimony of Hillside Residents at the August 1, 2024 Kailua Neighborhood Board

600 block of Ilimano Street

- Cracked wall near hill, cracked retaining wall on side of house, cracks living room wall – keeps spreading. Severed sewer line (10' down) emergency repair \$10,000
- Shifting foundation under Ohana
- Front driveway surface and house foundation separated by 3 feet

600 block of Ilimano street

- Entire front end of concrete slab in main living repoured to make level,
- Replaced sanitary drain lines
- MULTIPLE, yearly-routine, cracks in walls, doors don't close over time.
- Replaced half of the home's window frames that were completely out of plumb.
- In summer (dry) holes wide in yard. When very rainy → standing water in yard.
- Drainage system overflow and has flooded the back of our house when very rainy

400 block Ilimano Steet

- Large crack in slab running the full width of the house, running under both bathrooms causing problems with toilets, leaky bathtub and shower, broken main sewer lines plus other cracks in main slab.
- Drop of 8 inches in floor from one side of house to another, have had to level twice in 25 years, main sewer line doesn't drain. Had to replace all plumbing lines.
- Broken windows, sliding glass door fell out of frame because of foundation sagging and damage. Have had to realign door locks to the frame's multiple times. Have had to rebuild window frames and walls multiple times because of foundation problems.
- Installed 15 micro piles, injected foam under slab and jacked up the foundation and pumped 5000 gallons of clay stabilizer under the house to try to stop the house from shifting so much \$2120,000. Then spent another \$50,000 fixing the house to where it is live able again and that don't come close to fixing other things like a sagging roof, fences and walls falling over, etc. all because of the problems of having a house and property on clay soil.
- Still have a 6-foot-high rock wall on my side and 7-8 foot on neighbor's side that is leaning over toward neighbor's yard and starting to come apart. It is probable 40-60 feet



long and could fall over into neighbor's property. The lonely way to fix it would be tear it down and start over again but don't have the money or time to do right now

- The other property lines all have fences that are also falling over because of clay soil that is shifting and moving. Even if one replaces them, you can't stop the ground from moving so it is only a matter of time where one has to completely redo the fences gain or live with them leaning and falling over.



1000 block of Ilikala Place

- Living room walls (2) detached, renovation included repour of slab with firt base cost \$50,000. Cracks in diveway.
- \$3000soil survey (sustainable systems) in 2020 revealed unstable clay and running water 9.5 feet under property.

1000 block Ilikala Place

- Huge crack I workshop floor. I paid \$20,000 in 2016 to stabilize the foundation – it is still moving and I continue to have to repair the walls. There is a crack trough floor of kitchen and living room. Front door won't open. Cracke are in the driveway.

600 block Iliana Street

- 1988/89 house foundation completely redone prior to our ownership due to cracks.
- 2012 put in retaining wall and it had to be redone in 2019 due to movement. Lanai slab continues to crack. Interior wall in master has gap in corner. Front bay window area sinking. Horrible soil-this hill is backfilled of a clay material that will never be settled.

600 block of Iliania Street

- Front porch is separating from house. Kitchen floor tile is cracking. Walls in back of house have cracks and separating. Patio has major crack and separation in several places. Sliding glass door no longer works due to house sagging. Foundation in back family room is cracked and separating.

600 block of Iliaina Street

- Permitted retaining walls constructed in 1994 are failing due to obvious hillside erosion and slippage: retaining walls cracks, leaning and leaning; cracking, separation, leaning of concrete stairs and slabs; metal fence posts leaning and slipping downhill. Recent (preliminary quotes from contractors for repair of CMU wall alone are for \$30K-\$50K, with caution that area is unstable and the same issue will likely occur again.
- Over the past 15 years of living at this address we frequently inspect the drainage easement bordering our mauka property line. The soils exhibit strong shrink/swell characteristic aligning with seasonal dry and wet periods. Large cracks appear in the soil when dry and there are indications they connect to subsurface drainage voids. When wet, the soil is very sticky and clayey.

600 block of Iliaina Street

- Home was renovated in 2019. Contractors found foundation has lifted in the middle. Whole foundation had to be lifted in the middle. Whole foundation had to be leveled. Had to inject substance into soil so won't expand and contract under the foundation. Where nothing was injected (outside the house) new slabs have cracked, rock wall has cracks. Pretty scary. Before the renovation, door and gates askew-gates virtually unusable. Glass and sliding doors would get stuck and coming off track.

600 block of Iliaina

- Cracks in back retaining wall. Cracks in home walls. Gate would close some days and be completely off the next. We have had to remove that gate/fence. Front door gets stuck and we are not able to open from inside on some days. Huge deep cracks on our hillside. Cracks in driveway/carport. Rocks falling out of rock wall b/c of shift

600 block of Iliaina street

- Foundation cracks and some wall damage

600 block of Iliaina street

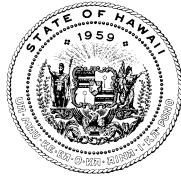
- 2021 retaining wall collapse in backyard. 2021 sewer line pooling and collapse, likely due to settling. \$19K repair. Previous owner renovated kitchen and waste lined due to cracking and settling of slab.

600 block of Iliaina Street

- Wall separation from the slab – separation around perimeter 1-1.5 inches. Wall cracks. Corner of future construction is hill and hill has coral which could shake and excavation.

JOSH GREEN, M.D.
GOVERNOR
STATE OF HAWAII
*Ke Kia'āina o ka Moku'āina 'o
Hawai'i*

SYLVIA J. LUKE
LT. GOVERNOR
STATE OF HAWAII
*Ka Hope Kia'āina o ka Moku'āina
'o Hawai'i*



KALI WATSON
CHAIRPERSON, HHC
Ka Luma Ho'okele

KATIE L. LAMBERT
DEPUTY TO THE CHAIR
Ka Hope Luma Ho'okele

**STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS**

Ka 'Oihana 'Āina Ho'opulapula Hawai'i

P. O. BOX 1879
HONOLULU, HAWAII 96805

**TESTIMONY of KALI WATSON, CHAIRMAN
HAWAIIAN HOMES COMMISSION**

Before the
HONOLULU CITY COUNCIL
COMMITTEE ON PLANNING AND THE ECONOMY

Thursday, August 22, 2024
9:00am

In consideration of
PROPOSED CD1 TO RESOLUTION 24-151

Aloha Chair Kia'āina, Vice-Chair Cordero, and members of the Committee on Planning and the Economy:

Mahalo to the City Council of the City and County of Honolulu for the opportunity to provide testimony in strong support of the Proposed CD1 to Resolution 24-151 approving and authorizing the conveyance of the former Kalaheo Elementary School property in Kailua, O'ahu, to the State of Hawai'i Department of Hawaiian Home Lands (DHHL), in furtherance of the intent of the Hawaiian Homes Commission Act, 1920, as amended (HHCA) and to honor the legacy of Prince Jonah Kūhiō Kalaniana'ole, which includes his role in establishing the counties of the State of Hawai'i.

This resolution acknowledges that the HHCA, which was later incorporated as a provision in the State of Hawai'i Constitution as a condition of statehood, was intended to provide native Hawaiians with homesteads through leases of residential, pastoral, and agricultural lots and the City is committed to and has a role to further the intent of the HHCA by providing the former Kalaheo Elementary School site in Kailua. DHHL is supportive of this resolution aimed at addressing the goals and objectives set in motion over one hundred years ago.

DHHL appreciates the opportunity the conveyance of this land will provide to native Hawaiian families, and also appreciates the cancellation of drainage easements A, E, F, and V. Additionally, the CD1 clarifies that the City's intent is to convey the ~10.038 acre site, except for portions of the property to be designated as roadways that the City will retain ownership.

DHHL supports the following additional amendments: 1) clarifying that the conveyance of the Kalaheo site to DHHL is for the development of single-family housing consistent with the character of the surrounding neighborhood; 2) providing that DHHL will need to conduct due diligence prior to the conveyance to determine the suitability of the Kalaheo site for the proposed development, including preparation of a Preliminary Engineering Report detailing utility and infrastructure availability, topography, soils, physical constraints and access restrictions, and other pertinent information; and 3) providing that the City will also need to conduct due diligence prior to conveyance, including evaluation of the potential impacts of the proposed development to the surrounding neighborhood, such as impacts to traffic and infrastructure, as well as a survey of any existing, soil-related damage to the homes abutting the Kalaheo site.

DHHL can only develop where it has lands. Most of DHHL's land is located on the neighbor islands in rural or more remote locations. The greatest demand (longest waiting list) is for residential property on O'ahu. Yet, DHHL has the least amount of land holdings on O'ahu. Furthermore, the DHHL Beneficiaries Study Applicant Report, 2020 reflected not only that areas on O'ahu are the most desired, but specifically the Ko'olaupoko and Ko'olaupoko region on O'ahu is identified as the most preferred location on O'ahu.

Therefore, we heartily support this Proposed CD1 to Resolution 24-151.

Subject: Written Testimony of Sharon Sawdey to the Committee on Planning and the Economy (P&E) meeting regarding City Council Resolution 24-151, Conveyance of Kalaheo Hillside Parcel (TMK 4-4-033:018) to the Hawai'i Department of Hawaiian Home Lands (DHHL) to include changes and amendments in 24-151 CD1.

Overview

My name is Sharon Sawdey, and I have lived adjacent to the Kalaheo Hillside parcel for 15 years. As a professional civil engineer with more than 30 years experience developing and assessing proposed projects, it's been enlightening both personally and professionally to see this resolution evolve as it passes through the committee process. I recognize and appreciate that Proposed Committee Draft 1 incorporates amendments that address several concerns raised by our community. However, as currently written, I still perceive shortcomings in the Resolution and therefore continue to oppose it. The section that follows identifies specific Resolution wording that needs to be strengthened, while the final section summarizes the evidence of structural damage and soil instability on our property.

Resolution Concerns

1. Amendment "L" indicates DHHL will prepare a Preliminary Engineering Report (PER) prior to the conveyance as part of its due diligence to determine the suitability of the Kalaheo Site for the proposed development. While I highly commend the committee for adding this language, it needs to include a public review process: that is, the PER must be made available for at least 60 days before conveyance to allow the public sufficient time for review and comment.
2. Amendment "M" indicates the City will also conduct due diligence prior to the conveyance, evaluating potential impacts of the proposed development on the surrounding neighborhood. Similar to Amendment L, the C&C's due diligence assessment needs to include a public review period of at least 60 days, prior to conveyance, to allow the public sufficient time for review and comment.
3. Amendment "I" states the Kalaheo Site is to be developed for "affordable single-family housing consistent with the character of the surrounding neighborhood". This language raises two concerns:
 - A. It contradicts the language in Amendment "D" stating the Kalaheo Site is zoned R-7.5 Residential District and P-1 Restricted Preservation District, since the most current version of the C&C Department of Planning and Permitting Land Use Ordinance (LUO) allows duplexes to be built in R-7.5 zoning. (See Table 21.3, particularly pages 46-47 at https://www.honolulu.gov/rep/site/dpp/LUO_2024.7.30.pdf). For clarity, Amendment "I" should be modified to specify development of affordable single-family homes ONLY, consistent with the character of the surrounding neighborhood.
 - B. The language may preclude DHHL from assessing Subsistence Agriculture or other low density homestead purposes described in the DHHL Oahu Island Plan

(2014). Given the unstable soil conditions, a lower-density development might reduce the risk of structural damage both on-site and down-slope while still achieving some homestead development benefits. Please encourage an assessment to determine the potential benefits of a lower-density development.

Soil Instability and Structural Damage Concerns

Our property lies adjacent to the proposed conveyance parcel, and the back slope includes four rock and CMU retaining walls that were permitted by the City and installed in 1995, making them now just 30 years old. When we purchased our home in 2009, the disclosure statement did not indicate any issues with ground stability, and we saw no signs of structural failure on the site. Around 2015 we began seeing cracks and wall tilt. This past March following significant rains, the CMU wall failed. Three estimates we received to complete repairs were in the range of \$35,000 to \$45,000. One contractor noted he cannot guarantee the repairs will last any set amount of time, since the evidence of ground movement and slippage is so significant.



Photo 1 caption: This 5-foot high, permitted CMU retaining wall failed in March after substantial rains. The wall runs parallel to the drainage easement along our mauka property boundary, about 7 feet from the concrete-lined drainage ditch. Even with that close proximity to the ditch, note the occurrence of large shrink-swell cracks in the soil; these are evidence of considerable subsurface water flow during wet periods.



Photo 2 caption: This permitted rock retaining wall is about 30 years old but showed no sign of leaning when we purchased the property in 2010. A haole koa tree at the far end is probably preventing it from falling totally over.

Amendment “1” states this Resolution will help address the City’s affordable housing crisis and also show the City’s commitment to further the intent of the (Homestead) Act. However, there are obvious, visible challenges to develop the Kalaheo Site, beginning with a steep slope of about 12%. Substantial evidence from downslope residences demonstrates real-time issues with very unstable soils. Indeed, the advice of local geology experts as reported in the reference *Volcanoes in the Sea, the Geology of Hawaii* (Macdonald et al., 1983) is this:

Once slopes with high potential for landsliding have been identified, the best solution is to **avoid them altogether**. If this cannot be done, great care must be taken to design earth work and buildings so as to prevent landsliding... In particular, excess loading and steepening of slopes... should be avoided. **If this is not achieved, continued troubles must be expected.**

Summary

I applaud the Committee for requiring the completion of the DHHL Preliminary Engineering Report and the C&C impacts evaluation prior to conveyance. I trust the Committee will further amend the Resolution to include a 60-day public review and comment period on the findings. My personal experience anticipates the reports will estimate development costs considerably higher than average, and with a high risk of damaging both new and existing resident investments. Even so, I look forward to learning more about the conditions of my Kalaheo Hillside property and community, and I hope in some way to contribute to responsible resource management and development of more affordable housing here on Oahu.

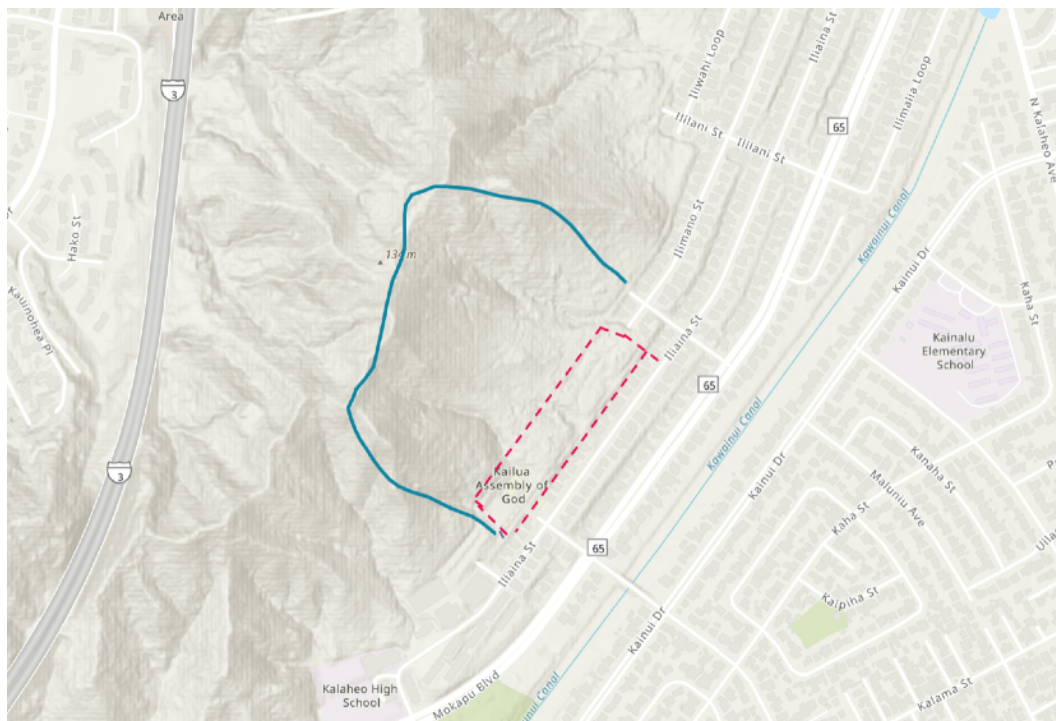
Thank you for this opportunity to comment on City Council Resolution 24-151, Committee Draft 1.

Sharon Sawdey
657 Iliaina Street
Kailua, HI. 96734

Subject: Written Testimony of James Hancock to the Committee on Planning and the Economy (P&E) meeting regarding City Council Resolution 24-151, Conveyance of Kalaheo Hillside Parcel (TMK 4-4-033:018) to the Hawai'i Department of Hawaiian Home Lands (DHHL) to include changes and amendments in 24-151 CD1.

I am opposed to this resolution in its current written form for several reasons:

1. It does not protect the existing neighborhood or attach liability to anyone for future hillside soil damage caused by building this development at all.
2. I want a legitimate soil and land instability assessment as it pertains to the proposed development parcel and in the existing adjacent neighborhood, before the ownership of this parcel is changed.
 - A. I want physical drill core samples, not hydraulic echo signal data.
 - B. I want at least 10 samples laid out by grid, not random places easily accessible by the machinery.
3. I want an accurate accountability of what responsibility this future construction has with regards to following established Uniform Building Codes for Hawaii and Honolulu County, especially as it pertains to electrical, plumbing, weather related and water drainage issues.



Red outline is proposed development of 10 acres.

Blue outline is watershed / drainage basin boundary, approximately 75 acres.

Kailua averages 50 inches of rain a year. Because of the development parcel's hillside topography, the site also has to convey all the uphill runoff water as it passes downhill through the site. This is an amount more than 5 times the amount of water that falls directly on the parcel.



This hydrant at 515 Iliaina has been leaking for months. Long enough for a stream of green algae to live in the concrete ditch for the distance from it to the street storm drain drop inlet about 100 yards away.



These are some of the extra-curricular repairs and fortifications used commonly on this Kalaheo Hillside neighborhood.



... and ultimately the base breaks through the concrete anyway.

Thank you all for this opportunity to comment on City Council Resolution 24-151,
Committee Draft 1.

James Hancock
657 Iliaina Street
Kailua, HI. 96734

Enclosure:

1 – Written Testimony of James Hancock, submitted for the July 25, 2024, City Council
P&E Committee Meeting.

Written Testimony of Jim Hancock
July 25, 2024

Subject: Written Testimony of Jim Hancock regarding City Council Resolution 24-151, Conveyance of Kalaheo Hillside Parcel (TMK 4-4-033:018) to the Hawai'i Department of Hawaiian Home Lands (DHHL)

Aloha,

My name is James Hancock. I live at 657 Iliaina St, in a home that my wife and I have owned for about 15 years. I am writing this to discourage the transfer of this 10 acre plot to anyone intending to develop it. I am a Geologist, University of Houston (1971) B.S. Geology. I will attempt to explain why this is a very bad idea in terms of the geologic nature of this parcel.

The Soil

The exposed surface of this parcel is Kokokahi clay of unknown depth. I would guess at my property at least 10 feet. In the upper left corner of this plot the elevation is 70 feet higher in elevation than my house I would assume the clay to be at least half of that.

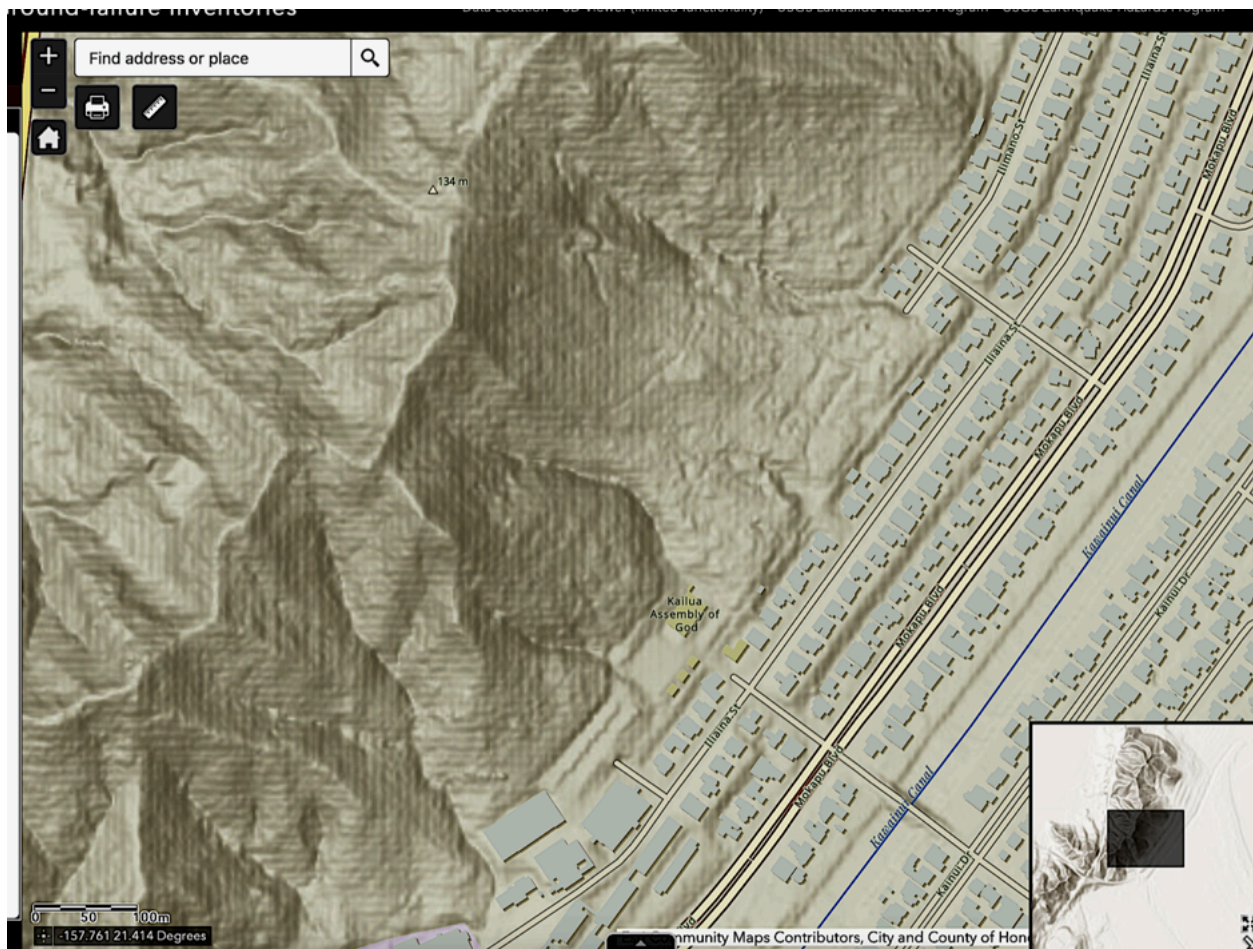


Montmorillonite is the common clay mineral associated with most expansive and highly plastic soils. Unlike the more stable kaolinite, **montmorillonite** has a variable crystal lattice which allows it to absorb large numbers of metal cations and water molecules on its surface. Thus when water is available it is absorbed by montmorillonite and the soil expands; then when the soil dries out and the water is lost from the montmorillonite structure, the soil shrinks, **With sufficient water, montmorillonite, may expand up to 15 times its own volume.** Fortunately, most Hawaiian soils contain only limited amounts of **montmorillonite**.

The Hill



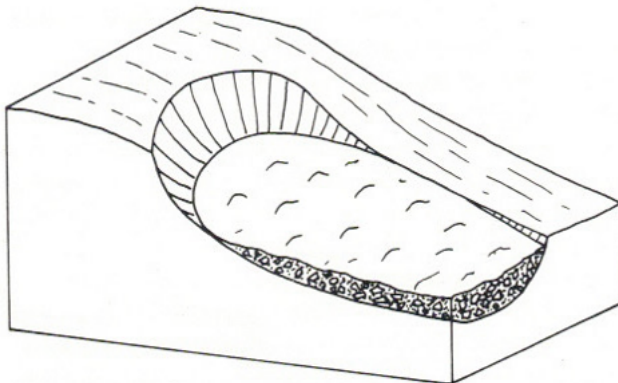
It can be seen from a simple contour map that the site has a substantial slope. Estimates place it at roughly twice as steep as the existing housing below, and it is especially steep in the southwest part of the parcel. Enormous amounts of soil will need to be removed, moved or manipulated to make this site work.



This LIDAR reveals the surface of the property.
Notice the now 60 year old remnants of attempted road preparation, A
And the missing soil B which was probably removed and used to smooth out lawns and back
yards in the development.



This 1997 air photo clearly shows what I believe to be a very old landslide, The more recent LIDAR image clearly confirms it.



To the left is a diagram from Macdonald et al. (1983) illustrating the general form of a typical landslide.

The following (from the MacDonald 1983) is a description of a very similar situation involving montmorillonite clay and new home construction

subdivision in the upper reaches of Palolo Valley and Aina Haina Valley close to Waimanalo (just over the Koolau ridge) Similar soil types and at the foot of the hills.

The Waiomao subdivision was completed near the end of 1952, and in March 1954 the first signs of slope instability appeared. At the end of November 1954 the rate of sliding began to increase, presumably partly in response to almost 23 centimeters of rainfall in one 48-hour period. By February 1955 it became necessary to disconnect the water main in



Kuahea Street, and during the next several years all utility lines were dug up and relocated above ground.

The rate of sliding movement is slow, several centimeters to a few meters per year, and is fairly well correlated with rainfall (Peck, 1967). Due to the slow movement, human life has not been endangered; however, the ground surface has dropped a few meters in places, breaking and tilting road pavements as well as tilting and distorting houses to the point that most of them have had to be abandoned. The slide is of the slump type, and is taking place in colluvial material resting on competent basalt bedrock. The colluvium is primarily weathered basalt consisting of gravel and boulders in a matrix of mostly brownish clay, including some montmorillonite. The shearing surface bounding the slide at the bottom appears to be approximately 20 meters below ground level in the central part of the slide.

R. Peck (1959), an expert in slope stability problems, hired by the City of Honolulu to study the Waiomao slide, concluded that the slide was caused by: (1) reduction of effective frictional resistance to sliding in the soil because of high groundwater pore pressure, and (2) an increase in the weight of the overlying soil because of water trapped above the sliding surface. He also concluded that the sliding movement created a "smear zone" which prevented water from draining out of the sliding mass into the underlying permeable basalt, hence the inability of the slide to drain and the build-up of excessive pore water pressure.

Numerous attempts were made to stabilize the slide, mostly aimed at draining the sliding mass, but none was successful, and by 1970 all attempts at stabilization were abandoned. Subsequently, the City purchased much of the most severely affected property and in 1976 graded the area into a park. The area is still highly unstable and undoubtedly will continue its slow but relentless descent for many years to come.

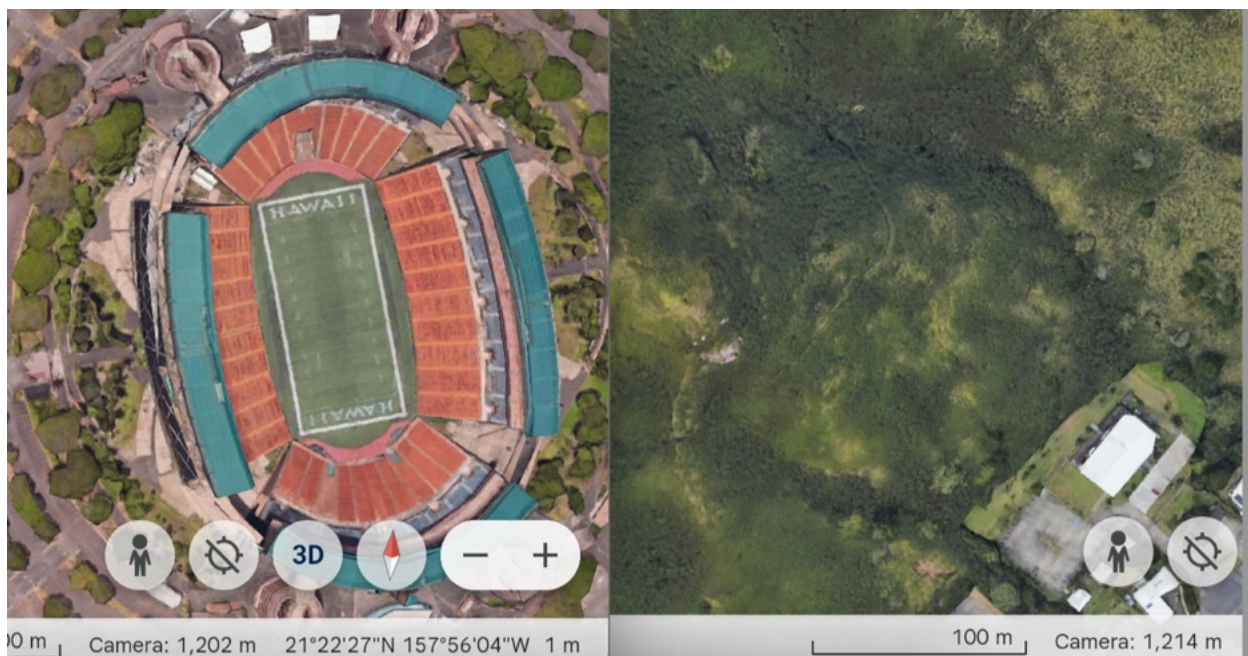
Aina Haina Valley, in Honolulu, also has experienced numerous landsliding problems. By far the most serious is a large slide covering over 12,000 square meters and affecting some 32 residential lots between Mona and Hind luka streets in the upper eastern portion of the valley (fig. 9.8). Movement in this area, as evidenced by leaky water mains, was first detected in early 1966, some 8 years after development was completed. The Hind luka slide, as it is called, is similar in many respects to the Waiomao slide in Palolo Valley. Like the Waiomao slide, the rate of movement generally is slow, averaging at most a few meters per year, and periods of most rapid movement correlate fairly well



...This is a picture taken yesterday July 24 on my street just a couple of houses away.

with heavy rainfall. Although the Hind luka slide is only about 5 meters thick, the sliding mass is very heterogeneous colluvial material consisting of rock and boulder fragments in a matrix of brownish clay. Much of the clay is expansive montmorillonite.

Landslide experts hired by the City of Honolulu, R. Peck and S. Wilson (1968), concluded that the causes of sliding were: (1) inherent instability of slopes in this area, coupled with (2) stress concentrations resulting from residential development, and (3) addition of water into the subsurface from broken utility pipes and other associated development activities. Numerous efforts at stabilizing the sliding mass were attempted, but none was successful, and as with the Waiomao slide, the City ultimately purchased most of the affected property and converted the area into a park.



This is a true to scale series of pictures of Aloha Stadium as it compares to the aforementioned “very old landslide”. I estimate that the quantity of Kokokahi clay in that slide would just about fill aloha stadium. Imagine that mass tipped up 200 feet on the side of a hill in your back yard.

Creep

Macdonald et al. (1983) describe this issue as follows:

Although not dramatic in terms of surface expression, slow downslope movement by creep is a very important process of mass wasting in Hawaii. In areas of high rainfall, creep occurs in weak soils on steep slopes as a result of gravitational forces slowly deforming the near-surface materials. In drier areas the force of gravity is aided by expansion and contraction of soil particles caused by alternate wetting and drying.

Even though overt evidence of creep such as bent tree trunks and stretched roots is scarce, Peck and Wilson (1968), in a study of landsliding in Aina Haina Valley for the City of Honolulu, concluded that many hillsides in Honolulu are continually moving very

slowly downward as a result of creep. They estimated, based on visual observations in several residential developments and survey data from upper Aina Haina and upper Palolo valleys, that creep rates of the surface of these slopes is on the order of 0.5 to 1 centimeter per year.



Across from Aikahi Fire Department



Fire hydrant busting through a substantial
Concrete foundation



My backyard, collapsed walls.



Kokokahi clay soil profile, 18 inches deep, my backyard.

Comments by Christopher W. Evans
to the
Committee for Planning and the Economy (P&E) Meeting,
August 22, 2024
Concerning City Council Resolution 24-151 (Conveyance of Kalaheo Hillside Parcel (Tax
Map Key 4-4-033:018) to the Hawai'i Department of Hawaiian Home Lands

1: I have a home in the 400 block of Ilimano Street on Kalaheo Hillside and oppose the resolution and amendments as currently written.

A. The land on Kalaheo Hillside and the parcel in question has significant clay soil problems and should not be developed at all. I have owned my home on Kalaheo Hillside for over 25 years and although it is a nice neighborhood I have seen first hand the problems with the clay soil and what it can do to any development in that area.

When we bought the house 25 years ago we knew about the soil problems but thought that after 40 years since the neighborhood had been developed that the land would have settled and not be such problem anymore. That was the furthest from the truth. Clay soil is constantly changing or moving on an annual basis, expanding when wet after any rain, and contracting and shrinking when dry mostly in the summer months. This causes the soil to expand and shrink every year causing foundations to move and crack, walls to crack, roofs to break, pipes to move, bend and break, doors and windows to jam, and nothing to stay level or straight up and down (plumb).

We have had to repair our house annually for years just to keep it livable and finally this last year spent over \$200,000 in foundation and house repairs just to make it livable again. We installed 15 micropiles into the soil around that back of the house, injected clay stabilizer, and jacked it up to fix a large crack and broken foundation that had made the house un-inhabitable. We are hoping that this will fix the problem for a while but were only able to do about half of the recommended fix as proposed by the engineering study because of the very expensive costs of these kinds of repairs. The foundation studies and repairs were around \$125,000 and the remaining \$75,000 was for putting the house back together and that was the minimum that we could have done. To do the recommended repair would have cost another \$100,000 and that is only what is under the actual structure. Anything else on the property like fences, walls, underground water and sewer pipes, etc. that is not directly under the house is still subject to moving with the clay soil and will continue to have settling problems. Even after the very expensive foundation repairs the house is still moving but just not as much.

One can live with a crooked house up until a point but when toilets start leaking, bathtubs and showers start leaking and wrecking your walls, sewer lines don't drain downhill anymore, and water pipes break, roofs crack, etc, then it becomes unliveable and one has to make very expensive repairs that are often beyond the reach of a typical working or retired person. Although Kalaheo Hillside looks like an ideal place to live it has major ongoing problems and probably should not have been developed in the first place. This is why so many of us have spoken out against this land transfer and potential development. It would not be a wise place to invest for residents that don't have a lot of extra money to make these ongoing annual repairs that never end. There is also a big

liability of developing this parcel without doing damage to the surrounding homes just by disturbing the soil.

2: If the City decides to go forward with this proposal then there are some further revisions or amendments that I and my wife would like to see made in the Resolution.

A. We would like to see that the City will NOT convey the site to DHHL until both the City and DHHL complete more thorough soil surveys of the area, survey all of the land owners on Kalaheo Hillside of existing and past damage caused by the soil problems, and do due diligence to protect the City, DHHL, and the current land owners, not renters or caretakers but actual land owners.

The Resolution should direct both the City and DHHL to provide these assessments or Due Diligence reports to the residents and the public with sufficient time for public review, comment, and testimony. Only after that should the P&E Committee begin to consider recommending the approval of the Resolution for the full City Council approval and possible conveyance of the land to DHHL.

Any final Resolution needs to specify in writing that DHHL fully acknowledge the inherent responsibility and financial liabilities for the site as part of the land conveyance.

Given that this issue keeps coming up over and over again, if the land is determined to be unsuitable for development, then we recommend that the Department of Planning and Permitting down-zone the parcel's "residential" zoning to "Preservation" so that further attempts to develop this parcel are no longer an issue.

If the parcel is conveyed to the DHHL for future development we ask that it be written that each parcel only be allowed for single family dwellings and not duplexes or multi-family dwellings. This would be consistent with the neighborhood and not add too much extra infrastructure issues to a very small residential neighborhood.

Finally: I just want to restate once again that my wife and I oppose the resolution and think that this land should not be conveyed to DHHL for future development. We are all for good land for Hawaiian Home Lands but think that this land has too many problems to be a good investment for any future development.

Thank you and Aloha,

Christopher W. Evans

TO: Committee for Planning and the Economy (P&E) Meeting, July 25, 2024,
FROM: Kyle Smith, 604 Ilimano Street, Kailua HI 96734
RE: Written Testimony of Kyle Smith in OPPOSITION TO City Council Resolution 24-151
DATE: August 22, 2024

1. I am over eighteen, competent to testify to the following matters, and make this declaration in opposition to City Council Resolution 24-151 (Conveyance of Kalaheo Hillside Parcel (Tax Map Key 4-4-033:018) to the Hawaii Department of Hawaiian Home Lands [DHHL]) due to the numerous unanswered questions of
2. I live at 604 Ilimano Street, Kailua and I am a resident of Kalaheo Hillside.
3. I have no opposition to a Hawaiian Homelands community within Kailua or Kalaheo Hillside so long as it is thoughtfully planned. I am deeply concerned, however, about the prior lack of transparency in the roll-out of City Council Resolution 24-151. While I do appreciate recent modifications to the original resolution, I believe specific protection should be included on behalf of my Kalaheo Hillside neighbors.
4. In particular, the Resolution should direct both the City and DHHL to provide all assessments or “due diligence” reports to residents and the public with sufficient time for public review, comment, and testimony. Only then should the P&E Committee begin to consider recommending the approval of the Resolution for full City Council approval and possible conveyance of the Site to DHHL.
5. As has been repeatedly noted, Kalaheo Hillside has substantial concerns regarding soils, wastewater treatment, traffic, fire, and run-off related to the proposed transfer that should be addressed *before* any transfer is authorized.
6. For example, my family has spent tens of thousands of dollars because of expansive clay soils that have caused substantial cracking of foundations, walls, and ceilings in addition to adverse impacts on our windows, doors, etc. Because of the historic problem of expansive soils on Kalaheo Hillside, it is my understanding R.M. Towill intends to conduct a Preliminary Engineering Report (PER) for the City to assess the suitability of the site for future development. While the community has raised questions about the timing, scope of work, and significance of the PER, no response has yet been provided. I believe such information should be provided to the community before any transfer is approved.
7. Kalaheo Hillside already bears a significant burden related to Kalaheo High School parking and traffic and any new development plan should address how and whether it will add to existing problems.
8. Finally, Kalaheo Hillside has a long history of significant rainfall and flooding. HRS § 46-11.5 recognizes that “each county shall provide for the maintenance of channels, streambeds, streambanks, and drainageways, whether natural or artificial, including their exits to the ocean, **in suitable condition to carry off storm waters**; and for the removal from the channels, streambeds, streambanks, and drainageways and from the shores and beaches any debris **which is likely to create an unsanitary condition or otherwise become a public nuisance**.”¹ To date, maintenance of the adjacent stormwater channel near our home has been carried out by City personnel. Will this maintenance continue and how will it be handled under the proposed transfer are additional questions that have not been addressed?
9. These examples are neither exclusive nor limited to a few homes. Rather, Kalaheo Hillside has an interest in making sure that future development is thoughtfully carried out rather than treated as a political plank. This begins with working with residents to address valid concerns. Accordingly, because

¹ HAW. REV. STAT. § 46-11.5.

there has been little effort to date to work with the neighborhood to make sure transfer is in the best interest of the community and DHHL, I respectfully OPPOSE Resolution 24-151.

Sincerely,

Kyle Smith

HONOLULU CITY COUNCIL

KE KANIHELA O KE KALANA O HONOLULU
CITY AND COUNTY OF HONOLULU

COMMITTEE ON
ECONOMY

Voting Members

Esther Kia'aina

Radiant Cordell

Val A. Okimoto

Calvin K.Y. Saiki

Matt Weyer

AGENDA

REGULAR MEETING
CITY COUNCIL CHAMBER
THURSDAY, AUGUST 22, 2024
9:00 A.M.

PROPOSED CD1 TO RESOLUTION 24-151

Aloha Chair Waters and City Council members:

While the intent to support the need for affordable housing for Hawaiians is to be commended, there are various public policy mindset that needs to be dialogued. Is this the best way to encourage DHHL to serve its kuleana? It already manages about 203,500 acres in Hawaii.

1. Is the City on a campaign to sell "surplus city real property"? Recently it was the Piikoi Street Little Park of 5,000 square feet for \$112,000 to the neighboring real estate investor. Now, it another open space that has also served as a public space for local residents for generations.
2. Local residents have come forth to express their first hand knowledge of the area. The subject land area may not be the best area to further "turn it into a parking lot" for various reasons, including the natural environment like drainage as stated by written testimonies who are familiar with the area.
3. Is this area the best for DHHL housing that is already very well-funded and has many resources and options to promote its important mission? What about farming for interested Hawaiians?
4. Could this area be better suited to continue to be an open space for ALL residents in Oahu? Open Green Space is much needed for all as concrete density increases.
5. We do not know what the future needs may hold for Oahu. But we know that once a city real property is given away, it's gone forever. It leaves the city no opportunity to revisit this parcel again. The inventory for the city is forever lessened.

6. Lest I'm labeled as anti-Hawaiian, I want to share that I've grandchildren of Hawaiian ancestry. My husband speaks Hawaiian. I've lived with Hawaiians all these decades I've been here. Much of my best friends are Hawaiians. I've spent decades supporting and advocating for Hawaiian interests. I've helped Hawaiians and others protect their family lands and kuleana as much as I can.

Sincerely,

Choon James
808 293 8888
ChoonJamesHawaii@gmail.com

References:

"APPROVING AND AUTHORIZING THE CONVEYANCE OF THE FORMER KALAHEO ELEMENTARY SCHOOL PROPERTY IN KAILUA, O'AHU, TO THE STATE OF HAWAII DEPARTMENT OF HAWAIIAN HOME LANDS, IN FURTHERANCE OF THE INTENT OF THE HAWAIIAN HOMES COMMISSION ACT AND TO HONOR THE LEGACY OF PRINCE JONAH KŪHIŌ KALANIANA'OLE, WHICH INCLUDES HIS ROLE IN ESTABLISHING THE COUNTIES OF THE STATE OF HAWAII."

B. Amends the 13th WHEREAS clause to provide that the Hawaiian Homes Commission Act served as the legal basis for the establishment of the State of Hawai'i Department of Hawaiian Home Lands ("DHHL").

Page 7

C. Deletes the 15th and 16th WHEREAS clauses relating to a previous land exchange between the City and the DHHL.

D. Amends the 17th WHEREAS clause to clarify that the former Kalaheo Elementary School property (the "Kalaheo Site") is zoned R-7.5 Residential District and P-1 Restricted Preservation District, has an assessed value of \$10,455,000, and is depicted on the map attached to the resolution as Exhibit A (instead of Exhibits A-1 and A-2).

Amends the 20th WHEREAS clause to provide that by Departmental Communication 557 (2024), the BFS Director has determined that the Kalaheo Site is **surplus** City real property, and, with the concurrence of the Department of the Corporation Counsel, has recommended the disposal of the Kalaheo Site pursuant to ROH § 37-1.2, subject to the City retaining its ownership of portions of the Kalaheo Site to be designated as roadways.