

LAND USE COMMISSION  
STATE OF HAWAI'I

Hearing held on June 10, 2020  
Commencing at 9:00 a.m.

Held via ZOOM by Interactive Conference Technology  
and  
YouTube Streaming Video Link

AGENDA

VI. Call to Reconvene (If Necessary)

VII. CONTINUED HEARING AND ACTION (If Necessary)

VIII. EXECUTIVE SESSION (Continued)

IX. ADJOURNMENT

BEFORE: Jean Marie McManus, CSR #156

## 1 APPEARANCES:

2 JONATHAN SCHEUER, Chair (Oahu)  
NANCY CABRAL, Vice Chair (Big Island)  
3 EDMUND ACZON (Oahu)  
GARY OKUDA (Oahu)  
4 LEE OHIGASHI (Maui)  
ARNOLD WONG (Oahu)  
5 DAN GIOVANNI (Kauai)

6 STAFF:

WILLIAM WYNHOFF, ESQ.  
7 Deputy Attorney General

8 DANIEL ORODENKER, Executive Officer  
RILEY K. HAKODA, Planner/Chief Clerk  
9 SCOTT DERRICKSON, AICP/Planner

10 DAWN APUNA, ESQ.  
Deputy Attorney General  
11 RODNEY FUNAKOSHI, Planning Program Director  
LORENE MAKI, Planner  
12 State of Hawaii, Office of Planning

13 DUANE PANG, ESQ.  
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14 Department of Planning and Permitting  
City and County of Honolulu

15 BENJAMIN MATSUBARA, ESQ.  
16 CURTIS TABATA, ESQ.  
Attorneys for Petitioner

17 GRANT YOSHIMORI, Pro Se  
18 RICH McCREEDY  
For Intervenor Hui O Pikoiloa  
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1                   CHAIRPERSON SCHEUER: Aloha mai kakou.  
2                   Good morning. This is Wednesday June 10th,  
3                   continuation of the June 9th and June 10th Land Use  
4                   Commission hearing on the Hawaiian Memorial Park  
5                   matter.

6                   I want to do one brief update on June 9th.  
7                   Yesterday the Land Use Commission received public  
8                   testimony by email from Richard and Donna Perkins,  
9                   Lokahi Cuban, Mililani Group Incorporated from Eadean  
10                  M. Buffington and from Sarah Houghtailing.

11                  Those documents are uploaded to the Land  
12                  Use Website and available to all the parties.

13                  Are there any comments or questions on our  
14                  continued procedure today? We're in the middle of  
15                  the presentation of witnesses from the Petitioner by  
16                  Ben Matsubara and Curtis Tabata following by  
17                  questioning of each witness, and that will be  
18                  followed by presentation of the cases from the  
19                  County, Office of Planning and Intervenor.

20                  Are there any questions for our procedures  
21                  for today or comments about our procedures or  
22                  operations, especially as it might relate to our  
23                  online platform?

24                  MR. WYNHOFF: Chair, perhaps I missed it.  
25                  Could we just make sure that we confirm for the

1 record that all of the Commissioners are present?

2 CHAIRPERSON SCHEUER: Sure.

3 MR. WYNHOFF: Thank you, sir.

4 CHAIRPERSON SCHEUER: We will do presence  
5 of the Commissioners and appearances as well.

6 Mr. Orodenker, will you confirm presence  
7 of all Commissioners?

8 EXECUTIVE OFFICER: Thank you, Mr. Chair.  
9 Commissioner Aczon?

10 VICE CHAIR ACZON: Here.

11 EXECUTIVE OFFICER: Commissioner Okuda?

12 COMMISSIONER OKUDA: Present.

13 EXECUTIVE OFFICER: Commissioner Wong?

14 COMMISSIONER WONG: Here.

15 EXECUTIVE OFFICER: Commissioner Cabral?

16 VICE CHAIR CABRAL: Here.

17 EXECUTIVE OFFICER: Commissioner Giovanni?

18 COMMISSIONER GIOVANNI: Here.

19 EXECUTIVE OFFICER: Commissioner Ohigashi?

20 COMMISSIONER OHIGASHI: Here.

21 EXECUTIVE OFFICER: Who am I missing?

22 Commissioner Chang?

23 COMMISSIONER CHANG: I'm here, thank you

24 EXECUTIVE OFFICER: Chair Scheuer?

25 CHAIRPERSON SCHEUER: Here.

1           Thank you very much. Let's do appearances  
2 as well.

3           MR. MATSUBARA: Good morning, Mr. Chairman,  
4 members of the Commission, Ben Matsubara and Curtis  
5 Tabata on behalf of Petitioner Hawaiian Memorial Life  
6 Plan.

7           MR. PANG: Duane Pang, Deputy Corporation  
8 Counsel.

9           MS. APUNA: Deputy Attorney General Dawn  
10 Apuna on behalf of State Office of Planning.

11           MR. YOSHIMORI: Good morning everyone.  
12 Grant Yoshimori, with me is Rich McCreedy for  
13 Intervenor Pro Se.

14           CHAIRPERSON SCHEUER: I'm not -- on my  
15 screen -- I apologize for this, but I'm not seeing  
16 your video, Mr. Yoshimori. Got it, thank you.

17           With that, I'm not going to repeat  
18 announcements I made yesterday morning regarding the  
19 reason why we are doing this via interactive "ZOOM"  
20 technology.

21           I will repeat, however, the request that  
22 everybody speak slowly and clearly and identify  
23 themselves prior to speaking to aid our court  
24 reporter. Unlike when we're in the room together  
25 when the court reporter can ask for clarification, or

1 did not hear something, she's not able to do that in  
2 this proceeding.

3 With that, are there any other questions  
4 about our procedures today or timing? Hopefully we  
5 will be able to get through most of everything by  
6 4:30 today, but we will see how it goes.

7 Any questions?

8 MR. MATSUBARA: Petitioner has no  
9 questions, Mr. Chair.

10 MR. PANG: No questions from the City.

11 MS. APUNA: No questions.

12 MR. YOSHIMORI: The Intervenor has --

13 CHAIRPERSON SCHEUER: No questions?

14 MR. YOSHIMORI: No questions. Thank you.

15 CHAIRPERSON SCHEUER: Okay. Let's proceed,  
16 Mr. Matsubara.

17 MR. MATSUBARA: I believe Mr. Morford was  
18 on the stand and subject to cross-examination by the  
19 Commission. So Mr. Morford is here and available for  
20 questions.

21 CHAIRPERSON SCHEUER: And I will note, Mr.  
22 Derrickson -- never mind. Yes, I will let in Mr.  
23 Morford.

24 Mr. Derrickson was in the outdoor circle,  
25 has his hand raised with an attendee, but I'm not

1 able to communicate with him.

2 But I'll clarify, public testimony on this  
3 matter was ended yesterday, so we're only proceeding  
4 with the witnesses. Hopefully that addresses the  
5 question of Mr. Welch (phonetic), otherwise I'll ask  
6 Mr. Derrickson to try and get in touch with him.

7 MR. MATSUBARA: Mr. Morford is at HMP-2.

8 CHAIRPERSON SCHEUER: I'm letting him in.

9 Thank you, Mr. Matsubara.

10 Good morning, you're on.

11 THE WITNESS: Good morning, aloha.

12 CHAIRPERSON SCHEUER: You're still under  
13 oath, and we were going through questions for you  
14 from the Commissioners.

15 JAY MORFORD

16 Having been previously called by and on behalf of the  
17 Petitioner, was recalled and gave testimony as  
18 follows:

19 THE WITNESS: Thank you.

20 CHAIRPERSON SCHEUER: Commissioners?

21 Commissioner Okuda.

22 COMMISSIONER OKUDA: Thank you, Mr. Chair.

23 If I may -- this is Gary Okuda, if I may  
24 continue with some closing questions.

25 CHAIRPERSON SCHEUER: Yes.



1                   COMMISSIONER OKUDA: Good morning, Mr.  
2 Morford. Let me ask you this.

3                   As a condition of any approval, assuming  
4 the approval is given to Hawaiian Memorial Park's  
5 Petition here, as a condition of any approval, would  
6 Hawaiian Memorial Park agree to obtain and maintain a  
7 liability insurance policy to indemnify, defend and  
8 protect, number one, the holder of the Conservation  
9 Easement; and number two, the manager of the cultural  
10 preserve from any and all liability claims,  
11 especially those claims arising from bodily injury or  
12 death from rockfall?

13                  THE WITNESS: As I stated yesterday,  
14 Commissioner Okuda, I think that's premature at this  
15 point for us to consider that action. I think that  
16 is a conversation that's going to need to occur with  
17 the conservation holder and with the civic club at  
18 that time, and I'm sure we can come to agreement  
19 between the parties.

20                  COMMISSIONER OKUDA: I'm going to ask you a  
21 question about whether or not Hawaiian Memorial Park  
22 or SCI, or maybe a combination of both, would be  
23 willing to post a bond to assure compliance with the  
24 conditions suggested by the Office of Planning?

25                  But before you answer that, let me put my

1 question in certain context, so this doesn't appear  
2 to be any type of trap or setup or anything like  
3 that, because that's not my intention.

4 The reason why I'm going to ask you that  
5 question about posting a bond to ensure compliance  
6 with conditions is, frankly speaking, the Land Use  
7 Commission really has no enforcement powers, except  
8 for reversion of the property to the prior boundary  
9 designation.

10 But as many people are aware, the Hawaii  
11 Supreme Court in this case called DW 'Aina, A-I-N-A,  
12 Le'a, L-E-A, versus Bridge 'Aina Le'a, that's found  
13 at 134 Hawaii Reports 187, the Hawaii Supreme Court  
14 has held that the reversion power cannot be exercised  
15 if there is substantial commencement of the use of  
16 the land.

17 And so frankly speaking, I think we found  
18 in other cases that Land Use Commission conditions  
19 are, as a practical matter, simply ignored. For  
20 example, we had a case where it looked like the  
21 Department of Education ignored a condition of  
22 building the Kihei High School, which would have  
23 required a grade-separated crossing to protect  
24 students' health and safety from being hit by  
25 automobiles.

1           We've had other applicants, where after  
2 they've received their boundary redesignations and  
3 have all these conditions attached to it --

4           CHAIRPERSON SCHEUER: Mr. Okuda, your  
5 question is would they post a bond?

6           COMMISSIONER OKUDA: Yeah. And that's the  
7 context that I'm asking, which is, you know, so that  
8 there is practical assurance that these conditions  
9 would be followed.

10           Will Hawaiian Memorial Park be willing to  
11 post a bond to ensure compliance with, for example,  
12 the conditions that it said would accept proposed by  
13 the Office of Planning?

14           MR. MATSUBARA: Let me interject. A  
15 comment, Mr. Okuda. The same conditions proposed by  
16 the Office of Planning are the same conditions we had  
17 in our proposal and our representation and our  
18 testimony. We made that representation.

19           COMMISSIONER OKUDA: And I'm sorry for not  
20 making it more broader as far as the representations  
21 there. The question --

22           CHAIRPERSON SCHEUER: Move on.

23           COMMISSIONER OKUDA: Will Hawaiian Memorial  
24 Park post a bond to ensure compliance with those  
25 conditions?

1           MR. MATSUBARA: I will interject. Hawaiian  
2 Memorial Park will apply the State law, State  
3 regulations and do everything that is required.

4           Now you're talking about imposing a  
5 different remedy. It's not included in the statutory  
6 provisions of Chapter 205. So under the  
7 circumstances, I would advise my client at this  
8 particular time to agree to abide by the law and the  
9 rules and regulations, but in regard to additional  
10 sanctions you're proposing at this time, I would have  
11 to advise him not to --

12           COMMISSIONER OKUDA: Okay. And that is  
13 the testimony then of Hawaiian Memorial Park. Do I  
14 understand that correct in answer to my question?

15           MR. MATSUBARA: Mr. Morford's previous  
16 answer that it's premature to get into issues such as  
17 indemnification because he needed to talk to whoever  
18 has the conservation easement and whoever was going  
19 to manage the cultural preserve at that time.

20           Something may very well arise that covers  
21 what you're talking about, but at this time, I think  
22 it's premature.

23           We will commit to following all the laws  
24 relating to the Land Use Commission and its  
25 regulations.

1           So I think that is a major representation  
2 including the conditions OP and the Petitioner has  
3 proposed. Thank you.

4           COMMISSIONER OKUDA: Well, may ask anyway  
5 to get an answer to my question about whether or not  
6 Hawaiian Memorial Park will agree to post a bond to  
7 ensure compliance with the condition? The answer can  
8 "yes", "no" or "I don't know".

9           THE WITNESS: I'm going to follow the  
10 advice of Mr. Matsubara, and we will follow  
11 conditions of the law. And I'll follow his advice at  
12 this point.

13           CHAIRPERSON SCHEUER: Commissioner Okuda.

14           COMMISSIONER OKUDA: Chair, I don't think I  
15 received an answer to the question.

16           CHAIRPERSON SCHEUER: Let me attempt the  
17 rephrasing of the question, if I'm following this  
18 line of questioning correctly.

19           Would a bond, which would help ensure  
20 compliance with conditions be, Mr. Matsubara, in your  
21 opinion, in accordance with the laws and rules that  
22 govern these kind of proceedings?

23           MR. MATSUBARA: It's not within the  
24 statutory and regulatory provisions of the Land Use  
25 Commission at this time. And that's the only reason

1 I'm raising it as an issue.

2 We have committed to following everything  
3 else on the book related to your regulation of that  
4 land.

5 CHAIRPERSON SCHEUER: I believe that might  
6 be an answer to your question, Mr. Okuda. Is that  
7 correct?

8 COMMISSIONER OKUDA: Chair, respectfully, I  
9 don't think it's an answer. The record is what it  
10 is. Based on that answer. And I'll leave it at  
11 that.

12 Mr. Morford, Petitioner's Exhibit 26  
13 contains a reference of having 100 burial spaces in  
14 the cultural preserve. Where in the cultural  
15 preserve will these hundred burial spaces be located?

16 THE WITNESS: At this time I'm going to  
17 defer to our expert in that area and she will be able  
18 to testify about anything regarding cultural. That  
19 would be Dr. Watson.

20 COMMISSIONER OKUDA: Can you tell me right  
21 now the location of the burial sites?

22 CHAIRPERSON SCHEUER: He's answered the  
23 question. He's deferring.

24 COMMISSIONER OKUDA: So you would defer to  
25 Dr. Watson about whether or not there would be a

1 charge for the burials and things like that, is that  
2 correct?

3 THE WITNESS: I will defer to Dr. Watson in  
4 regards to anything cultural.

5 COMMISSIONER OKUDA: If the manager of the  
6 cultural preserve determines that there is a risk of  
7 bodily injury, including possible fatality from  
8 rockfall in the area, will Hawaiian Memorial Park  
9 take additional rockfall mitigation actions in the  
10 cultural preserve.

11 THE WITNESS: I believe that the rockfall  
12 hazard that has been brought up will be addressed in  
13 rebuttal or at a later time with our rockfall expert.

14 COMMISSIONER OKUDA: Will you give me an  
15 answer to my question?

16 MR. MATSUBARA: We have a witness who will  
17 address the questions you're raising now, and so will  
18 Dr. Watson in regard to the management of the  
19 cultural preserve and what portions will be  
20 accessible or not.

21 So Mr. Morford has two other witnesses who  
22 will follow, who will answer those questions.

23 COMMISSIONER OKUDA: Okay, well, if I may,  
24 Mr. Matsubara, the reason why I'm asking this  
25 question is it appears to be a business decision, and

1 I would like to know what the business position is of  
2 Hawaiian Memorial Park whether or not it will pay for  
3 additional rockfall mitigation if the manager -- or  
4 if such mitigation efforts become necessary?

5 MR. MATSUBARA: Well, the business decision  
6 will be based on the science and the engineering  
7 involved, and the accessibility of the cultural  
8 preserve. So all of those things will be brought up,  
9 put in the record, and a decision made thereafter.

10 CHAIRPERSON SCHEUER: May I say something  
11 here? I want to make sure that all of our  
12 Commissioners have -- as long as our questions are  
13 within the realm of what we're allowed to ask, they  
14 have the opportunity to have the questions answered.

15 It seems on this that there's both on this  
16 particular issue and maybe on other issues a  
17 technical aspect of the answer as well as a business  
18 aspect of the answer.

19 And so perhaps in terms of flow, if Mr.  
20 Morford was available to be recalled at the end after  
21 the technical experts have given their answer to the  
22 more technical aspects of the question, that might be  
23 more suitable to our procedures.

24 MR. MATSUBARA: That's suitable, Mr.  
25 Chairman. We will do that.



1                   COMMISSIONER OKUDA: Mr. Chair, I'll defer  
2 the questions then, if necessary.

3                   Let me ask one last question then. Most of  
4 this will be deferred. And, Mr. Morford, this goes  
5 to the issue of self-sufficiency as stated in the  
6 constitution.

7                   Can you tell me what percent of the gross  
8 revenues from the sales of cemetery plots or  
9 inurnment rights arising from the expanded cemetery,  
10 if it's approved, what percentage of that revenue  
11 will remain in Hawaii?

12                  THE WITNESS: I can let you know that based  
13 on our current gross revenues that we are generating,  
14 I would say, between 85 and 90 percent of those  
15 revenues stay here.

16                  COMMISSIONER OKUDA: Would Hawaiian  
17 Memorial Park be willing to have that stated as a  
18 condition of approval?

19                  THE WITNESS: No.

20                  COMMISSIONER OKUDA: Can you tell me why  
21 not?

22                  THE WITNESS: Because I don't think that's  
23 a reasonable request.

24                  COMMISSIONER OKUDA: Thank you, Mr. Chair.  
25 I have no further questions.

1           CHAIRPERSON SCHEUER: Thank you,  
2 Commissioner Okuda.

3           Commissioners, are there further questions  
4 for Mr. Morford at this time?

5           I will note at this time in reference to  
6 the last exchange on technical issues, in my limited  
7 experience in front of Land Use Commission it has  
8 often been the case to have the person who can bind  
9 the entity by commitment appear towards the end of  
10 the witnesses rather than beginning for that.

11           Not saying this is right or wrong, but this  
12 procedure may address those kinds of concerns.

13           MR. MATSUBARA: That procedure is very  
14 acceptable, Mr. Chair.

15           CHAIRPERSON SCHEUER: Commissioners?  
16 Commissioners Aczon? Giovanni? Commissioner Wong.

17           COMMISSIONER WONG: Just want to say that  
18 after our other witnesses --

19           CHAIRPERSON SCHEUER: I'm sorry, Riley and  
20 Scott, we can hear you as well.

21           COMMISSIONER WONG: Is Mr. Morford coming  
22 back so I can ask him questions?

23           CHAIRPERSON SCHEUER: Thank you. That will  
24 be our procedure.

25           Any other questions at this time for Mr.

1 Morford?

2 COMMISSIONER CHANG: Mr. Chair, I have a  
3 question.

4 Good morning, Mr. Morford. Thank you for  
5 being here this morning and for your testimony.

6 I just have a few questions and maybe these  
7 will be deferred to your subject matter experts.

8 So with respect to the question by  
9 Commissioner Okuda regarding that exhibit by the  
10 Association of Hawaiian Civic Clubs, the 100 Native  
11 Hawaiian burials, I just wanted to clarify.

12 Are those existing burials or are these  
13 potentially new burial sites?

14 THE WITNESS: These are potentially new  
15 locations for future interments.

16 COMMISSIONER CHANG: All right. And then  
17 two, let me know whether Mr. Montgomery is the right  
18 person or not.

19 This is Mr. Nance's proposed mitigation for  
20 the damselfly habitat. Do you know whether  
21 consultation has occurred with the U.S. Fish and  
22 Wildlife on that proposed mitigation?

23 THE WITNESS: I think there was a response  
24 letter sent to them, but I'm not 100 percent sure I  
25 can answer your question, so I might defer.

1 COMMISSIONER CHANG: To Mr. Montgomery?

2 THE WITNESS: Yes.

3 COMMISSIONER CHANG: I wanted to ask you,  
4 because in your testimony --

5 CHAIRPERSON SCHEUER: Commissioner Chang,  
6 ask you to lower your screen so we see your whole  
7 face.

8 COMMISSIONER CHANG: Does that help?  
9 Sorry. I can't get it down now. Is that better?

10 CHAIRPERSON SCHEUER: Yes, much. Thank  
11 you.

12 COMMISSIONER CHANG: All right.

13 So in your testimony, Mr. Morford, you had  
14 mentioned that Ocean View Gardens was probably the  
15 last area, the most recent expansion of Hawaiian  
16 Memorial Park; is that correct?

17 THE WITNESS: That's correct.

18 COMMISSIONER CHANG: I notice its location  
19 seems to be, when we did the site visit, very similar  
20 habitation, very close to where the proposed  
21 expansion area is.

22 THE WITNESS: That is correct.

23 COMMISSIONER CHANG: So when you did the  
24 ocean -- developed the Ocean View Estates, did you  
25 have to cut and fill to create the Ocean Vier

1 Estates?

2 THE WITNESS: I was not actually involved  
3 in the process at that time, so I don't have an  
4 answer to that question on how the plans were put  
5 together on the grading and so -- (indecipherable).  
6 I wasn't involved.

7 COMMISSIONER CHANG: So would a civil  
8 engineer be able to answer any of those questions,  
9 because I'm trying to find out what were the  
10 conditions during the construction of the Ocean View  
11 Gardens with respect to rockfall, erosion and  
12 flooding.

13 THE WITNESS: That would be a question you  
14 could ask our civil engineer, but I'm not sure that  
15 she would know that information because she was not  
16 involved in that project as well.

17 COMMISSIONER CHANG: How long ago did that  
18 expansion occur?

19 THE WITNESS: I believe it was 20 years  
20 ago, approximately 2000.

21 COMMISSIONER CHANG: And the final question  
22 I have is in relationship to the Koolaupoko  
23 Sustainable Communities Plan that was recently  
24 updated in 2017, and prior to that the cemetery  
25 additional lands and the cultural preserve were not

1 included in the Koolaupoko Sustainable Communities  
2 Plan.

3 And my recollection is that that was one of  
4 the major -- or one of the issues in inconsistency  
5 with the community plan during Hawaiian Memorial  
6 Park's original Land Use Commission application.

7 So since then, 2017, the City and County of  
8 Honolulu has updated their communities plan,  
9 specifically Koolaupoko Communities Sustainable Plan.

10 Now, does the record include any public  
11 meetings or public -- either that the City had or  
12 that Hawaiian Memorial Park had in regards to the  
13 Koolaupoko Sustainable Communities Plan update? Does  
14 the record have anything in relationship to that?

15 THE WITNESS: There were multiple public  
16 meetings that occurred during that process. I think  
17 there may have been three or four Kaneohe  
18 Neighborhood Board meetings, and I believe there was  
19 another community meeting that we had outside of  
20 that. There were numerous community meetings.

21 COMMISSIONER CHANG: That's all the  
22 question that I have. Thank you so very much, Mr.  
23 Morford.

24 CHAIRPERSON SCHEUER: Thank you,  
25 Commissioner Chang. Commissioner Giovanni.

1           COMMISSIONER GIOVANNI: Thank you, Chair.  
2 Good morning, Mr. Morford.

3           THE WITNESS: Good morning.

4           COMMISSIONER GIOVANNI: Like to ask you a  
5 couple questions about your business. I think just  
6 to refresh the record I think you said that the  
7 pricing for -- and I want to get the terminology  
8 straight -- interment plot or area, it ranges from  
9 4,000 to \$30,000 each; is that correct?

10          THE WITNESS: So our current pricing in the  
11 developed area is probably approximately from 4,000  
12 up to 30,000 for interment, correct.

13          COMMISSIONER GIOVANNI: I believe you also  
14 made the statement that the price is a function of  
15 both location and availability. Is that correct?

16          THE WITNESS: That's correct.

17          COMMISSIONER GIOVANNI: Can you describe  
18 for us the process -- and I presume this is probably  
19 a periodic process by which you review the pricing  
20 and adjust it up or down depending on market  
21 conditions?

22          THE WITNESS: A lot would be based on  
23 availability in certain areas, like supply and demand  
24 depending on what areas you have. Our pricing itself  
25 has been pretty consistent for quite some time, but

1 as inventory depletes, you'll probably need to raise  
2 your prices as time goes on.

3 But that's really how you evaluate cemetery  
4 pricing is based on availability and location.

5 COMMISSIONER GIOVANNI: So in the economic  
6 presentation that one of your experts presented  
7 yesterday, he attempted the -- shared the results of  
8 his study work in which he forecasted a dire or  
9 severe shortage of interment plots for Oahu in  
10 general; is that your vision or understanding?

11 THE WITNESS: That's correct.

12 COMMISSIONER GIOVANNI: So wouldn't it be  
13 the case that if those two things were true, and  
14 there is indeed a shortage, that the pricing for the  
15 interment plots could be expected to increase  
16 precipitously over the next 20 years if we don't do  
17 something about the shortage?

18 THE WITNESS: I believe that could be the  
19 case. Yes, sir.

20 COMMISSIONER GIOVANNI: And despite that  
21 situation at present, would you consider the number  
22 of pre sold determined rights that you have for  
23 future deaths or burials to be typical, high, low,  
24 for the industry?

25 THE WITNESS: It would depend on when they



1 were purchased. You have people that may have  
2 purchased back in '60s or '70s, and those prices are  
3 never changed for them. So based on how the years go  
4 on, and you increase your pricing based on just doing  
5 business, I would say that in relation to your  
6 question our pricing has been pretty flat for quite  
7 some time, if I've answered your question.

8 COMMISSIONER GIOVANNI: Yeah, I think in  
9 general. I'm not asking you to predict the market.

10 You also, when looking at your -- I presume  
11 you start with a general plan for the given area in  
12 terms of the expectations you have in terms of what  
13 would be set aside for caskets, what would be set  
14 aside for interments in terms of general numbers, but  
15 I presume there's some flexibility in that, depending  
16 on how the marketing evolves; is that correct?

17 THE WITNESS: That is correct.

18 COMMISSIONER GIOVANNI: Is there also  
19 flexibility in terms of the density that might be  
20 implemented over time? In other words, if market  
21 conditions suggest that there's very high demand and  
22 you could actually increase the densities in terms of  
23 number of per unit area, is that something you do, or  
24 do you stand firm relative to your original plan?

25 THE WITNESS: So in regards -- let's just

1 look at casket interment space that we were talking  
2 about yesterday.

3 So, for example, our current width on our  
4 casket interment spaces are 40 inches. So if you  
5 were dealing with an extra large vault for an outer  
6 burial container for the casket, if an individual is  
7 larger and they need to be in a larger casket and  
8 larger outer container, the dimensions of that outer  
9 burial container for extra large is 40-inches.

10 So at that size, you're kind of locked in  
11 to being able to accommodate what the need is versus  
12 somebody passes away and needs that size, so you want  
13 to sustain your mapping. You don't want to have a  
14 lot of different size spaces or you could run into  
15 issues in regards to what we call an interment  
16 verification process to ensuring that we have every  
17 single person interred in the right spot 100 percent  
18 of the time.

19 COMMISSIONER GIOVANNI: But I presume in  
20 listening to you, the interment option that you  
21 executed for the gentleman, or the family that wanted  
22 40 urns in one location, I'm guessing that wasn't in  
23 an original plan, and it was accommodated through  
24 some change in plan and design in response to the  
25 interest of the family. Is that correct?

1 THE WITNESS: That is correct.

2 And to elaborate a little bit on that. So  
3 if a family does have a special request of where they  
4 would like to do something that is out of the  
5 standard or ordinary practice that we're doing on a  
6 daily basis, we can remap spaces that are open to  
7 make a larger space to accommodate something like  
8 that if needed.

9 And that is something you can do through  
10 the process of your daily business operations.

11 COMMISSIONER GIOVANNI: Thank you very  
12 much. That's all the questions I have.

13 CHAIRPERSON SCHEUER: Thank you very much,  
14 Commissioner Giovanni.

15 Commissioners, are there further questions  
16 for Mr. Morford at this time? He will be recalled at  
17 the end. Commissioner Aczon.

18 VICE CHAIR ACZON: Good morning, Mr.  
19 Morford.

20 THE WITNESS: Good morning.

21 VICE CHAIR ACZON: I just have a basic and  
22 general question for you.

23 Were you involved in the first time that  
24 the Hawaiian Memorial Park made a DBA Petition?

25 THE WITNESS: I missed the question, sir.

1                   VICE CHAIR ACZON: Were you involved the  
2 last time that Hawaiian Memorial Park made the DBA  
3 Petition?

4                   THE WITNESS: Yes, I was.

5                   VICE CHAIR ACZON: I understand the Land  
6 Use Commission denied the Petition, the first  
7 Petition, due to community's concerns.

8                   What's the difference now this time around?  
9 Were you able to address those concerns? If not,  
10 what are those that you're struggling with?

11                  THE WITNESS: I feel the first time that we  
12 went through this process, I think we made a lot of  
13 errors the first time around in some of our planning  
14 and what we were putting together.

15                  I don't think we took the time or due  
16 diligence to do what we needed to do with the  
17 community. I feel this time, based on the mistakes  
18 that we made in the past, we corrected those and  
19 we've addressed the concerns raised with the  
20 community at that time.

21                  VICE CHAIR ACZON: So you feel that you  
22 addressed all those community concerns?

23                  THE WITNESS: I do, sir.

24                  VICE CHAIR ACZON: Thank you. Thank you,  
25 Mr. Chair.

1                   CHAIRPERSON SCHEUER: Thank you,  
2 Commissioner Aczon.

3                   Commissioners, are there further questions  
4 for Mr. Morford at this time?

5                   If there's not, Mr. Morford, I would like  
6 to ask you a couple questions.

7                   And I realize that you said in response to  
8 Commissioner Okuda's questions that you wanted to  
9 defer all cultural answers to Dr. Kehau Watson when  
10 she appears, but I have some questions relating to  
11 the corporation's relationship to cultural concerns,  
12 so I prefer to ask them to you.

13                   And as a preface to what I'm asking, you  
14 know, you're familiar with the case Ka Pa'akai O Ka  
15 'Aina perhaps that requires the Land Use Commission  
16 to look at the impact on any traditional and  
17 customary practices that may impact negatively from a  
18 development.

19                   THE WITNESS: I'm not familiar with that,  
20 but that's okay.

21                   CHAIRPERSON SCHEUER: Well, so I think your  
22 proposal is somewhat unusual, at least what I've  
23 seen, because you're actually proposing certain  
24 actions as part of your project to enhance  
25 traditional and customary practices rather than

1 oppose them, so I'm interested in some issues about  
2 that.

3 One, in your running of Hawaiian Memorial  
4 Park, have you ever had individuals seek to exercise  
5 traditional and customary practices on the property  
6 and you have denied those requests?

7 THE WITNESS: No, we have not denied anyone  
8 access.

9 CHAIRPERSON SCHEUER: Have you allowed  
10 access to people to exercise traditional and  
11 customary practices?

12 THE WITNESS: Yes, we have.

13 CHAIRPERSON SCHEUER: I want to talk about  
14 the Native Hawaiian burial preserve.

15 Can you explain a little bit about how came  
16 to incorporate that into this proposal?

17 THE WITNESS: Sure. I was abreast of the  
18 Koolaupoko Hawaiian Civic Club taking steps to get  
19 the penal code changed. And during the process when  
20 they were at the legislature, I was not really  
21 involved in those hearings, but I did understand what  
22 they were trying to do and the reasons they were  
23 trying to bring that forward for them to be able to  
24 practice their traditional Hawaiian burial practices.

25 Due to my relationship with those that are

1 in the civic club, I felt that was something that was  
2 special for them to be able to have, and I wanted to  
3 help them through that process to have a place where  
4 they can actually practice that that was protected  
5 and under cemetery guidance.

6 CHAIRPERSON SCHEUER: Are you aware of the  
7 passage of the law in, I think it was 2016 Governor  
8 Ige signed the law relegalizing traditional Native  
9 Hawaiian burial practices.

10 Are you aware of anyplace in the State that  
11 is set aside for the exercise of those practices?

12 THE WITNESS: I'm not aware of anyplace in  
13 the State, no.

14 CHAIRPERSON SCHEUER: So if this is  
15 approved, this would be the only officially  
16 designated place to actually continue those  
17 traditional and customary practices?

18 THE WITNESS: To my knowledge.

19 CHAIRPERSON SCHEUER: Thank you. That was  
20 all I had for you right now.

21 THE WITNESS: Thank you.

22 CHAIRPERSON SCHEUER: Commissioner  
23 Giovanni.

24 COMMISSIONER GIOVANNI: I just want to  
25 clarify. Will we have one of the future witnesses

1 would be the civil engineer or not?

2 CHAIRPERSON SCHEUER: Mr. Matsubara.

3 MR. MATSUBARA: Our next witness will be  
4 the civil engineer, Commissioner Giovanni.

5 COMMISSIONER GIOVANNI: No further  
6 questions.

7 CHAIRPERSON SCHEUER: Anything further for  
8 Mr. Morford at this time until he's recalled? If  
9 not, thank you very much.

10 COMMISSIONER OHIGASHI: Mr. Chair.

11 CHAIRPERSON SCHEUER: Commissioner  
12 Ohigashi.

13 COMMISSIONER OHIGASHI: It's about Mr.  
14 Morford. I was wondering when Mr. Morford returns,  
15 is he going to be treated as a continuing witness  
16 which would allow only I guess the Commissioners to  
17 ask questions? Or will he be subject to additional  
18 cross-examination by the Parties? I'm just asking  
19 that for, I guess --

20 MR. MATSUBARA: Commissioner, when we  
21 present Mr. Morford at the end to answer questions  
22 relating to the cultural issue and business issues  
23 raised earlier, I imagine he would be open to  
24 questions from everyone, so that everyone will have a  
25 full understanding of what's being agreed to.



1 COMMISSIONER OHIGASHI: Okay, thank you.

2 CHAIRPERSON SCHEUER: Thank you,

3 Commissioner Ohigashi.

4 Mr. Matsubara, anything further for Mr.  
5 Morford at this time? If not, thank you very much.

6 Mr. Matsubara, is your next witness in the  
7 same location or via different remote link?

8 MR. MATSUBARA: It's Jami Hirota, different  
9 remote link. And Mr. Tabata will be handling the  
10 direct for Ms. Hirota.

11 CHAIRPERSON SCHEUER: I'm promoting Jami  
12 Hirota to a panelist.

13 Good morning, Ms. Hirota.

14 MR. TABATA: Good morning, Chair,  
15 Commissioners. Curtis Tabata for the Petitioner.

16 CHAIRPERSON SCHEUER: Good morning, Ms.  
17 Hirota, you're muted. I'm going to swear you in, and  
18 you'll get direct questioning from Petitioner's  
19 counsel, and then be subject to cross from the  
20 Parties and Commissioners.

21 Do you swear or affirm the testimony you're  
22 about to give is the truth?

23 THE WITNESS: Yes, I do.

24 CHAIRPERSON SCHEUER: Thank you.

25 You might change the angle slightly of your

1 computer, if you can. That's a little bit better.  
2 Thank you. Curtis.

3 MR. TABATA: Thank you, Chair.

4 JAMI HIROTA

5 Was called as a witness by and on behalf of the  
6 Petitioner, was sworn to tell the truth, was examined  
7 and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. TABATA:

10 Q Jami, could you please describe your  
11 professional background for us?

12 A Sure. I graduated from Purdue University  
13 with Bachelor of Science in civil engineering. I've  
14 been licensed in the State of Hawaii for over  
15 20 years, and have experience in federal, state,  
16 county and private projects.

17 I'm a principal with Coffman Engineers, and  
18 also a LEED accredited professional. I belong to  
19 mult-professional organizations, including the  
20 American Council of Engineering Companies of Hawaii,  
21 American Society of Civil Engineers and the Society  
22 of American Military Engineers.

23 MR. TABATA: Thank you, Jami.

24 Petitioner requests that Jami be qualified  
25 as an expert in the field of engineering.

1 CHAIRPERSON SCHEUER: Are there any  
2 objections from the Parties?

3 MR. PANG: City it has no objections.

4 MS. APUNA: No objection.

5 MR. YOSHIMORI: Intervenors have no  
6 objections.

7 CHAIRPERSON SCHEUER: Commissioners?

8 COMMISSIONER GIOVANNI: Can we make it  
9 civil engineering not engineering in general?

10 CHAIRPERSON SCHEUER: Mr. Tabata?

11 MR. TABATA: Modify the request. We  
12 request that Jami Hirota be qualified as an expert in  
13 civil engineering.

14 CHAIRPERSON SCHEUER: I'm assuming that  
15 since there were no objections from the Parties,  
16 there's no objections to a narrower qualification.  
17 Commissioners?

18 If not, Jami Hirota is recognized as an  
19 expert in civil engineering.

20 MR. TABATA: Thank you.

21 Q Jami, would you please summarize for us  
22 your written testimony?

23 A Sure. I would be happy to. Before I get  
24 started, I just want to let you know that I'm going  
25 to share a few exhibits. And I've got the share

1 screen, but I just want to warn you that they'll come  
2 up shortly.

3 CHAIRPERSON SCHEUER: Thank you.

4 When you do so, Ms. Hirota, please identify  
5 the exhibit number and page number you're referring  
6 to.

7 THE WITNESS: Sure will.

8 So I prepared the preliminary engineering  
9 report for Hawaiian Memorial. The scope of the PER  
10 included preliminary grading and drainage analysis,  
11 erosion and sediment control analysis, and a potable  
12 water analysis.

13 In addition to the PER, I've been retained  
14 to provide civil engineering services for this  
15 project.

16 I'm going to start with discussion on the  
17 grading. And I will share this exhibit -- it says  
18 that I'm disabled to share.

19 CHAIRPERSON SCHEUER: You should now be  
20 enabled.

21 THE WITNESS: Can everyone see my exhibit?

22 CHAIRPERSON SCHEUER: Yes.

23 THE WITNESS: This is the preliminary  
24 grading plan which is shown on page 3 from Exhibit 32  
25 of my written testimony. I would like to point out

1 on all my exhibits you will see the north arrow  
2 points up, because I will refer to different  
3 directions.

4 On this exhibit I want to point out that  
5 the grades are steeper here on the south and the west  
6 part of the site, and that they are generally flatter  
7 over on the north and the east side of the site.

8 The cemetery fencing area is approximately  
9 27.5 acres, and it will have slopes no greater than  
10 20 percent and retaining walls.

11 No grading will be done along the mauka  
12 side of the site. You see along my cursor, this area  
13 will have no grading in it (indicating).

14 Page 4 of my written testimony shows a  
15 section cut of this grading. I'm going to go down to  
16 that. Are you having difficulty seeing this as well?

17 As I mentioned, this is a section cut of  
18 the grading. We cut this section through this black  
19 line here, and it's really representative to show  
20 that the majority of the hillside on this western  
21 side will be excavated to achieve height reductions  
22 between 40 and 100 feet.

23 In this section cut, this green line shown  
24 underneath my cursor indicates the existing grades on  
25 the site which are steeper, and then the red line

1 indicates the proposed grades which are much flatter.

2 CHAIRPERSON SCHEUER: Ms. Hirota and Mr.  
3 Tabata, just due to the sort of specific detailed  
4 drawings that Ms. Hirota is referring to, I just want  
5 to make sure that the Commissioners might stop her at  
6 any point to ask questions of the graph in front of  
7 us. Is that acceptable?

8 MR. TABATA: Yes, Chair, I think that would  
9 be helpful.

10 CHAIRPERSON SCHEUER: So, Commissioners, it  
11 would help, given the way my screen is set up, if you  
12 use the "raise hand" function if you have a question  
13 you want to ask during Ms. Hirota's presentation.

14 Thank you. Please proceed.

15 THE WITNESS: So the grading of this  
16 project site will result in the soil being generated  
17 from excavation as mentioned previously, this is  
18 estimated to be approximately 57,000 cubic yards.

19 The excess soil will be made available to  
20 other construction sites on Oahu. There is a big  
21 demand for uncontaminated fill material, and it  
22 usually exceeds the supply. In my professional  
23 opinion, I don't believe any of the soil material is  
24 going to end up in PVT.

25 In my experience in Hawaii, I've never had

1 a project that has taken clean soil material to PVT.

2 As I mentioned, retaining walls will be  
3 necessary to create level cemetery grounds and the  
4 roadway that services the cemetery.

5 So in this same exhibit -- I'm going to  
6 zoom in a little bit -- these retaining walls are  
7 shown in the light blue lines, and they are primarily  
8 in the central and western portions of the site.

9 They also appear in this section cut here.  
10 (Indicating). These areas that go straight up are  
11 the retaining walls. And as I mentioned, they're  
12 necessary to create level grounds.

13 We anticipate designing these out of the  
14 pea stone, which is a gravity wall system. The  
15 average height of the walls is ten feet, and wall  
16 heights above ten feet will be minimized.

17 The retaining walls will have a sub-drain  
18 to protect the wall structure itself. They will be  
19 constructed on either a concrete or a crushed stone  
20 footing, and they will be designed to meet the City  
21 and County of Honolulu building permit requirements.

22 I'd like to talk a little bit about  
23 construction best management practices, or what we  
24 call BMPs. These BMPs are required by the City rules  
25 related to stormwater quality which were updated in

1 2017.

2           The 2017 rules are significantly more  
3 stringent than the previous regulations had been.  
4 Based on these rules, this is considered a Category 5  
5 project, and will require an erosion sediment control  
6 plan and (indecipherable).

7           A National Pollutant Discharge Elimination  
8 System Permit from the State of Hawaii will also be  
9 required. The ESCP requires many things. A few of  
10 them are a detailed description of the existing and  
11 finished grading and drainage conditions. BMPs  
12 during construction, BMPs prior to start of  
13 construction and BMPs after construction is complete.

14           Monitoring is also required, and inspection  
15 reporting during the entire length of the project.

16           The project is going to obtain one grading  
17 permit. However, the grading work will be done in  
18 five-acre increments as required by the 2017 rules.  
19 This helps to minimize the amount of exposed dirt at  
20 any given time.

21           As I mentioned before, it is required to  
22 put BMPs in place prior to the start of construction,  
23 these may include silt fencing, dust fencing,  
24 controlled access points that prevent tracking of mud  
25 off-site and sediment basins in the area where work



1 shall be performed first.

2           Once construction starts, additional BMPs  
3 shall be used. They include covering of stockpiles  
4 with plastic sheets to prevent erosion; spraying  
5 water during grading to prevent dust; sand bags and  
6 berms to control the flow of runoff; and grassing of  
7 the graded area is required within 14 days of the  
8 completion of disturbance in that area.

9           CHAIRPERSON SCHEUER: Are you still  
10 referring to your diagrams?

11           THE WITNESS: I'm not, but I have a couple  
12 more. Would you like me to take them down?

13           CHAIRPERSON SCHEUER: No, that's fine,  
14 continue.

15           THE WITNESS: Okay.

16           The other thing required by the ESCP is  
17 that the contractor monitors severe weather, and  
18 provide weekly and monthly monitoring reports.

19           I'm going to move on to the discussion  
20 regarding the drainage study, and I'm going to move  
21 on to existing drainage area map, which is on page 11  
22 of Exhibit 32 of my testimony. I'll zoom in a little  
23 bit. Give it a second for it to pull up for  
24 everyone.

25           So the existing drainage flows generally

1 travel in a north, north/westerly direction as  
2 indicated by my cursor moving at this point.

3 Stormwater flows into three locations right  
4 now, the first of which is a small area down in the  
5 southwest corner, flows into the existing Ocean View  
6 Garden. A large portion of the site flows into the  
7 area behind the homes on Ohaha Street and Lipalu  
8 Street into existing concrete swales that were  
9 constructed with that subdivision, and water also  
10 flows into two existing City and County structures at  
11 the end of Lipalu Street and one here off of Ohaha  
12 Street.

13 The project will improve the drainage in  
14 the area by changing the drainage pattern, improving  
15 the land's runoff coefficient, and the use of  
16 retention/detention basins.

17 I'm going to move on to H-15 of Exhibit 32  
18 of my testimony, which is the proposed drainage area  
19 map.

20 I mentioned that we are going to change  
21 some of the drainage patterns. Currently the area in  
22 yellow on this exhibit are off-site areas that flow  
23 through our project site in order to maintain  
24 existing drainage system below our site.

25 So as part of the rockfall mitigation, a

1 portion of this area where my cursor is, we're going  
2 to put in concrete swale. And this swale will also  
3 help to capture stormwater runoff during storm  
4 events. The water will then be piped down into the  
5 City and County system so that it is not flowing over  
6 our project site.

7           The areas in orange and red are the areas  
8 that currently drains through the site, either into  
9 the graveyard swales or into the structures that I  
10 mentioned before, the City and County structures.

11           We are going to modify that flow, and then  
12 ultimately outlet it into the two City and County  
13 structures.

14           And then the areas behind the existing  
15 homes on Ohaha and Lipalu Street, as I mentioned  
16 before, we are not going to do any disturbance here,  
17 so this water will continue to flow into these  
18 swales. However, note that it is significantly less  
19 water that will be entering these backyard swales.

20           I also want to note that all stormwater  
21 improvements constructed for this project will  
22 require maintenance access. It includes the rockfall  
23 mitigation measures. It also includes any of the  
24 basins. As part of the City and County's rules, an  
25 operation and maintenance plan will be developed and

1 that will be reviewed by DPP.

2 CHAIRPERSON SCHEUER: Ms. Hirota, if I may  
3 inject.

4 Two items. One is I need to note for the  
5 record that Commissioner Giovanni has temporarily  
6 lost internet access and is trying to reestablish it.

7 And second, I wanted to check in with you  
8 on the amount of time you have remaining on your  
9 direct?

10 THE WITNESS: I just need to talk about the  
11 flows, actual volumes and flows, and that's the end  
12 of my discussion.

13 CHAIRPERSON SCHEUER: So in terms of number  
14 of minutes?

15 THE WITNESS: Hopefully less than five.

16 CHAIRPERSON SCHEUER: Thank you very much.  
17 And we have Commissioner Giovanni back. Please  
18 continue.

19 THE WITNESS: Okay. I'm going to move onto  
20 Table 1, you will find on page 14 of Exhibit 32 of my  
21 testimony.

22 These are the runoff flows. These flows  
23 were calculated using the rational method, which is  
24 required by the City and County of Honolulu drainage  
25 standards. We have calculated the flows for two

1 storm events, the ten-year one-hour storm event, and  
2 100-year one-hour storm event. These two columns.

3 We have the existing conditions, the  
4 proposed conditions, and this differential.

5 In these rainfall intensities, this is  
6 measured in inches and, again, this is the City and  
7 County standard to do the ten-year one-hour storm  
8 analysis. We have also committed to doing the  
9 100-year one-hour storm analysis as part of this  
10 project.

11 These intensities are from NOAA rain gauge  
12 data, and are contained in the City and County  
13 standards.

14 The third column is the runoff coefficient.  
15 As the runoff coefficient is lowered, more water is  
16 captured on-site. And by decreasing the slopes of  
17 this site and increasing the permeability through the  
18 turf grass that we are going to be using, it helps to  
19 reduce the runoff coefficient, so that's why you see  
20 a lower number here in this proposed condition for  
21 runoff coefficient.

22 And the fourth and fifth columns are the  
23 actual flow, which are measured in cubic feet per  
24 second, and it's for the ten-year storm and 100-year  
25 storm. This table indicates that we will see a

1 decrease of approximately four percent in these  
2 numbers.

3 I'm going to move down to Table 2, which is  
4 also -- I'm sorry, I'm trying to find my reference --  
5 it's in my testimony in Exhibit 32. You'll see very  
6 similar numbers here. The difference here, these are  
7 the runoff volumes. This is actually a measurement  
8 of cubic feet during the entire storm event. So many  
9 columns are the same. The intensities are the same.  
10 The runoff coefficients are the same. And instead  
11 you'll see volumes in the fourth and fifth columns,  
12 and, again, the differential. It is a slightly  
13 larger differential, because in addition to improving  
14 the runoff coefficient, this calculation is taken  
15 into account the retention/detention ponds that will  
16 be required as part of this project.

17 This concludes the summary of my written  
18 testimony.

19 If I may, I would like to address a concern  
20 regarding the drainage calculations raised in Mr.  
21 John Higham's study.

22 CHAIRPERSON SCHEUER: So what we're going  
23 to have to do, Ms. Hirota, is continue with any  
24 further direct from you and then allow for cross. So  
25 we have been going just over an hour, and I would

1 like to take a break before you do that, if that's  
2 okay.

3 It is now 10:03 a.m., so we will take a  
4 ten-minute recess and reconvene at 10:13. Thank you  
5 very much.

6 (Recess taken.)

7 CHAIRPERSON SCHEUER: We're back on the  
8 record at 10:13 a.m., continuing direct testimony  
9 from Jami Hirota, civil engineer.

10 MR. WYNHOFF: Chair, would you mind just --  
11 we don't need to poll the Commissioners, but just can  
12 we make the record reflect that all the Commissioners  
13 are present?

14 CHAIRPERSON SCHEUER: The record is so  
15 reflected. I can see Commissioner Okuda, Cabral,  
16 Ohigashi, Aczon, Giovanni, Chang and Wong.

17 MR. WYNHOFF: Thank you, chair.

18 CHAIRPERSON SCHEUER: Thank you, Mr.  
19 Wynhoff.

20 Ms. Hirota, please continue as you wished  
21 to prior to the break.

22 THE WITNESS: As I noted before the break,  
23 that was the conclusion of my summary of the written  
24 testimony.

25 I did request that I would like to address

1 a concern brought up by Mr. John Higham's analysis.  
2 If I may proceed with that.

3 CHAIRPERSON SCHEUER: Please go ahead.

4 THE WITNESS: Mr. Higham, in his report,  
5 notes that the drainage tributary area is 93.2 acres.  
6 He also notes that if it was seven acres larger, the  
7 City and County standards would require the use of  
8 Plate 6 from the storm standard runoff.

9 He states that if you use Plate 6, the  
10 runoff for the 100-year one-hour storm event would be  
11 approximately 1000 cubic feet per second.

12 As I noted in my testimony, we used the  
13 rational method, because that is the standard that is  
14 required for sites under 100 acres, and those numbers  
15 for the rational method, the 100-year storm are much  
16 smaller.

17 In the existing condition it was about  
18 173.9 cfs, and in the proposed condition we would  
19 reduce that to 166 cfs.

20 I just want to point out that these numbers  
21 are really different, and there's -- even Mr. Higham  
22 notes there's many different ways to calculate  
23 runoff. The rational method, which is the City and  
24 County standard, is a globally accepted calculation  
25 method for what are considered smaller drainage areas



1 such as our site.

2           It allows us to calculate the peak runoff  
3 using characteristics from this site, most  
4 importantly slope and ground cover, and many times  
5 Plate 6, because it's used for larger drainage areas,  
6 those numbers are used for bridge design and for  
7 really large structures. The Plate 6 is information  
8 gathered from USGS stream data throughout Oahu and  
9 divided up by the region of the island that you're  
10 on.

11           And I just want to, I guess, no matter  
12 which method we use, we are changing --  
13 (indecipherable) and the improvements at HMP will  
14 decrease the amount of runoff leaving the site. And  
15 further refinements of the drainage calculations will  
16 continue to occur as this project gets further into  
17 design, and as we go to DPP for review and permit.

18           And that's all I have to say.

19           MR. TABATA: Ms. Hirota is available for  
20 cross.

21           CHAIRPERSON SCHEUER: Thank you, Mr.  
22 Tabata. Starting with the City.

23                           CROSS-EXAMINATION

24 BY MR. PANG:

25           Q       Good morning, Ms. Hirota. Duane Pang,

1 Deputy Corporation Counsel for the City. I just have  
2 a few questions.

3           Might be preliminary, but have you or  
4 anyone associated with the project had preliminary  
5 discussions with Department of Planning and  
6 Permitting with regard to the grading and grading  
7 permits?

8           A       Yeah. During the EIS process the  
9 preliminary engineering report was reviewed by DPP  
10 and there were comments provided at that time, and we  
11 addressed those comments during that process.

12          Q       The City is requesting that, in conjunction  
13 with the review of the grading permit and excavation,  
14 that the permittee submit a landscaping plan.

15                    Would that be possible?

16          A       Yes. That will be anticipated as part of  
17 the permit process, because we are developing a  
18 highly landscaped site.

19          Q       I have no further questions.

20                    CHAIRPERSON SCHEUER: Thank you very much.  
21                    Office of Planning.

22                    MS. APUNA: Thank you, Chair. I did have a  
23 few questions for Ms. Hirota. Thank you for your  
24 question.

25    -o0o-

## CROSS-EXAMINATION

1  
2 BY MS. APUNA:

3 Q I have a couple of questions about  
4 retention basins and grading.

5 First, Figure 31 of your PER, I believe  
6 that there are two proposed retention basins; is that  
7 correct?

8 A Yes. Would you like me to put that on the  
9 screen?

10 Q Okay, sure, if you could.

11 A I landed on the wrong one, just one moment.

12 Let me revise that, there are currently  
13 three planned basins, one here to the west, another  
14 one here further east, and a third one over above  
15 Lipalu Street (indicating.)

16 Q Thank you.

17 Can you explain how these basins will be  
18 accessed? Will there be an access road?

19 A There will be maintenance from the -- that  
20 will be designed into this grading so that there will  
21 be a pathway that would allow -- (indecipherable).  
22 These basins are designed to capture sediment from  
23 the stormwater and retain it within the site. That's  
24 why we call it retention/detention basins, that's to  
25 retain water long term, but really to retain

1 sediment.

2 So the owner, Petitioner will need to get  
3 in and clean out these basins on a regular basis, and  
4 that will be part of the operation and maintenance  
5 plans.

6 Q You said these are pathways, but wide  
7 enough for a car or truck or just walking pathway?

8 A It will be wide enough for maintenance  
9 equipment, so I would imagine a small excavator would  
10 have to get down into these sites, maybe a small  
11 truck as well.

12 Q Can you explain how these detention basins  
13 will be maintained, just as far as like how often?  
14 On a monthly basis, or on some other regular term,  
15 and --

16 A Yes.

17 Q Go ahead.

18 A So these basins will be a grass-lined  
19 bottom basin, and the plan will define exactly how  
20 often they have to be cleaned. They will have to be  
21 cleaned after any significant storm event. That will  
22 be mandatory.

23 And then during the dry periods there will  
24 be a specified period of time, probably somewhere  
25 between 30 and 60 days where the owner will have to

1 go in and do a visual inspection and determine  
2 whether or not sediment needs to be removed from the  
3 basins.

4 Q And then the retention walls, where are  
5 they located in relation to the basin? Can you point  
6 that out?

7 A Yes. Some of them show up on this plan.  
8 There's a retaining wall here (indicating). There is  
9 one here. They're kind of buried under some of these  
10 other drainage. I have to go back to the grading  
11 plan.

12 You can see several of them here with the  
13 light blue lines. And, yeah, the basins do sit down  
14 below these walls.

15 Q So there shouldn't be any interference  
16 between the walls and the retention basin?

17 A That is correct. The basins will sit below  
18 the wall structure. It's a gravity wall structure,  
19 so anything required to keep the wall upright will be  
20 behind the wall (indecipherable) --

21 COURT REPORTER: You need to keep your  
22 voice up. Excuse me, Dawn.

23 Witness, you need to keep your voice up.  
24 You drop your voice at the end and I can't hear what  
25 you're saying. This is the court reporter.

1 Q (By Ms. Apuna): Moving onto the grading.  
2 Has the grading plan, the phases been developed yet?

3 A No. We have not developed the phases for  
4 the grading plan. It will be done in maximum five  
5 acre increments, as required for permit, for the one  
6 grading permit, but we have not determined how we  
7 will grade this site at this point.

8 Q And you wouldn't even know from what  
9 direction you would grade, whether, for example, from  
10 north to south --

11 A We will grade from west to east because our  
12 site access will be on the west side. So we'll come  
13 in and likely take down, you know, this section of  
14 the fill site first, and then probably work our way  
15 east.

16 Q Thank you. No further questions.

17 CHAIRPERSON SCHEUER: Thank you very much,  
18 OP.

19 Intervenor.

20 Maybe remove the screen share for now, if  
21 you will.

22 THE WITNESS: Yes, I will.

23 CROSS-EXAMINATION

24 BY MR. YOSHIMORI:

25 Q I was hoping you could show us the drainage

1 improvement diagram, which I think is on page 3 of  
2 your testimony.

3 A This is my drainage area map. Was this the  
4 document you were referencing?

5 Q Actually, I was thinking -- I think it was  
6 page 3 of your testimony. It was a different  
7 diagram. It showed the retention ponds. Looked very  
8 similar to this, but had green retention ponds on it.

9 A I apologize, I don't have that available  
10 electronically at the moment.

11 Q Okay, that's all right.

12 I was wondering, you had testified that  
13 there were going to be these seven retaining walls  
14 between 10 to 25 feet high. So I think you showed us  
15 where the retaining walls were, but can you show us  
16 how high those will be?

17 A The best way I think is to go back to the  
18 section cut that we did. And as I zoom in --

19 CHAIRPERSON SCHEUER: One moment. I'm not  
20 sure who. I'm picking up some background sounds.  
21 I'm hearing somebody's conversation.

22 Okay. Just for a cleaner record, thank  
23 you. Please proceed.

24 THE WITNESS: So in this section cut, you  
25 can see the walls here in blue, and on the left and

1 access you will see the elevations. So this lower  
2 wall is closer to 25 feet, and the two additional  
3 walls in this section show approximately ten feet.

4 Q (By Mr. Yoshimori): I'm having to  
5 mute/unmute, because I think it's my background  
6 noises causing the problems.

7 I was hoping we could pull up Mr. Nance's  
8 testimony. I think it's Exhibit 3 on his testimony.  
9 I have it available if you don't have it.

10 A I do not have it available to me.

11 CHAIRPERSON SCHEUER: Why don't you stop  
12 screen sharing, Ms. Hirota, and Mr. Yoshimori can  
13 pull it up.

14 Q (By Mr. Yoshimori): Could you please  
15 explain the color coding behind this diagram?

16 A Yes, I can.

17 So the various colors show the depths of  
18 cut and fill that are projected for the site. So as  
19 you get into the red, the yellows and the reds, show  
20 the areas of the red -- this is the area of largest  
21 cut (indicating). And as you go into what looks like  
22 gray and blueish areas, those are the areas of fill.

23 So we will be removing material from this  
24 southwestern portion of the site and relocating it to  
25 the blue area.



1 CHAIRPERSON SCHEUER: One moment, Mr.  
2 Yoshimori. Commissioner Giovanni.

3 COMMISSIONER GIOVANNI: I can wait for my  
4 questions until it's to the Commissioners.

5 CHAIRPERSON SCHEUER: Please proceed, Mr.  
6 Yoshimori.

7 Q (By Mr. Yoshimori): Would you mind  
8 explaining the different colors, how many feet those  
9 colors represent in terms of fill or cut?

10 A So if you look up to the proportion of the  
11 exhibit, you will see that -- (indecipherable) and  
12 it's kind of hard to define. It's kind of this  
13 purplish/red color. That shows cuts -- it's in a  
14 20-foot range, so we have a cut up to as much as  
15 100 feet. And then on the opposite end, we have a  
16 fill as much as 40 feet.

17 Q Can you indicate where the damselfly  
18 habitat is located on this diagram?

19 A If you can see, Mr. Nance has shown his  
20 three herringbone sub-drains that he referenced  
21 yesterday, and the damselfly habitat is to the north  
22 or above those three herringbone sub-drains.

23 Q So right around here, this area  
24 (indicating)?

25 A Yes.

1           Q       Can you explain what the dark blue hash  
2 marks represent? You just touched upon it.

3           A       Yes. These are the sub-drains that  
4 Dr. Nance spoke about yesterday that will help  
5 maintain the subsurface flow of water to the seep and  
6 to the well.

7                   CHAIRPERSON SCHEUER: It's Mr. Nance.

8                   THE WITNESS: I'm sorry, Mr. Nance.

9           Q       (By Mr. Yoshimori): Can you explain where  
10 those drains terminate? Are they underground  
11 terminations or aboveground terminations?

12          A       They're underground terminations.

13          Q       Mr. Nance testified yesterday that there  
14 will be a spigot on the end of these pipes and flow  
15 could be controlled by changing the spigots.

16                   Is that possible if they're underground?

17          A       Maybe these are questions that were asked  
18 to Mr. Nance. It's my understanding this is a  
19 subterranean system intended to keep flow to the  
20 well, and the well is below grade. There will be  
21 valves and those will be below grade.

22          Q       Would you be able to walk us through, you  
23 know, high level, how the herringbone drains will be  
24 built? For example, first you're going to grade the  
25 red and orange area, and then we're going to excavate

1 10 to 15 feet below the herringbones to put those  
2 herringbone drain in, then put the fill back, fill  
3 the walls and then put in the backfill.

4 Can you just walk us through that?

5 A The herringbone drains will be constructed  
6 first before we actually move any dirt, because  
7 they're in the areas where fill will be placed. So  
8 we will trench in those drains, as indicated by Mr.  
9 Nance, to their depth. And then we will begin the  
10 excavation of the hillside and the filling of the  
11 area below.

12 Q So you'll dig in first, put the drains in,  
13 refill that, fill the walls, and then put the  
14 backfill?

15 A Yes.

16 Q Thank you.

17 You mentioned that it could be up to  
18 100 feet of removal of dirt. I just want to get a  
19 visual about how many stories would that be?

20 A I can't tell you.

21 Q During construction I think you mentioned  
22 that there's going to be sediment basins designed for  
23 a two-year, 24-hour storm; is that correct?

24 A Yes, that is the City and County standard.

25 Q Has it been identified where these sediment

1 basins are going to be placed, whether above the  
2 damselfly habitat or above the homes?

3 A They will be located in every five-acre  
4 increment that we create on this site. So they will  
5 be put in place before we grade a particular area,  
6 and then they will be filled as that grading is done.  
7 The three retention/detention basins will remain as  
8 permanent features, but there will be many sediment  
9 basins across the site as the grading is done.

10 Q There is no diagram showing the plans for  
11 the sediment basins?

12 A No. And as I responded to a previous  
13 question about the phasing, the five-acre phasing  
14 diagram has not been developed. As we go into  
15 further design and permitting, we would probably  
16 reach out to resources in the construction industry  
17 to help us better understand accessibility and  
18 feasibility for construction, and how to best grade  
19 that site.

20 Q Will those retention ponds be built at the  
21 start of construction or during construction? I was  
22 confused by that.

23 A They will be built as that area is graded,  
24 yes. So all three of them will be built initially,  
25 because we won't be grading all of those areas

1 initially.

2 Q If there is a rain event that's greater  
3 than the two-year, 24-hour storm, will the sediment  
4 basins be able to -- I'm assuming the sediment basins  
5 will overflow. Will it still be able to capture  
6 sediment in those conditions?

7 A If the basins overflow, then the additional  
8 sediment that comes from a larger storm event will  
9 not be captured.

10 Q You mentioned that you're going to be  
11 redirecting water flow into the City and County  
12 drainage systems.

13 Have you evaluated whether the City and  
14 County drainage system can handle that flow  
15 redirection of that water into those systems?

16 A The water during existing conditions  
17 already reaches these systems, so we are just going  
18 to redirect on our site how it gets into those  
19 existing systems. We are not going to increase the  
20 flow going into each of these catch basins, these  
21 structures.

22 So we're required to analyze our existing  
23 flow into the structures and our proposed flow, and  
24 we will be showing a reduction in the proposed flow.

25 Q Thank you. Those are all the questions I

1 have. Thank you.

2 CHAIRPERSON SCHEUER: Thank you very much,  
3 Mr. Yoshimori.

4 Commissioners, starting with Commissioner  
5 Giovanni.

6 COMMISSIONER GIOVANNI: Thank you, Chair.  
7 And if I could lower my hand. There we go.

8 Thank you, Ms. Hirota, for your testimony.  
9 I was particularly interested in some of your opening  
10 remarks this morning regarding the disposition of  
11 clean fill, because there will be quite a volume of  
12 fill or product, by-product that comes from this  
13 grading operation.

14 And we heard yesterday, and in the  
15 documents that are part of the record, one of the  
16 possible fates of a good deal of that material would  
17 be the construction landfill facility known as PVT;  
18 is that correct?

19 THE WITNESS: Yes, I did believe you did  
20 hear that yesterday.

21 COMMISSIONER GIOVANNI: Your remarks today,  
22 you said in your experience, your expectation -- I  
23 think you refer to it as clean fill -- would find a  
24 final disposition other than a landfill, and it would  
25 be common to find a location for that.

1           Could you expand on that perspective just  
2 for a bit?

3           THE WITNESS: Yes. Suitable fill material  
4 is in high demand across this island. At any given  
5 time I have two or three projects I'm involved in  
6 that require fill.

7           As much as we try to balance project sites,  
8 balance the earthwork, it's not always reasonable to  
9 do that like it is in this site. So many contractors  
10 are always looking for fill. And we would expect  
11 over the 18 months of construction on this project,  
12 that this fill material will find a home other than  
13 PVT.

14           COMMISSIONER GIOVANNI: Are there  
15 precautions that you would advise to be appropriate  
16 for this particular project, so that the fill  
17 material characteristics would not be contaminated  
18 with other construction waste so that it would  
19 increase the likelihood of that scenario you just  
20 described materializing, and it would find another  
21 site for the clean fill as opposed to PVT?

22           THE WITNESS: Yes. I don't have expert  
23 in -- (indecipherable) but this project site I don't  
24 believe has any contaminants on it. The waste that  
25 we would expect to see which would be the grubbing

1 waste from where they remove the vegetation, and that  
2 generally is taken and stored separately from  
3 (indecipherable) material, so we would expect those  
4 stockpiles would be separate.

5 And other than the grubbing waste, I don't  
6 anticipate that there would be other waste on this  
7 site.

8 COMMISSIONER GIOVANNI: Describe what you  
9 mean by grubbing waste.

10 Does that include, for example,  
11 construction of materials for building the retaining  
12 walls and with reinforcement structures or concrete,  
13 rebar, anything of that nature?

14 THE WITNESS: No, the grubbing waste is the  
15 vegetation that is removed from the site prior to  
16 grading, the trees and existing ground covers.

17 COMMISSIONER GIOVANNI: So the grubbing  
18 waste would have to be separated from, in effect, the  
19 soil. The soil would be the clean fill that you can  
20 find another home for?

21 THE WITNESS: Yes.

22 COMMISSIONER GIOVANNI: Greenwaste, what  
23 would be the disposition of the greenwaste then?

24 THE WITNESS: The greenwaste could end up  
25 in landfill. It could be used. It will be composted



1 and they can use it for compost in the finished  
2 condition as well as part of the topsoil and  
3 landscape amendments.

4 COMMISSIONER GIOVANNI: What about other  
5 building materials that would be used for the grading  
6 operation or the construction's operations that might  
7 otherwise be commingled with the clean landfill, if  
8 not specifically addressed in the construction  
9 process?

10 THE WITNESS: Let me reference in my oral  
11 testimony to a National Pollutant Discharge  
12 Elimination Permit that is issued by the State of  
13 Hawaii, and that permit requires the contractors to  
14 define all of those wastes that you mentioned, two by  
15 fours, human waste from construction workers,  
16 anything that's generated during that construction,  
17 and the contractor must define to the State of Hawaii  
18 where each of those wastes will end up. The  
19 port-a-potties get cleaned. That there's dumpsters  
20 on-site to collect construction materials, and those  
21 are taken to the landfill.

22 That will be the contractor's  
23 responsibility during construction.

24 COMMISSIONER GIOVANNI: Looking at all  
25 these different waste streams purely from a

1 volumetric perspective, is it your understanding that  
2 the preponderance of it will be, or the large  
3 majority of it will be clean fill that comes from the  
4 grading operation?

5 THE WITNESS: Yes. The 57,000 yards that  
6 we mentioned before will be the clean fill. These  
7 other wastes will be negligible compared to that.

8 COMMISSIONER GIOVANNI: I think we heard  
9 yesterday -- maybe a question to Mr. Tabata -- I  
10 think we heard yesterday in an exchange between the  
11 City and County and Mr. Morford about whether  
12 Petitioner would be willing to entertain discussions  
13 with the City and County regarding disposition of  
14 this fill material.

15 Did I hear that correctly when Mr. Morford  
16 answered that question in the affirmative?

17 MR. TABATA: I'm not sure that Mr. Morford  
18 indicated the disposition of the clean fill material.  
19 If he did, I think he would defer to Ms. Hirota and  
20 what she is saying about the clean fill and how it  
21 will be disposed of.

22 COMMISSIONER GIOVANNI: I think rather than  
23 disposing it, we are looking for an alternative in  
24 which its reused.

25 MR. TABATA: That's what I meant, to be

1 reused for other projects as Ms. Hirota stated,  
2 demand for this clean fill. So, yes, disposal at PVT  
3 is not something we are looking at.

4 Well, Ms. Hirota can explain that.

5 COMMISSIONER GIOVANNI: I understand that.

6 And so, Mr. Tabata, I don't know if this is  
7 the appropriate witness, but I would like to ask  
8 questions to some witness of the Petitioner regarding  
9 whether or not a condition for finding a reuse for  
10 that landfill as opposed to discarding that landfill  
11 material will be an acceptable condition for approval  
12 of this.

13 CHAIRPERSON SCHEUER: Mr. Tabata.

14 MR. TABATA: We can discuss it with our  
15 client.

16 I would just also mention that  
17 procedurally, after the close of the evidentiary  
18 hearing, that the Parties, and I believe also the  
19 Commission, can submit proposed language for the  
20 order and propose conditions.

21 There may be argument or discussion related  
22 to proposed conditions, but ultimately the  
23 Commission, you and your fellow Commissioners will  
24 decide which conditions are placed on any future  
25 Decision and Order.

1                   COMMISSIONER GIOVANNI: Understood. Thank  
2 you very much. That's all I have. Thank you, Ms.  
3 Hirota.

4                   CHAIRPERSON SCHEUER: Thank you,  
5 Commissioner Giovanni. Commissioners?

6                   Commissioner Wong.

7                   COMMISSIONER WONG: Thank you, Chair.

8                   CHAIRPERSON SCHEUER: Thank you for your  
9 enthusiastic waving. It's a smaller image, so it's  
10 hard to see.

11                  COMMISSIONER WONG: Just want some  
12 clarification on your recent testimony, and Mr.  
13 Nance's testimony.

14                  So Mr. Nance said there is a seep well, I  
15 guess, for the dragonfly and you're going to make a  
16 herringbone pattern to shoot water to that seep well  
17 or outside to the City and County drainage area; is  
18 that correct? Something like that? I'm just setting  
19 up the scenario for my question.

20                  THE WITNESS: The herringbone drain will go  
21 into the seep well. So it will be a subsurface drain  
22 and it helps to feed the well. It will not -- I  
23 believe Mr. Nance may have discussed if there was too  
24 much water, we can redirect that water away from the  
25 well.

1                   COMMISSIONER WONG: I guess what happens is  
2 Mr. Nance also said that the soil is clayish, so most  
3 of the surface water will go over the clay soil and  
4 not seep down into the lava rock, something like  
5 that; is that correct?

6                   THE WITNESS: Yes.

7                   COMMISSIONER WONG: So the question I have  
8 is more in the sense that when you're grubbing and  
9 taking all this dirt, okay, how will it affect that  
10 undersurface water going into the seep well?

11                  THE WITNESS: So that's what Mr. Nance was  
12 trying to protect with this sub-drain is to allow  
13 that water to continue to flow underneath the fill  
14 surface.

15                  COMMISSIONER WONG: So it will be under --  
16 so like grubbing close to 100 feet of dirt.

17                  THE WITNESS: And his herringbone drain  
18 will be below that.

19                  COMMISSIONER WONG: So I'm just trying to  
20 get this in the top of my head.

21                  So the water on the top, the surface flow  
22 is still going to flow out, I mean flow after all the  
23 grubbing is done and all those basins are done,  
24 correct?

25                  THE WITNESS: Yes.

1                   COMMISSIONER WONG: So will it affect the  
2 habitat of the damselfly in any way with all those  
3 changes?

4                   THE WITNESS: With the surface runoff?

5                   COMMISSIONER WONG: Changes of the -- your  
6 testimony just stated --

7                   THE WITNESS: My testimony stated that we  
8 will be changing the drainage patterns above where  
9 the damselfly habitat is located.

10                  COMMISSIONER WONG: Water downhill. So  
11 let's say there is water coming down from the seep,  
12 that elevation, over the clay surface, wouldn't it  
13 hit the damselfly habitat?

14                  THE WITNESS: In the proposed condition, we  
15 are going to capture that water before it gets to the  
16 damselfly habitat.

17                  COMMISSIONER WONG: So the other question I  
18 have is, because the water is flowing from the top,  
19 again, and let's say there is 100-year storm and it  
20 happens for more than two hours, you know, because  
21 you're taking out that much water, would it hit the  
22 neighborhood in any way, do you believe, affect the  
23 neighborhood flooding in any way because it's lower?

24                  THE WITNESS: Maybe you can rephrase that.  
25 I'm not sure I understand the question.



1 are going to have to put temporary measures in place  
2 to make sure we are not increasing the amount of  
3 runoff going into the neighbors' backyards. We're  
4 going to have to use sandbags, lots of measures to  
5 redirect this water and make sure it ends up --

6 CHAIRPERSON SCHEUER: Ms. Hirota, please  
7 spell out what ESCP stands for.

8 THE WITNESS: Erosion and Sediment Control  
9 Plan.

10 COMMISSIONER WONG: I think that's it.  
11 Thank you, Ms. Hirota.

12 CHAIRPERSON SCHEUER: Thank you very much,  
13 Commissioner Wong.

14 Commissioners, we're continuing with cross  
15 of Ms. Hirota.

16 Commissioner Okuda.

17 COMMISSIONER OKUDA: Thank you very much,  
18 Ms. Hirota, for your testimony.

19 Going back to this matter regarding PVT,  
20 did you participate in any way in the preparation of  
21 the Draft Environmental Impact Statement?

22 THE WITNESS: No, I did not. I wrote the  
23 preliminary engineering report.

24 COMMISSIONER OKUDA: Did you participate in  
25 any way of the preparation of the Final EIS?



1 THE WITNESS: No, I did not.

2 COMMISSIONER OKUDA: Were you consulted in  
3 any way at any time about the disposal of excavated  
4 material from the construction site? And when I say  
5 "consulted", I mean consulted by Hawaiian Memorial  
6 Park or anyone --

7 THE WITNESS: I don't recall discussions  
8 about PVT.

9 COMMISSIONER OKUDA: Well, my question was  
10 more broadly based about whether or not at any time  
11 were you consulted by Hawaiian Memorial Park or  
12 anyone acting on its behalf about disposal of  
13 materials which are excavated from the construction  
14 site?

15 THE WITNESS: I don't recall those  
16 discussions.

17 COMMISSIONER OKUDA: In the Final EIS at  
18 page 2-31 in red and underlined there is a statement  
19 which indicates to me that that was an insertion made  
20 or modification made to the Draft EIS.

21 If I can just read the first sentence of  
22 that additional portion, which is in red and  
23 underlined, and I'm going to ask you whether or not  
24 the statement that I'm going to read is an accurate  
25 statement or not an accurate statement.

1           Quote: "As discussed in section 5.4,  
2 excavated material that is not used as fill within  
3 the cemetery expansion would need to be disposed of  
4 at the privately-owned PVT Nanakuli Construction and  
5 Demolition Material Landfill site."

6           Is that statement accurate or not accurate?

7           THE WITNESS: It appears to be accurate.  
8 I've got the document in front of me, and it reads  
9 the same way.

10          COMMISSIONER OKUDA: So you believe that  
11 that statement that I just read is an accurate  
12 statement?

13          THE WITNESS: It's accurate and it was  
14 written in the EIS. I didn't write the EIS.

15          COMMISSIONER OKUDA: Okay. So we all agree  
16 that that statement is in the EIS. I'm just asking  
17 whether or not the statement itself is accurate or  
18 not accurate.

19          THE WITNESS: My testimony today  
20 contradicts that statement in that I don't believe  
21 the material will go to PVT.

22          COMMISSIONER OKUDA: So that statement  
23 stated in the EIS is not accurate, correct?

24          CHAIRPERSON SCHEUER: I think,  
25 Commissioner, I think she just answered that

1 question.

2 COMMISSIONER OKUDA: Okay, thank you, Mr.  
3 Chair. I have no further questions.

4 CHAIRPERSON SCHEUER: Commissioners, are  
5 there further questions for this witness?

6 Commissioner Chang, I think followed by  
7 Commissioner Cabral.

8 COMMISSIONER CHANG: Thank you very much.  
9 Thank you, Ms. Hirota, your testimony was very  
10 helpful. Quite frankly, a lot of it was above my  
11 head, but I appreciated the explanation.

12 If you can pull up on the share screen one  
13 of your first exhibits which showed, it was more the  
14 topography.

15 Could you show me on this map where the  
16 Ocean View Gardens are located, if you know?

17 THE WITNESS: Yes, if you can see my  
18 cursor --

19 COMMISSIONER CHANG: Yes.

20 THE WITNESS: -- this dark gray line, the  
21 road goes around Ocean View Gardens, that's the  
22 existing roadway.

23 COMMISSIONER CHANG: Well, I'm not too sure  
24 if -- well, let me ask the question this way.

25 When you prepared your report, the

1 sedimentation, the erosion and the grading plans, did  
2 you take -- did you look at some of the previous work  
3 that was done in Hawaiian Memorial Park including the  
4 Ocean View Gardens?

5 THE WITNESS: You know, I don't recall that  
6 I had access to the as-built documents for Ocean View  
7 Gardens when we initially started this.

8 COMMISSIONER CHANG: I guess the reason I'm  
9 asking that question, it appears that the topography  
10 of the Ocean View Gardens prior to it becoming the  
11 Ocean View Gardens may be very similar to the  
12 proposed expansion area. Would you agree with that?

13 THE WITNESS: I can't confirm that, I'm  
14 sorry.

15 COMMISSIONER CHANG: That's okay. Then I  
16 have no further questions.

17 CHAIRPERSON SCHEUER: Thank you very much,  
18 Commissioner Chang. Commissioner Cabral.

19 VICE CHAIR CABRAL: Mine are somewhat in  
20 line, I think. I love maps, and based on the map  
21 that is in front of us, is that area that's outlined  
22 in that solid red line, that is the subject area that  
23 is going to be under construction or consideration.

24 So can you show us, because there's a  
25 reference on some of these maps of Road A, Road B,

1 and so all of that what is looking like it's going to  
2 be a new road is really going to occur, it doesn't  
3 already exist? Or is that the area -- what I'm  
4 trying to figure out is where were we standing during  
5 our site visit? Were we in a sense below this, along  
6 this green, and in a whole other area that's now in  
7 gray? Or are we somewhere on the orange area?

8           Where was I standing when I was looking  
9 over to the side and looking at the tall Norfolk  
10 pines, et cetera?

11           Do you know, or can somebody help show  
12 where that was in relationship to this current map?

13           THE WITNESS: I wasn't a participant in  
14 that site visit, but it is my understanding you went  
15 to Ocean View Gardens, and you were along the roadway  
16 and you probably looked directly to the east where my  
17 pointer is right now.

18           VICE CHAIR CABRAL: So was I along that  
19 area, I think it's called Road A. Was I along that,  
20 or am I outside the whole area?

21           THE WITNESS: You were outside. You would  
22 have been standing in this gray area. Road A would  
23 be the proposed future road.

24           VICE CHAIR CABRAL: Okay. I see where your  
25 cursor is now. Thank you very much, that gives me a

1 perspective on it.

2 CHAIRPERSON SCHEUER: Thank you,  
3 Commissioner Cabral. If you would stop sharing for a  
4 moment, Ms. Hirota.

5 Commissioners, further questions for this  
6 witness? If not, I have two quick questions, Ms.  
7 Hirota.

8 I'm thinking back to Mr. Nance's testimony  
9 yesterday where he described the soil profile, but I  
10 believe he described fairly shallow bedrock on this  
11 site, then with a fill layer and then a clay cap  
12 which is what allows the seep to be filled.

13 Given that you're planning to excavate over  
14 100 feet at some levels, have you done test borings  
15 or other kinds of investigations to determine that  
16 you're not going to be intersecting bedrock as you do  
17 this excavation?

18 THE WITNESS: I'm going to defer that  
19 question to Robin Lim. I believe he's going to come  
20 back and further discuss the geotechnical aspects and  
21 the rockfall mitigation for this site.

22 CHAIRPERSON SCHEUER: Okay, is that -- Mr.  
23 Tabata, Mr. Lim is going to be recalled?

24 MR. TABATA: Yes, we will call Robin Lim as  
25 a rebuttal witness.

1           CHAIRPERSON SCHEUER: Commissioner Chang.

2           COMMISSIONER CHANG: I apologize. I'm  
3 always one of these last people.

4           Ms. Hirota, do I understand your testimony  
5 that what you are proposing through the  
6 retention/detention basin erosion control measures,  
7 that you're actually going to improve the drainage,  
8 and you're going to actually eliminate some of the  
9 flows that go onto the neighbors, the subdivision; is  
10 that your testimony?

11          THE WITNESS: Yes, that is my testimony.

12          COMMISSIONER CHANG: Thank you. I just  
13 wanted to be sure.

14          CHAIRPERSON SCHEUER: I had two questions  
15 but I wasn't quite done with my first question.

16                 Just to the degree, Ms. Hirota, I'm fine  
17 with your deferring to Mr. Lim as to the geotechnical  
18 aspects of things, but I guess my question is then,  
19 are you confident with this preliminary site plan,  
20 regardless of what the actual grading finds, you're  
21 going to follow these plan contours, or might it  
22 change in the course of construction if, for  
23 instance, bedrock is much more shallow?

24          THE WITNESS: No. From this stage we will  
25 go out and do more soil borings and more topographic

1 survey to confirm. This is preliminary data that we  
2 have, these exhibits. More investigation work will  
3 be done as preparation for the permit drawings  
4 occurs, so you may see changes, and those will happen  
5 during the design phase.

6 We would not go out before construction  
7 phase. They will be determined with further  
8 investigation after this process is over.

9 CHAIRPERSON SCHEUER: So my second question  
10 then, and this really is perhaps more a question for  
11 Mr. Tabata, but coming from the perspective of among  
12 other experiences on the LUC being the Hearings  
13 Officer on Lanai docket related to groundwater use,  
14 and having very conflicting representations from the  
15 Petitioner in the record -- and I've seen this  
16 again -- we have one thing in the EIS, and one thing  
17 else from your witness.

18 There is going to be a request, from me at  
19 least, for the Petitioner to be really clear what  
20 their representations are on the matter of the  
21 disposal of fill.

22 Will that be possible in this process, Mr.  
23 Tabata?

24 MR. TABATA: I believe that will be  
25 possible, Chair. In a nutshell, the EIS was written



1 by HHF Planners, and they did the best job that they  
2 could.

3 My understanding is that they didn't have  
4 the various sub-consultants draft everything that was  
5 contained in the text of the EIS. They gathered the  
6 best information they had. But in this case, they  
7 did not have the years of experience that Ms. Hirota  
8 has as a civil engineer.

9 So I don't see a conflict in the evidence.  
10 I see two different perspectives, one from a planner  
11 drafting a 343 document, and we also have a  
12 perspective of a civil engineer that has practical  
13 onsite experience with projects.

14 So I appreciate that comment or advice, and  
15 we will certainly address both representations in  
16 post-hearing filings.

17 CHAIRPERSON SCHEUER: I will want it to be  
18 very clear on the record which representation which  
19 the LUC needs to be relying upon in considering the  
20 merits on this case.

21 MR. TABATA: Yes, Chair. Thank you.

22 CHAIRPERSON SCHEUER: I have nothing  
23 further for, Ms. Hirota. Is there anything else? If  
24 not, thank you very much -- oh, is there redirect?

25 MR. TABATA: No, thank you. No redirect.

1           CHAIRPERSON SCHEUER: Seeing there is no  
2 redirect of Ms. Hirota's testimony, we will excuse  
3 Ms. Hirota from being a witness and move you back to  
4 being an attendee.

5           And, Mr. Tabata, who are your next  
6 witnesses?

7           MR. TABATA: Next witness will be Reginald  
8 David, our biologist, followed by Steven Montgomery.

9           CHAIRPERSON SCHEUER: Dr. David is going to  
10 be testifying on which particular matters?

11          MR. TABATA: With respect to avian and  
12 terrestrial mammals.

13          CHAIRPERSON SCHEUER: How long do you  
14 expect his direct testimony to be?

15          MR. TABATA: He will probably take maybe 10  
16 to 15 minutes on direct.

17          CHAIRPERSON SCHEUER: I'm going to suggest  
18 that we take a break now, reconvene at 11:16 for the  
19 direct of Dr. David, and then followed by  
20 Dr. Montgomery prior to lunch, if that's possible.

21                 Is that acceptable to the Parties and  
22 Commissioners? It's 11:06, we will reconvene at  
23 11:16.

24                 (Recess taken.)

25          CHAIRPERSON SCHEUER: Let's go back on the

1 record, and confirm on the record that all sitting  
2 Commissioners are participating.

3 We are now proceeding with the direct  
4 testimony of Reginald David.

5 I'm going to swear you in first before Mr.  
6 Tabata proceeds with your direct.

7 Do you swear or affirm the testimony you're  
8 about to give is the truth?

9 THE WITNESS: I do.

10 CHAIRPERSON SCHEUER: Thank you. Nice to  
11 see you.

12 THE WITNESS: Thank you, sir.

13 REGINALD DAVID

14 Was called as a witness by and on behalf of the  
15 Petitioner, was sworn to tell the truth, was examined  
16 and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. TABATA:

19 Q Good morning, Reggie, could you please  
20 describe for us your professional background?

21 A Certainly.

22 My name is Reginald David. I am an  
23 endangered species biologist mostly. I worked in  
24 Tropical Pacific and Asia for at least the last  
25 30 years. My clients have involved both federal and

1 state governments, foreign national governments, and  
2 also almost every branch of the military, and a very  
3 large number of private concerns such as this one.

4 Q Thank you.

5 Petitioner requests that Reginald David be  
6 qualified as expert in biology.

7 CHAIRPERSON SCHEUER: Do you want to be a  
8 little more specific? Biology is a big field.

9 MR. TABATA: Yes, that would be and  
10 terrestrial mammals.

11 CHAIRPERSON SCHEUER: Are there objections  
12 from the Parties?

13 MR. PANG: City has no objection.

14 MS. APUNA: State has no objection

15 MR. YOSHIMORI: We have no objections.

16 CHAIRPERSON SCHEUER: Commissioners? Okay.  
17 So qualified. Please proceed.

18 Q (By Mr. Tabata): Reggie, could you please  
19 summarize for us your written testimony?

20 A Certainly, my pleasure.

21 Mr. Chair, Commissioners, good morning.

22 Basically I was contracted to conduct avian and  
23 mammalian surveys on the property. Previous work was  
24 done in the '60s by another biologist.

25 Essentially we used standardized bird

1 sensing techniques, and essentially what we reported  
2 was that 227 individual animals, 19 species  
3 representing 15 separate families. No indigenous or  
4 endemic avian species were recorded within the  
5 Petition Area.

6 We did record an indigenous migratory  
7 shorebird species on the existing HMP cemetery,  
8 Pacific Golden-Plover and the three species that we  
9 detected are all alien invasive and deleterious  
10 mammals present on most of the islands in the state.

11 Q Reggie, let me ask you another question.

12 Are you familiar with the U.S. Fish and  
13 Wildlife Service?

14 A Yes, sir.

15 Q Are you familiar with their regulations?

16 A Yes, sir.

17 Q Did you have a chance to review the U.S.  
18 Fish and Wildlife letter dated August 22, 2019 that  
19 is addressed to Mary Alice Evans, Director, Office of  
20 State Planning?

21 A Yes, I did.

22 Q Do you have any comments to that letter?

23 A I think possibly one -- I'm not an  
24 attorney, however, I have written numerous HCPs, and  
25 I have no idea how many consultations for various

1 entities, so I do understand the process involved in  
2 permitting under endangered species in Hawaiian and  
3 Tropical Pacific.

4           Essentially what we have here is a  
5 situation where we do have an acknowledged endangered  
6 species on the property. Essentially, under the law,  
7 essentially what an applicant or petitioner is  
8 required to do is to ensure that minimization  
9 measures are put in place to minimize to the maximum  
10 extent practicable any potential deleterious impacts  
11 to that species.

12           If those measures are not sufficient, then  
13 one is generally required to consult in another  
14 process to make sure that one mitigates the  
15 unintended take of those endangered species.

16           Q       Thank you.

17           Mr. David is now available for  
18 cross-examination.

19           CHAIRPERSON SCHEUER: Thank you, Mr.  
20 Tabata. City and County.

21   CROSS-EXAMINATION

22 BY MR. PANG:

23           Q       Good morning, Mr. David. My name is Duane  
24 Pang.

25   Can you give me a timeframe of your study?

1           A       Yes, sir. Let me just check my report  
2 here. It was conducted in 2017, sir.

3           Q       Can you give me a little bit of general  
4 information as to what encompassed the study?

5           A       Yeah. Basically what we did is -- when you  
6 survey for birds, there are different methodologies  
7 that you use, because this is a relatively -- the  
8 Petition Area is a relatively dense vegetation. What  
9 we do is we set up what we call point counts. So we  
10 put eight point counts within the property, and  
11 conducted what are called variable circular plot  
12 counts for avian species.

13                   Basically when you're doing these kind of  
14 surveys, probably in this kind of a setting, 70 or  
15 80 percent of the species recorded are recorded by  
16 their vocalizations. You don't actually see them.  
17 And it's a standardized technique that's used  
18 throughout the Pacific.

19           Q       One more last question. What was the  
20 length of time of that survey?

21           A       The survey was conducted on one day.

22           Q       Okay. Any particular time of year?

23           A       I honestly am embarrassed to say I'm not  
24 100 percent sure. I believe it was in October 2017.  
25 It is the period -- so in Hawaii we have fairly

1 little change in bird populations, however, we do  
2 have a number of migratory shorebird species which  
3 are present in the State, and we conducted the survey  
4 at an appropriate time of year to record both those  
5 species and any resident land birds.

6 Q Thank you.

7 Mr. Chair, I have no further questions.

8 CHAIRPERSON SCHEUER: Thank you very much.  
9 State?

10 MS. APUNA: No questions.

11 CHAIRPERSON SCHEUER: Intervenor?

12 CROSS-EXAMINATION

13 BY MR. YOSHIMORI:

14 Q Hello, Dr. David. I just have one  
15 question.

16 Yesterday Mr. Ezer had stated that there  
17 were only damselflies using the property as an  
18 endangered species, but your written testimony says  
19 the Hawaiian hoary bats may also be present; is that  
20 correct?

21 A That is correct.

22 Q Thank you. Those all the questions I have.  
23 Thank you, Dr. David.

24 CHAIRPERSON SCHEUER: Commissioners,  
25 starting with Commissioner Giovanni.



1           COMMISSIONER GIOVANNI: Mr. Chair, I  
2 recommend that earlier in regards to recognizing Mr.  
3 David as an expert witness it was confined to  
4 mammals. I think it should be expanded to include  
5 avian species as well.

6           CHAIRPERSON SCHEUER: I have no problem  
7 with that. Mr. Tabata?

8           MR. TABATA: I'm in agreement. Thank you,  
9 Commissioner.

10          CHAIRPERSON SCHEUER: City and County?

11          MR. PANG: City is not objecting.

12          CHAIRPERSON SCHEUER: State?

13          MS. APUNA: No objection.

14          CHAIRPERSON SCHEUER: Intervenor?

15          MR. YOSHIMORI: No objections. Thank you.

16          CHAIRPERSON SCHEUER: Commissioners.

17 Mr. -- sorry, I said -- is it Mr. David or Dr. David?

18          THE WITNESS: It's Mr. David.

19          CHAIRPERSON SCHEUER: Mr. David is  
20 qualified as expert for mammals and avian species.

21          Did you have anything further, Commissioner  
22 Giovanni? Other questions.

23          Commissioner Wong.

24          COMMISSIONER WONG: Yeah. Mr. David, thank  
25 you for your testimony. I have a question.

1           You know, with all the talking about the  
2 grading and the changes to the landscape, would that  
3 enhance more pueo or hoary bats to live in the area  
4 or would it decrease the transits?

5           THE WITNESS: That's a good question, sir.  
6 Basically by altering the habitat to basically  
7 turf-grass dominated habitat, it will improve the  
8 habitat for migratory indigenous shorebird species  
9 which are native to Hawaii but also found elsewhere.  
10 And there's probably three species that would use  
11 that property.

12           Hawaiian hoary bats are an over-dispersed  
13 species in technical terms, which basically means  
14 they're solitary, they roost in tree vegetation, and  
15 their ranges are fairly large.

16           So this proposed clearing of the Petitioner  
17 site will not enhance habitat for that species. The  
18 pueo is diurnal, which means daytime owl. It is a  
19 grassland species. It's not particularly a forest  
20 species, and it actually nests on the ground in  
21 grass.

22           Turf grass is not usually the habitat in  
23 which they nest. On Oahu where they're usually found  
24 or on the North Shore, James Campbell, parts of  
25 Marine Corps Air Station, Nanakuli, and Lualualei

1 where you've got fairly undisturbed grassland.

2 COMMISSIONER WONG: Thank you. Thank you,  
3 Chair.

4 CHAIRPERSON SCHEUER: Thank you,  
5 Commissioner Wong.

6 Commissioners, are there other questions?  
7 I see nobody raise -- Commissioner Ohigashi.

8 COMMISSIONER OHIGASHI: Mr. David, I notice  
9 in your report that you have some mitigation  
10 recommendations concerning hoary bat.

11 Could you please expand on that?

12 THE WITNESS: Yes, sir.

13 COMMISSIONER OHIGASHI: Talk about maybe  
14 certain height of trees.

15 THE WITNESS: I'm just opening my report to  
16 that section to make sure I'm addressing your comment  
17 correctly.

18 So in consultations with federal and state,  
19 the minimization measure for Hawaiian hoary bats that  
20 I put in my report is the standard condition that  
21 would be expected from either DOFAW or Fish and  
22 Wildlife Service.

23 Essentially, the purpose of that is there  
24 is some beliefs that female bats may not be able to  
25 get out of a tree that's being felled during the bat

1 pupping season.

2           And so essentially the standard condition  
3 that is used by both the state and the federal  
4 government in Hawaii is that thou shalt not cut trees  
5 or woody vegetation over 15 feet high during the bat  
6 pupping season, which runs from June 1st to September  
7 15th, and that's a standard clause and condition in  
8 pretty much any permit process that I'm involved in.

9           COMMISSIONER OHIGASHI: Is there a  
10 recommendation or is there -- is it your position  
11 then that we should retain any trees over 15 feet  
12 high for the purposes of allowing the bat to  
13 procreate in the area?

14           THE WITNESS: No, sir. That is not my  
15 recommendation.

16           COMMISSIONER OHIGASHI: Would you tell me  
17 why wouldn't that be --

18           THE WITNESS: Certainly. The average home  
19 range of one of these bats is somewhere on the order  
20 of two to two-and-a-half kilometers. They do not  
21 have a single roost tree. They do not roost or  
22 congregate in groups. So they are not habitat  
23 restricted.

24           So essentially, on a parcel of property  
25 like this, removing the trees at the appropriate time

1 of year will not in all probability have a  
2 deleterious impact on Hawaiian hoary bat, and there  
3 are adequate trees in all the low lying areas for  
4 those animals to move into as they choose. They  
5 don't have one roost. They move around. They have  
6 day roost; they have night roost.

7 I hope that answers your question.

8 COMMISSIONER OHIGASHI: Yes, it did.

9 CHAIRPERSON SCHEUER: Thank you

10 Commissioner Ohigashi.

11 Mr. Tabata, point of clarification about  
12 this witness versus the next witness. You asked this  
13 witness to comment on Fish and Wildlife Service  
14 regulations, but the primary area of concern seems to  
15 be around whether or not there's a need for an  
16 Incidental Take Permit and an associated habitat  
17 conservation plan for the damselfly.

18 Is this witness expected to answer all  
19 questions related to Incidental Take and HCPs, or is  
20 that your next witness, or is there another witness?

21 MR. TABATA: Mr. David is being offered  
22 right now to address all those federal regulations  
23 regarding the damselfly.

24 CHAIRPERSON SCHEUER: He's not here as the  
25 entomologist?

1           MR. TABATA: He's not the entomologist, but  
2 he does have that experience with U.S. Fish and  
3 Wildlife, so he is being offered in that capacity.

4           CHAIRPERSON SCHEUER: So with that  
5 clarification, thank you.

6           If there's not other Commissioners with  
7 questions right now, I have questions for Mr. David.

8           Mr. David, how is the determination done on  
9 whether or not an Incidental Take Permit may be  
10 required?

11          THE WITNESS: It somewhat depends on the  
12 trigger for the consultation. So in this particular  
13 situation we currently do not have a federal nexus,  
14 which I believe -- so if there were a federal nexus  
15 it would automatically be handled by the federal  
16 government under Section 7 of the Endangered Species  
17 Act. Because we do have a 343 document in play, both  
18 the federal and state wildlife regulatory agencies do  
19 get to comment and make suggestions.

20          Essentially, ordinarily what happens at  
21 this juncture is that a plan will be put forth which  
22 details all minimization and conservation measures  
23 with the determination from the Petition team that  
24 those are adequate, and then it will be up to the  
25 federal and state agencies to determine whether or

1 not they agree with that.

2 CHAIRPERSON SCHEUER: So in this case where  
3 there was no federal nexus, did the -- was it somehow  
4 incumbent on the Fish and Wildlife Service to state  
5 in a letter that an Incidental Take Permit would be  
6 required?

7 THE WITNESS: I think if you look at that  
8 letter, it said that it should be considered. So  
9 under Section 7 of the Endangered Species Act it is a  
10 required activity. You don't have a choice. If you  
11 trigger a federal nexus, then you have to do the  
12 consultation.

13 Section 10 under the Federal Endangered  
14 Species Act and the HCP clauses under 195(d) are an  
15 applicant driven process.

16 So an applicant basically needs to  
17 determine whether or not they think their  
18 minimization measures are sufficient and effective.  
19 And at that point they can choose to prepare an HCP  
20 under federal and state law, because in Hawaii they  
21 are joined, you can't do one or the other.

22 CHAIRPERSON SCHEUER: And what role does an  
23 approving body, such as the Land Use Commission, have  
24 in making a determination?

25 THE WITNESS: I am no expert on the LUC

1 rules and laws and conditions. I think --

2 CHAIRPERSON SCHEUER: You can defer action,  
3 that's fine. I'm not trying to ask you about  
4 anything outside of your area of expertise.

5 THE WITNESS: That's not my area of  
6 expertise. I do not know what your specific rules  
7 are.

8 CHAIRPERSON SCHEUER: What I'm trying to  
9 understand is on a common sense level if it was  
10 entirely always up to private landowners to determine  
11 whether or not what they're doing is good enough.

12 And I am not making any statement about the  
13 character of this Petitioner, but just there is going  
14 to be a range of petitioners in the world, some of  
15 whom might be more than willing to conclude that  
16 everything they're doing is fine, and others will  
17 take a much more cautious approach?

18 So that's why I was asking about does the  
19 approving authority have some role in the  
20 determination of whether or not the proposed actions  
21 are adequate to alleviate the need of needing any  
22 Incidental Take Permit and associated HCP.

23 So I just wondered, based our experience,  
24 you've seen any situations where -- appearing before  
25 us and other bodies -- whether there's been a



1 situation where a petitioner or applicant or  
2 landowner might not feel that HCP and Incidental Take  
3 Permit is required, but the body granting some  
4 approval or a permit required it?

5 THE WITNESS: In my experience that has  
6 never happened. Ultimately, I think under LUC's  
7 conditions that I have seen, essentially petitioner's  
8 are required to consult with the appropriate wildlife  
9 regulatory agencies and comply with state and federal  
10 law. So I think that probably is adequate, but I'm  
11 not a lawyer.

12 CHAIRPERSON SCHEUER: Again, I'm trying to  
13 be very clear. I'm not asking you about legal  
14 questions, per se, but just areas where you were  
15 offered as an expert.

16 I have nothing further for Mr. David. Is  
17 there anything else, Commissioners? Looking once,  
18 looking twice. If not, redirect, Mr. Tabata?

19 MR. TABATA: Yes, Chair.

20 REDIRECT EXAMINATION

21 BY MR. TABATA:

22 Q Just to be clear, based on your experience,  
23 is it your opinion that an Incidental Take Permit is  
24 not required for our project, legally required?

25 A Obviously it's not my decision, but I think

1 what is being proposed for minimization, which  
2 essentially is to protect the seep, the well, the  
3 area that the Hawaiian Blackline Damselfly is using  
4 on the property, and the fairly extensive measures  
5 being implemented to control water, to ensure that  
6 there is a constant appropriate flow, not only to the  
7 well, but to the seep that -- and also fencing to  
8 keep pigs and other -- and people out of there, I  
9 think most regulatory agencies would consider those  
10 minimization measures to be adequate.

11 And I think, frankly, from my perspective,  
12 those measures, if implemented, represent a net  
13 benefit to the species because you're going to create  
14 a better, more stable habitat for the species.

15 MR. TABATA: Thank you.

16 CHAIRPERSON SCHEUER: Sorry, there is a  
17 hand up from Commissioner Chang.

18 COMMISSIONER CHANG: I had a followup  
19 question based upon Mr. Tabata's question.

20 Are you through, Mr. Tabata? Were you  
21 going to ask Mr. David any more questions?

22 CHAIRPERSON SCHEUER: I guess I would like  
23 you to ask your question, Commissioner Chang, and  
24 then let Mr. Tabata finish his redirect.

25 COMMISSIONER CHANG: So my question is, in

1 light of the expert opinion, Mr. David, so is there,  
2 with respect to the proposed mitigation measures, is  
3 there -- I guess I'm more interested in process  
4 necessarily than substance.

5 So procedurally, is the Petitioner required  
6 to go back to U.S. Fish and Wildlife and consult on  
7 the proposed mitigation measures, or do they run the  
8 risk -- is there a potential cause of action for not  
9 protecting the habitat? I've asked you a compound  
10 question.

11 The first question is: Does the Petitioner  
12 have a responsibility or obligation to go back to  
13 U.S. Fish and Wildlife to consult on the proposed  
14 mitigation?

15 THE WITNESS: I mean, not to my knowledge,  
16 and this is actually considered minimization, not  
17 mitigation. But I would suspect that we would take  
18 back with a plan to the U.S. Fish and Wildlife  
19 Service to ensure that what we're doing is adequate.

20 COMMISSIONER CHANG: And my second  
21 question, if you can answer this.

22 In the absence of the Petitioner going back  
23 to U.S. Fish and Wildlife, but nonetheless  
24 implementing these minimization measures, is there a  
25 separate cause of action by an interested party to

1 challenge the impact to critical habitat on the  
2 property?

3 THE WITNESS: There is no critical habitat  
4 on the property.

5 COMMISSIONER CHANG: If the habitat of the  
6 habitat of the damselfly, can that be challenged or  
7 not, further consultation with Fish and Wildlife,  
8 that you know of?

9 THE WITNESS: I'm not a lawyer, but my  
10 experience is that anybody can file any lawsuit they  
11 want pretty much in this country. Obviously, this is  
12 not something that the Petitioner wants to have  
13 happen.

14 So I think the plan that is being put  
15 forward, and Dr. Montgomery will be talking to after  
16 me, certainly fulfills any criteria that I'm aware of  
17 for minimizing to the maximum extent practicable  
18 which is the ESA standard.

19 COMMISSIONER CHANG: Very good. Thank you  
20 so much for answering my question.

21 CHAIRPERSON SCHEUER: Thank you,  
22 Commissioner Chang.

23 Mr. Tabata, if you want to continue with  
24 your redirect.

25 -o0o-

## FURTHER REDIRECT EXAMINATION

1  
2 BY MR. TABATA:

3 Q During your survey did you actually see any  
4 hoary bats?

5 A No, sir.

6 MR. TABATA: I have no more questions.

7 CHAIRPERSON SCHEUER: Thank you very much,  
8 Mr. David. You're excused, and we will bring on  
9 Dr. Montgomery.

10 THE WITNESS: Thank you, Mr. Chair.

11 CHAIRPERSON SCHEUER: Mr. Tabata,  
12 Dr. Montgomery is where?

13 MR. TABATA: Dr. Montgomery is under HMP-2.

14 CHAIRPERSON SCHEUER: Pulling him up,  
15 waiting for is video and audio to be enabled.

16 Good morning, Dr. Montgomery.

17 THE WITNESS: Aloha.

18 CHAIRPERSON SCHEUER: I know you know this  
19 procedure well as a former member of this Commission.  
20 I will swear you in before your direct.

21 Do you swear or affirm the testimony you're  
22 about to give is the truth?

23 THE WITNESS: I do.

24 CHAIRPERSON SCHEUER: Please proceed, Mr.  
25 Tabata.

1 STEVEN MONTGOMERY

2 Was called as a witness by and on behalf of the  
3 Petitioner, was sworn to tell the truth, was examined  
4 and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. TABATA:

7 Q Dr. Montgomery, could you please describe  
8 for us your professional background?

9 A I'm an entomologist specializing in island  
10 ecosystems and have contributed to numerous EIS  
11 reports. I have provided my expertise as a  
12 biological consultant to private landowners and  
13 government agencies since 1978; and conducted many  
14 invertebrate surveys since 1964.

15 Focused on insects and science in  
16 childhood, I sought many six-legged education  
17 options, including making entomology collections for  
18 state fair exhibits, after which the Smithsonian  
19 Institution Diptera expert prevailed upon me to make  
20 a rare Bot Fly specimen donation at age 12.

21 At age 18 I was hired to assist two  
22 professors studying damselfly territorial behaviors  
23 for two months on a stream in Oklahoma.

24 I have been active in field biology in  
25 Hawai'i, earning a University of Hawai'i Master's

1 degree in 1973 master's degree in entomology on  
2 Drosophila Pomace Fly Ecology, and a 1984 Ph.D on my  
3 discovery of Carnivorous Caterpillars, their  
4 identification and behavior.

5 I have found a dozen new species and in  
6 1972 recollected the now well-known Happy Face  
7 Spider. I am a 50-year member of the Hawaiian  
8 Entomological and Hawaiian Botanical Societies, and a  
9 35-year member of the Xerces Society for Invertebrate  
10 Conservation.

11 As an avid conservationist, I have  
12 performed community service, including five years as  
13 a Land Use Commissioner, a State National Area  
14 Reserve Commissioner under three governor's, and have  
15 been a board member of the National Wildlife  
16 Federation and Ahahui Malama I Ka Lokahi/Hawaiians  
17 for the Conservation of Native Ecosystems.

18 Shall I go onto my testimony?

19 MR. TABATA: No.

20 We request that Dr. Montgomery be qualified  
21 as an expert in terrestrial invertebrates.

22 CHAIRPERSON SCHEUER: Any objections from  
23 the Parties, starting with County?

24 MR. PANG: City has no objection.

25 MS. APUNA: State has no objection.

1           MR. YOSHIMORI:  Intervenor has no  
2  objections.

3           CHAIRPERSON SCHEUER:  Commissioners?  
4  Seeing none, Dr. Montgomery is so qualified.

5           Please continue.

6           MR. TABATA:  Thank you.

7           Q     Steve, could you please summarize for us  
8  your written testimony?

9           A     Yes, sir.

10           I prepared the Survey of Invertebrate  
11  Resources for the Hawaiian Memorial Park project and  
12  written testimony.  I concluded a 12-day invertebrate  
13  survey at the site, July to December 2017, dry and  
14  wet conditions, day and night, searching for Native  
15  Hawaiian species.

16           I covered all habitat types, and searched  
17  for hidden springs or native invertebrate host  
18  plants.

19           Survey methods included visual  
20  observations, native host plant searches, net sweeps  
21  and light sampling.  I found published data by UH  
22  scholars Henry and Butler and contacted them about  
23  Manoa's Blackline Damselfly adults' habitat needs and  
24  preference for shade.

25           Plant and invertebrate populations are



1 interdependent, host plants being a measure of insect  
2 community health. Feral pigs degrade vegetation and  
3 understory plants by rooting, thus very limited  
4 native plants survive to serve as hosts for few  
5 Hawaiian insects.

6           The Remaining native Hawaiian insects I did  
7 find are very widespread in the islands.

8           The only federally listed endangered  
9 species was the Blackline Hawaiian Damselfly  
10 (*Megalagrion nigrohamatum nigrolineatum*). Not having  
11 seen any initially, when we heard secondhand of this  
12 damselfly's presence, the landowner requested that I  
13 confirm their seep breeding location.

14           Of the 25 native damselfly species in  
15 Hawaii, they diversified long ago from a single waif  
16 landing in Hawaii, and they now occupy many aquatic  
17 niches and rain forests.

18           The Blackline, or sometimes called  
19 Rainbow-Eye Damselfly on Oahu was once common from  
20 sea level to 2400 feet, but by 1996, it no longer was  
21 found in the Waianae mountains.

22           A Xerces Society for Invertebrate  
23 Conservation data profile associates this damselfly  
24 with standing pools in stream headwaters and  
25 mid-reach sections and bordering seeps.

1           It is present in both the Windward and  
2 Leeward sides of the Koolau mountains in the  
3 headwaters of 17 streams. Some populations are  
4 reported as robust. Critical habitat in streams and  
5 seeps of six Koolau Mountain sections totals 25,200  
6 acres. In the Petition Area they are in the  
7 northwestern corner along a seep fed by a well  
8 created about a century ago for dairy farming.

9           This brown inch-long damselfly has nymphs  
10 that live concealed under stones or algae clumps in  
11 slow, still waters. Their diet includes larvae of  
12 midges, flies, sowbugs, and oribatid mites.

13           On sunny days up to eight damselflies,  
14 usually males awaiting courtship opportunities, were  
15 sighted along seep waters. With thick cloud cover  
16 and decreased sunlight two to zero were present, even  
17 at mid-day.

18           The major threat to immature damselflies is  
19 alien fish predation. Feral pigs wallowing and  
20 rooting cause major disruption of adult breeding and  
21 resting places.

22           Key habitat invertebrates in this damselfly  
23 site include alien ants which are a primary threat,  
24 especially the Big-headed ants, the general predator  
25 of most native arthropods.

1           Mosquitoes do breed in small numbers in the  
2 seep's small flowing waters and the cement well,  
3 which feeds it. Cannibal mosquitoes live in the  
4 water well and feed on larvae of all other  
5 invertebrates, mosquitoes especially.

6           Human trespassers risk harming resting and  
7 molting damselflies on the water margins or muddy  
8 areas, as their cryptic colors make it difficult to  
9 see, so that they could be stepped upon. Treading in  
10 or along the seep could disturb damselfly molting,  
11 breeding and resting.

12           Damselfly habitat boundaries along the seep  
13 were determined after many site visits including one  
14 with Fish and Wildlife Service, Dr. Dan Polhemus.  
15 Damselfly young stay within the water, but adults  
16 forage and roost in nearby vegetation. Undisturbed  
17 emergent wetland plants are ant-free perches for  
18 immature damselflies in the first hours of tender,  
19 flightless vulnerability while they're molting,  
20 primarily due to repeated feral pig rooting. The  
21 seep habitat lacks much shrub foliage and ground  
22 cover.

23           The topographic and sunlight conditions  
24 influence the adult damselfly movements resting in  
25 and along the seep's course. Based on site visits

1 and topographic data polygon responds to their needs,  
2 with higher points along and surrounding the ravine  
3 and above the seep channel establishing a natural  
4 habitat boundary.

5           The densely forested belt reserved as a  
6 buffer between residential plots and the burial  
7 plots, together with the cultural reserve, provide  
8 adequate habitat for adults to forage and to roost.

9           Improvements implemented under the proposed  
10 action would not adversely impact widespread native  
11 invertebrate species populations nor harm the single  
12 endangered species.

13           Native vegetation landscaping and cemetery  
14 expansion areas and the cultural preserve would  
15 provide increased native vegetation as-needed for  
16 arthropod habitat.

17           The hydrology and the geology data both  
18 show the seep is maintained by natural discharge of  
19 subsurface water moving downslope through soil at  
20 depths over ten feet. Sub-drains with adjustable  
21 valves to provide optimal water flow would be  
22 installed to maintain this natural discharge.

23           Grading plans incorporate designs to  
24 minimize effects on the well and the seep serving as  
25 damselfly habitat.

1           CHAIRPERSON SCHEUER: Mr. Tabata, sorry,  
2 are we summarizing your written or --

3           MR. TABATA: This is a summary of his  
4 written. His written testimony is much longer.

5           THE WITNESS: I have just a single page  
6 left.

7           With damselfly habitat avoided, grading  
8 improvements would not impact or alter Blackline  
9 Hawaiian Damselfly seep habitat.

10           Damselfly populations and human  
11 developments can co-exist. For 20 years the  
12 Orange-Black Hawaiian damselflies have lived at  
13 Tripler Army Hospital stream by management with piped  
14 water.

15           On Lana'i Island damselflies breed in a  
16 large ornamental pond behind the Koele Hotel.

17           Although no impacts to seep habitat from  
18 project implementation are anticipated, several  
19 actions are proposed to minimize future impacts from  
20 predators and trespassers, and ensure the seep  
21 remains and even improves damselfly breeding habitat.

22           An Incidental Take Permit under Section 10  
23 would not be required because cemetery expansion  
24 would avoid damselfly habitat, and minimization  
25 measures would ensure continued water flow along the

1 seep and not alter the habitat.

2 A fenced seep enclosure and sub-canopy  
3 riparian plantings would be significant improvements  
4 with feral pigs being excluded. A July 9th, 2019  
5 State Division of Forestry and Wildlife letter  
6 confirms this in our Exhibit 24.

7 The placement of non-native fish into  
8 Hawai'i aquatic habitat is ongoing and poses the  
9 major threat to this relatively accessible damselfly  
10 population.

11 The placement of large branches in and  
12 covering seep waters where damselflies breed has  
13 occurred in the recent past. I personally removed a  
14 large pile of these branches apparently from adjacent  
15 properties to restore open waters.

16 To minimize potential effects on the  
17 damselfly, these actions are proposed:

18 Schedule regular seep inspections to ensure  
19 continued water flow, inspection before construction  
20 will establish baseline flow, and be measured weekly  
21 during construction.

22 After construction, monitor flow for six  
23 months, weekly for the first three months, every two  
24 weeks thereafter if conditions are satisfactory.  
25 After six months, monitor monthly.

1           A monitoring gauge or other appropriate  
2 device will be installed inside the upslope well to  
3 monitor levels prior to, during and after project  
4 construction. Once project earth-moving activities  
5 conclude, a permanent waterline extending from the  
6 proposed cemetery expansion area's irrigation system  
7 to the well would provide the long-term water flows  
8 if needed.

9           As necessary during construction, a  
10 temporary waterline will extend to the well to  
11 support water levels.

12           An adjustable subsurface drainage system  
13 designed in a herringbone pattern implemented in the  
14 fill area above the well and seep is to ensure water  
15 flow.

16           During seep inspections, monitoring for  
17 non-native fish and other hazards will be done.

18           We will review habitat boundaries currently  
19 shown using more accurate data collected during  
20 project final design topographic survey and revise  
21 habitat boundary as appropriate.

22           Construct fencing around habitat boundary  
23 to exclude feral pigs.

24           Place small sticks upright away from the  
25 edges of waterlogged areas as molting safe zones to

1 prevent predation, since ants will not cross these  
2 barriers.

3 So I conclude by pointing out that I  
4 believe this project will provide net benefits to  
5 this endangered damselfly, and will include the  
6 habitat through management that will be focused.

7 So I'm available for questions.

8 Q Thank you.

9 Dr. Montgomery is ready for cross.

10 CHAIRPERSON SCHEUER: Thank you,  
11 Dr. Montgomery.

12 MR. PANG: City has no questions.

13 CHAIRPERSON SCHEUER: Office of Planning?

14 MS. APUNA: Thank you, Chair. I do have a  
15 question for Mr. Montgomery.

16 CROSS-EXAMINATION

17 BY MS. APUNA:

18 Q Mr. Montgomery, thank you very much for  
19 your testimony.

20 I was wondering, would the HMP staff need  
21 to be trained in order to perform some of the  
22 mitigation or -- I'm sorry, to monitor the water  
23 level?

24 A No. I think it would be fairly simple, and  
25 I would be pleased to help with that process. It's



1 monitoring the line of water flow to be sure that it  
2 maintains the levels that have been customary and  
3 that have allowed this population to survive even  
4 though the lands of Oahu have lost their population  
5 of this species in the last 30 years.

6 Q Thank you, Dr. Montgomery. No further  
7 questions.

8 CHAIRPERSON SCHEUER: Thank you very much,  
9 OP.

10 Commissioners? Commissioner Cabral --  
11 sorry, excuse me. I'm very sorry. Intervenor.

12 MR. YOSHIMORI: Thank you, Chair.

13 CHAIRPERSON SCHEUER: Sorry about that.

14 CROSS-EXAMINATION

15 BY MR. YOSHIMORI:

16 Q Dr. Montgomery, I just have a couple of  
17 questions.

18 So is the Blackline Damselfly found  
19 anywhere else in the world outside of Oahu?

20 A This sub species is not.

21 Q You testified that in your written  
22 testimony that there are about 1000 individuals  
23 across 17 stream colonies; is that correct?

24 A These estimates were taken from the federal  
25 register and based on their field work, and they did

1 refer to some of these populations as being robust  
2 and these are largely above waterfalls and upper  
3 mountains where there haven't been alien fish, like  
4 guppies and swordtails released in these streams by  
5 well-meaning but uninformed people.

6 Q So there were about 1000 individuals  
7 remaining in the world. Is that about right?

8 A That's an estimate that I didn't make  
9 myself, but I'm citing from publications in the  
10 federal register involving the listing of this.

11 Q You mentioned the mitigation measures that  
12 were going to be included, including the herringbone  
13 drainage system, regular inspections of the seep,  
14 monitoring the well gauge, permanent waterline.

15 These mitigations are required because of  
16 the risk that the proposed project has to the  
17 damselfly habitat; is that correct?

18 A I think that is correct. The risks that  
19 are raised about the supply of water have been -- I  
20 think the risk is greatly reduced by the installation  
21 of the herringbone drains because with them and the  
22 valve at their makai terminus, if there was any  
23 compression of the water bearing's stratum deep  
24 inside of this mountain, it will compensate for that  
25 compression.

1           So with that installation and the  
2 irrigation pipe as a backup, that the water supply is  
3 assured for this population.

4           Q     Thank you.

5                     What would be the impact to the damselflies  
6 should the seep stop flowing, or if somebody forgets  
7 to check on the water or something happens like that?

8           A     I was talking to Tom Nance about his most  
9 recent visit just earlier this week, and he noticed  
10 that because of the lack of rainfall in recent weeks,  
11 that the upper edge of the seep is beginning to dry  
12 out. There isn't standing water. But the lower  
13 150 feet seemed to be still soaked and providing  
14 habitat.

15                     There are natural fluctuation along with  
16 the rainfall patterns of the island, but if this  
17 development causes a change and reduction in the  
18 amount of water, supplemental irrigation pipe will  
19 make up for that difference.

20           Q     I was wondering if you know, say, the  
21 development does happen, the changes, it changes the  
22 flow of water, and the colony is now dependent on the  
23 supplement of irrigation, and for whatever reason the  
24 flow breaks or someone forgets to turn on the  
25 supplemental hose, what would be the impacts to the

1 damselfly if that water was stopped?

2 A Considering that the larval stage is  
3 aquatic, they can live for as long as nine months or  
4 so, even though they might only live just two weeks  
5 at the adult stage.

6 A drying up habitat would mean they can't  
7 breed there, and any eggs that the adults deposit  
8 there or lay there wouldn't have a place to survive.  
9 They're not terrestrial, unlike another species of  
10 damselfly that has evolved with terrestrial behavior.

11 So just as we have for 20 years at Tripler  
12 Army Hospital, a supplemental irrigation will make up  
13 for any reduction in water and will support this  
14 habitat in perpetuity.

15 Every time I visited I've seen staff and  
16 security at Hawaiian Memorial Park under the present  
17 situation, and I'm sure that the conditions that are  
18 established after these Commission hearings will  
19 provide for ongoing monitoring.

20 I've had every indication from my work on  
21 this project that this property is seriously  
22 concerned about the welfare of this native damselfly.  
23 It's a beautiful insect and it's getting a  
24 considerable fan club. And I don't think there's any  
25 chance that it's going to be forgotten and neglected.

1           Q       Thank you.

2                   How long would the damselfly population  
3 survive if the water had stopped flowing?

4           A       How long would the population survive if  
5 the water stops. I haven't seen any data that would  
6 allow me to know for sure. I think that in a moist,  
7 muddy impression, the damselflies could live for a  
8 couple months until it's completely dried out.

9                   So it's difficult to give you an answer, we  
10 have little information. We know that there was one  
11 occasion at Tripler Army Hospital where a  
12 well-meaning person turned off the faucet and it  
13 began to dry up. It was discovered in time, and the  
14 system was modified so that it could never be turned  
15 off with the faucet being removed, and it's a  
16 continuous trickle, been working now for 20 years.

17                   I should point out at the present time this  
18 damselfly is at considerable risk because of the kind  
19 of rooting and opening up of the vegetation by the  
20 feral pigs that frequently move through the area,  
21 especially during the dry season.

22                   And I think that we're quite fortunate that  
23 we have this permanent seep which existed long before  
24 the well structure was inserted there, and it has to  
25 do with the geological formation of the great dense,

1 Koolau basalt, because, remember, this is the core of  
2 the caldera of the old Koolau volcano, and this water  
3 is moving from a considerable distance to collect at  
4 this one spot.

5 Q You know, as part of page 36 on the  
6 Petitioner's Second Amendment it says that they're  
7 going to, quote:

8 "Evaluate the feasibility and  
9 practicability of initiating a participation in a  
10 habitat restoration and conservation program for the  
11 damselfly habitat under the partners for Fish and  
12 Wildlife Program", unquote.

13 Has this work been done with the Fish and  
14 Wildlife Service?

15 A Not presently. But as it says, that's the  
16 intention to explore these options because there is  
17 expertise available in the federal government that  
18 could help plan something that will provide the best  
19 future for this *Megalagrion nigrohamatum* species.

20 Q I think the Office of Planning's written  
21 testimony is saying that the consultation with the  
22 Fish and Wildlife Service is not required. So I  
23 wasn't sure. Were you aware of that?

24 A These sorts of questions should be  
25 addressed to people like Reggie David.

1           Q       In your summary testimony, you had  
2 mentioned that the damselfly would be able to take  
3 advantage of the new habitat that gets created as  
4 well as the cultural area. Is that correct?

5           A       Well, by new habitat, not sure what you  
6 mean. We're taking the existing habitat and we're  
7 improving it in our plans.

8           Q       And also you mention that they could use  
9 the cultural area as well?

10          A       Well, adults and their movements are very  
11 little known. They're a little bit like bats, they  
12 kind of disappear into the sky, and the canopy --  
13 they're only like two-inches long and very slender.  
14 So even Dr. Butler and her students at the University  
15 of Hawaii say that they never see the adults away  
16 from the stream where the males come to await the  
17 females when they come to find a mate and to lay  
18 eggs.

19                   So in all of my days on these hundreds of  
20 acres, the only place I see the damselfly is along  
21 this particular seep. So they may well go looking  
22 for gnats in the field to feed on, adults they may  
23 fly 100 yards, but I doubt it.

24                   What data we do have from marking the  
25 insects in Manoa before they were listed, and they

1 could be marked and released and then recaptured, we  
2 learned they're very sedentary. They're not like the  
3 dragonfly that soars on the wind and can go for miles  
4 and miles.

5 But they will have that option, because of  
6 the buffer zone of forested area that ranges from the  
7 cultural preserve all the way along this buffer area  
8 and the residential subdivision and the burial plots.

9 Well over 100 acres immediately would be  
10 available to them, but they probably will use  
11 something on the order of a couple of acres based on  
12 our anecdotal observations which are very, very few  
13 for the adults.

14 CHAIRPERSON SCHEUER: Right now, Mr.  
15 Yoshimori, about how long do you think you have?

16 MR. YOSHIMORI: Just one more followup  
17 question. Thank you.

18 Q So it's possible, if the damselfly could  
19 use a couple of acres of land, they could be ranging  
20 into the proposed cemetery expansion area; is that  
21 right?

22 A I really don't have any way of knowing  
23 about that. We do know that they avoid open areas,  
24 and this is in the case in the back of Manoa  
25 Arboretum where they're only seen right along the



1 stream course and not in a taro lo'i, or even in the  
2 lower part of the streams that was broad and sunny.

3 This species is a specialist on dark shady  
4 habitats. And I wish we had more information about  
5 how far the adults roam, and perhaps in the future  
6 university scholars will get a permit and can mark  
7 and release and have data. But right now it's  
8 apparent that they are very closely tied to an  
9 aquatic breeding site, and there are enough gnats and  
10 mosquitoes available, as I can attest, for the adults  
11 to live and feed very close to the well and the seep.

12 MR. YOSHIMORI: Thank you. Those are all  
13 the questions I have. Thank you, Dr. Montgomery.

14 CHAIRPERSON SCHEUER: Thank you.

15 Mr. Tabata, even though we would normally  
16 proceed directly to Commissioner questions, we're at  
17 one hour. It's lunchtime. I think we need to take a  
18 break, and Dr. Montgomery will need to be available  
19 after lunch.

20 MR. TABATA: Yes, I agree. I'm hungry.

21 CHAIRPERSON SCHEUER: Okay. With that, it  
22 is 12:18 p.m. I'm going to suggest we reconvene at  
23 1:00 p.m., is that acceptable to the Parties and  
24 Commissioners? Thank you all. See you at 1:00 p.m.

25 (Noon recess taken.)

1 CHAIRPERSON SCHEUER: Good afternoon, it is  
2 1:00 p.m., I'm calling the meeting back into session.

3 Confirming with us we have Commissioners  
4 Okuda, Cabral, Ohigashi, Aczon, Chang, Giovanni, and  
5 Wong, all eight sitting Commissioners are present.

6 We had just concluded the Intervenors'  
7 questioning of witness Dr. Steve Montgomery. Is that  
8 correct Mr. Yoshimori, you were concluded?

9 MR. YOSHIMORI: That is correct, I am  
10 concluded. Thank you.

11 CHAIRPERSON SCHEUER: We have questions  
12 from the Commissioners, starting with Commissioner  
13 Cabral.

14 VICE CHAIR CABRAL: Yes, this is a question  
15 to our witness. I don't see him. He's there  
16 somewhere.

17 Okay, my question has been pending since  
18 yesterday.

19 First off, because of the damselfly  
20 apparently is limited to this particular area, yet it  
21 seems like the geographic or the terrain is very  
22 similar through that entire area.

23 I'm curious as to why it's limited to that  
24 area, and perhaps, one, could it be that it was the  
25 well there?

1           Or my other real question is, is it because  
2 the cattle dairy rancher, the cattle were there at  
3 one point in time because -- I too have cows -- and  
4 cows and flies definitely go together.

5           So your enthusiasm for bugs has gotten me  
6 excited about all of these possible ideas. And I'm  
7 just kind of curious as to why such an insect, bug or  
8 what have you, would address one area when the  
9 terrain is so similar in all those areas around  
10 there.

11           What makes that area unique and different  
12 from all the other areas along that line that appear  
13 to be similar?

14           THE WITNESS: I believe the reason the  
15 damselfly is present now is that it's a relict of the  
16 habitat. It used to include all of the lowlands that  
17 were dark and margins of -- it's a species that has  
18 been extirpated from all other habitats because of  
19 fishes being dumped in streams.

20           The seeps that we have here at maximum  
21 might be an inch deep, or might be a footprint of a  
22 pig that's two or three inches deep. So it's not  
23 actually suitable habitat for fish. It could be  
24 somebody tried to put guppies in there before and it  
25 couldn't make it.

1           It's a very old seep, I believe, and I  
2           don't believe it was created by the dairy farm. The  
3           well was put there because it had a spring and the  
4           farmers were trying to capture some of that water so  
5           they wouldn't have to carry water so far.

6           VICE CHAIR CABRAL: Very interesting.  
7           Thank you very much.

8           CHAIRPERSON SCHEUER: Anything else,  
9           Commissioner Cabral?

10          VICE CHAIR CABRAL: That's it for now,  
11          thank you.

12          CHAIRPERSON SCHEUER: Commissioner Chang.

13          COMMISSIONER CHANG: Thank you. Thank you  
14          very much, Dr. Montgomery. I probably have learned  
15          more about damselflies than I ever had anticipated,  
16          but thank you for your testimony.

17                 I just have two questions. One, the  
18          proposed avoidance and minimization measures that you  
19          outlined, one, your oral testimony as well as one  
20          that's included in your written testimony, do you  
21          know whether the Petitioner is willing to accept  
22          those measures as part of a Land Use Commission  
23          condition?

24                 THE WITNESS: We've been discussing many,  
25          many drafts, and gone through, I'd say, ten different

1 versions as I put together things, and you'll have to  
2 ask that question about whether the landowner accepts  
3 it to him directly.

4           However, I accept them, and I think that  
5 that's what's needed to assure for the future of this  
6 Megalagrion species that's listed. I'm very  
7 confident that we can make sure it's there forever.

8           COMMISSIONER CHANG: Thank you.

9           So based upon your expert opinion since  
10 you've been qualified, do you believe that the  
11 implementation of these avoidance and minimization  
12 measures, that the damselfly habitat will be  
13 protected and may even be improved; is that correct?

14           THE WITNESS: Yes. I do believe it will be  
15 improved. And in a sense, we're kind of lucky that  
16 it's still there, a relict of what formerly lived in  
17 the lowlands.

18           People tell me about, in the '40s and '50s,  
19 Makiki Valley, Lower Makiki Stream having native  
20 Pinao ula living over there, a related species of  
21 these 25 species.

22           So it's a privilege to have something  
23 accessible. We don't have to go in a helicopter up  
24 the Koolau mountains, or take a three hour hike to  
25 see it. It's available here in the lowland as a

1 special little relict population.

2 COMMISSIONER CHANG: While this may be an  
3 artificial -- the herringbone, the particular  
4 minimization measure similar to, as you were  
5 describing at Tripler, those measures actually helped  
6 to ensure that this population continues to exist in  
7 this area?

8 THE WITNESS: Yes. Tripler is something of  
9 a model here, which gave us the idea about an  
10 irrigation line to assure the water flow.

11 In that case it was a natural stream that  
12 had some -- let's say an intermittent stream. It's a  
13 different species than what we are dealing with over  
14 at Tripler, but that's a very good model for what we  
15 can do here in this special situation of a  
16 dark-loving, shade-loving species that is really  
17 happy in these tiny, tiny moist seeps.

18 COMMISSIONER CHANG: That's the only  
19 questions I have. Thank you so very much for your  
20 testimony, Dr. Montgomery.

21 CHAIRPERSON SCHEUER: Commissioners, are  
22 there further questions for Dr. Montgomery?

23 EXECUTIVE OFFICER: Mr. Chair, I think  
24 Commissioner Wong has a question.

25 COMMISSIONER WONG: Thank you, Chair.

1 Thank you, Dr. Montgomery, for your testimony.

2           Regarding your mitigation measures --  
3 well, let me take a step back.

4           Have you ever worked with U.S. Fish and  
5 Wildlife for any other measures or plans?

6           THE WITNESS: No, I haven't had any  
7 contracts with them on such native species plans.  
8 I've read a lot of their publications in the federal  
9 register for the Blackburn Sphinx Moth and I've done  
10 studies about its presence in the Hawaii wind power  
11 on East Maui, collecting data on its presence and  
12 making plans for putting an access road in there,  
13 even though certain host plants were present that  
14 were used by this endangered species.

15           COMMISSIONER WONG: So I guess the question  
16 I have is, on your mitigation measures, it's pretty  
17 much a plan, and do you think the use -- in your  
18 opinion, do you believe the Fish and Wildlife Service  
19 will use as -- be satisfied with it to take care of  
20 the damselflies?

21           THE WITNESS: Yes, I believe they would be.  
22 And if they have suggestions for improvements, I'm  
23 open to hear them. And we will get to that stage  
24 very soon, assuming this rezoning is completed.

25           COMMISSIONER WONG: That's it. Thank you,

1 Chair. Thank you, Dr. Montgomery.

2 CHAIRPERSON SCHEUER: Thank you,  
3 Commissioner Wong. Commissioner Okuda.

4 COMMISSIONER OKUDA: Thank you very much,  
5 Chair.

6 Thank you for your testimony, Dr.  
7 Montgomery.

8 Since -- about what month and year do you  
9 understand the landowner to have first become aware  
10 of the existence of the damselfly on the property?

11 THE WITNESS: I don't have those records  
12 close at hand, but it was roughly two years ago I was  
13 contacted, because they had heard at a neighborhood  
14 board meeting that nearby residents had found a  
15 damselfly that they said was an endangered species.

16 Not having seen this myself, I very quickly  
17 within a few days went over there to search for the  
18 seep and damselflies and did find them after a couple  
19 hours and couple phone calls to my colleagues who are  
20 fellow entomologists who had expertise in this  
21 matter. I can't give you the exact date, but about  
22 two years ago.

23 COMMISSIONER OKUDA: Okay.

24 Since that time, can you tell us of any  
25 actions the landowner has taken to protect and



1 preserve the existing population of the damselfly?

2 THE WITNESS: Yes. I was authorized to  
3 remove the pile of brush that somebody, who lives in  
4 the neighborhood apparently, because there were  
5 things like coconut fronds, leaves. I mean like  
6 there were a whole pile of them, like 15 feet  
7 diameter and three feet high.

8 The Wildlife Service biologist point out  
9 that this is sunlight that feeds algae, limu and  
10 different gnats and blood worms that are food for the  
11 damselfly diet. So we cleared all that away.

12 And the well area was being cracked by an  
13 octopus tree roots going into it and spreading it  
14 apart the way banyan trees will split when they grow  
15 in the wrong place.

16 So we have been collecting data on the  
17 presence and damage of the feral pigs so that we can  
18 testify -- there was a camera that was put up. It  
19 was a remotely operating camera that did actually  
20 capture a photograph of a pig in this area of the  
21 seep.

22 And it's also helped, I think, for security  
23 purposes to let them know if there are trespassers  
24 doing something like unauthorized activity on this  
25 habitat.

1                   COMMISSIONER OKUDA: Was that the photo  
2 that I saw in the records of an individual, if my  
3 recollection was correct, might have been giving a  
4 middle finger?

5                   THE WITNESS: I have no knowledge of such  
6 photograph, so I can't answer that question.

7                   COMMISSIONER OKUDA: I'm sorry, that's  
8 neither here nor there.

9                   Let me ask you this. If this Petition were  
10 to be denied, have you received or do you know of any  
11 information which indicates the landowner's intention  
12 to continue to try to preserve or protect the  
13 habitat, or not preserve and protect the habitat, if  
14 the Petition is denied?

15                  THE WITNESS: No, that's never been  
16 discussed. I would be surprised if we got to that  
17 situation, because I just think that it's pretty  
18 clear from everything we've presented that this  
19 endangered species will benefit from the development,  
20 and all things being considered, that scenario never  
21 entered my mind.

22                  COMMISSIONER OKUDA: Asking the question  
23 about that scenario, do you have any information to  
24 indicate what the intentions, as may have been  
25 communicated to you either directly or indirectly

1 about the what the intentions would be about  
2 protecting and preserving the damselfly habitat if  
3 the Petition were to be denied?

4 THE WITNESS: No, I have no recollections,  
5 no information on that. You'll have to address the  
6 property owners.

7 COMMISSIONER OKUDA: Do you have an opinion  
8 about the future of the damselfly population if this  
9 Petition were to be denied by the LUC?

10 THE WITNESS: Wow, we do know that the  
11 population in the Koolau mountains, over a 1000  
12 individuals and 17 different streams, those appear to  
13 be stable and robust.

14 As far as this one, I could speculate. I  
15 don't know what it would be worth. I believe in  
16 using the best available science, and I'll have to  
17 ponder on that. Right now I have really no response  
18 to offer.

19 COMMISSIONER OKUDA: That's fine, if you  
20 haven't formulated an opinion, I'm not trying to  
21 force you.

22 Okay, Mr. Chair, thank you very much.  
23 Thank you very much, Dr. Montgomery. What you  
24 explained was very, very helpful.

25 I'm sorry I didn't taken entomology when I

1 was at the University of Hawaii at Manoa.

2 THE WITNESS: It's never too late. I know  
3 a woman who took a class at age 92.

4 (Indecipherable).

5 COMMISSIONER OKUDA: Thank you very much,  
6 doctor.

7 THE WITNESS: You're welcome.

8 CHAIRPERSON SCHEUER: Thank you,  
9 Commissioner Okuda.

10 Commissioners, further questions of Dr.  
11 Montgomery.

12 Dr. Montgomery, has a population viability  
13 analysis been done on this population?

14 THE WITNESS: On this particular  
15 population, on this property, a population -- no,  
16 it's not been done.

17 CHAIRPERSON SCHEUER: And I apologize, if  
18 you can direct me if it's in your written testimony,  
19 but do you have an estimate of the overall population  
20 size of this population?

21 THE WITNESS: No, we don't. If we were to  
22 obtain a special permit and do a mark, release and  
23 recapture experiment, it's possible to make an  
24 estimate.

25 That kind of work was begun by University

1 of Hawaii biologist, Lyon Arboretum Stream, and they  
2 had to discontinue it because when it was listed,  
3 they didn't have a permit. And they have some raw  
4 data that they're working up for more publication,  
5 and hopefully that will be available.

6 But, no, I don't have any answer about  
7 estimation of the population.

8 CHAIRPERSON SCHEUER: As a general  
9 biological principle, however, small isolated  
10 populations can be subject to extrication just  
11 through random demographics; isn't that correct?

12 THE WITNESS: That's quite correct.

13 CHAIRPERSON SCHEUER: So as one way to  
14 answer Commissioner Okuda's question that whether or  
15 not the LUC approves this project, and regardless of  
16 the kinds of management measures that the landowner  
17 does or doesn't -- (inaudible) randomly in one  
18 generation, three quarters of the population is male.  
19 And so the next generation shrinks as a result of  
20 that. These things occur no matter what under any  
21 management regime, correct?

22 THE WITNESS: Yes, they do.

23 CHAIRPERSON SCHEUER: I have one other  
24 question for you. And I see there is a question from  
25 Commissioner Cabral for you.

1           You stated in your written summary that an  
2           Incidental Take Permit was not required. But I  
3           wanted to understand, and maybe I misheard you, but I  
4           thought you said that -- and I want to understand  
5           what the basis of that statement was -- whether that  
6           was a statement of opinion, of expert opinion based  
7           on your role as entomologist, based on your reading  
8           of Endangered Species Act?

9           THE WITNESS: Well, it's based on all of  
10          these things. Because I believe that this project  
11          will result in an enhancement of population, it would  
12          improve the conditions and increase the population  
13          number.

14          And because of the water supply being  
15          guaranteed, I just see no basis as a scientist for a  
16          claim that there is incidental taking happening if  
17          this project proceeds.

18          CHAIRPERSON SCHEUER: I think the question  
19          is, might incidental taking happen? I believe the  
20          legal -- (inaudible).

21          THE WITNESS: I can't conceive of how it  
22          would happen --

23          (Frozen screen).

24          CHAIRPERSON SCHEUER: Okay, sorry.  
25          Anything further?

1 THE WITNESS: From my end, your camera is  
2 frozen, Mr. Chairman.

3 VICE CHAIR CABRAL: For me also. So this  
4 is Nancy. Frozen and I'm not getting words from him  
5 at this moment.

6 CHAIRPERSON SCHEUER: Sorry, am I now?

7 THE WITNESS: Yes, I hear you clearly.

8 CHAIRPERSON SCHEUER: I have no idea why my  
9 internet destabilized.

10 THE WITNESS: Sunspot or something.

11 VICE CHAIR CABRAL: So you're at the beach  
12 now?

13 CHAIRPERSON SCHEUER: I continue to be in  
14 the now.

15 Dr. Montgomery, if we can go back just to  
16 make sure I heard your answer and everyone heard your  
17 answer.

18 You stated, I believe in response to my  
19 question, that you don't see any scenario where an  
20 incidental take could occur. Did I understand that  
21 correctly?

22 THE WITNESS: That's correct. Because the  
23 development does not overlap this habitat, and  
24 because the water supply has been assured in two  
25 different ways.

1 CHAIRPERSON SCHEUER: Thank you.

2 Commissioner Cabral.

3 VICE CHAIR CABRAL: I wanted to followup  
4 really on I think the same conversation that Chairman  
5 Scheuer has been going through, and also that fellow  
6 Commissioner Okuda was asking.

7 I'm coming up with a conclusion, and  
8 correct me if I am wrong. So based on the fact that  
9 with proper oversight, the habitat at Tripler  
10 Hospital has been co-existing with, in a sense,  
11 development for 20-something years. That if this  
12 habitat here were to be properly taken care of, it  
13 might do better by having the landlord, property  
14 owner/landlord or some entity actually oversee the  
15 site and that it might be in better shape than if it  
16 were be to left in a sense to the wild, because the  
17 wild would include the pigs, and would include the  
18 neighbors throwing their rubbish and what have you.

19 Is that a proper conclusion on my part to  
20 think that proper care will better protect this  
21 habitat of the damselfly than just having it be  
22 ignored?

23 THE WITNESS: Yes, you heard me correctly.  
24 Here is a case where management and monitoring would  
25 have clear benefits for this relict population.



1 We're lucky to have it in this era where everywhere  
2 else in the lowland the species has that extirpated.

3 So it's now in some of the Koolaus and at  
4 Hawaiian Memorial Park.

5 VICE CHAIR CABRAL: Thank you very much.  
6 Very interesting. Really appreciated and enjoyed.  
7 Your testimony, thank you.

8 CHAIRPERSON SCHEUER: Commissioner Okuda,  
9 followed by Commissioner Aczon.

10 Commissioner Okuda, you are muted.

11 COMMISSIONER OKUDA: This is Gary Okuda.

12 Dr. Montgomery, as a followup to  
13 Commissioner Cabral's question and the Chair's  
14 question, can your suggestions to enhance the  
15 population of the damselfly be implemented even if  
16 the cemetery is in fact not expanded?

17 THE WITNESS: Theoretically, yes, but you  
18 have to address that question to the property owner.

19 COMMISSIONER OKUDA: Yes, I understand  
20 that. Thank you very much, Mr. Chair. No further  
21 questions.

22 CHAIRPERSON SCHEUER: Thank you,  
23 Commissioner Okuda.

24 Commissioner Aczon.

25 VICE CHAIR ACZON: Aloha, Dr. Montgomery.

1 I just have a few questions, just a followup of  
2 several questions that you answered.

3 I'm just wondering what would have happened  
4 if after the discovery of this damselfly, nobody  
5 contacted you, or you haven't given authorization by  
6 the owner to do some mitigation on this.

7 What do you think would have happened to  
8 the colony?

9 THE WITNESS: Well, it may have declined  
10 somewhat. I believe that removing the compost pile  
11 over the waterway helped open up to some sunlight and  
12 improved the feeding capabilities of the larvae in  
13 the water.

14 I hadn't thought about that question. I do  
15 appreciate the fact that nearby residents noticed it  
16 and brought it to our attention and we jumped on it  
17 and doing the best we can, so that it continues to  
18 have a future here.

19 By the way, I admire your background there.  
20 Are you on the edge of the Waimea Kauai pier?

21 VICE CHAIR ACZON: No, this is a Philippine  
22 island.

23 So I gather that the early intervention  
24 by you or by the owner saved this colony, saved these  
25 damselflies?

1           THE WITNESS: I don't think I can say I  
2 saved it, but we're doing everything we can in the  
3 interim process to stabilize the situation.

4           I would love to get a fence built up there  
5 quickly, but until we get some boundary adjustments  
6 and get the clear go-ahead in Conservation District,  
7 we can't really just run in and build a fence.

8           VICE CHAIR ACZON: That's all I have, Mr.  
9 Chair. Thank you.

10          CHAIRPERSON SCHEUER: Thank you very much,  
11 Commissioner Aczon.

12          Commissioners, are there further questions  
13 for Dr. Montgomery? Seeing none. Redirect?

14          MR. TABATA: No redirect.

15          CHAIRPERSON SCHEUER: Thank you very much.  
16 We're done with Dr. Montgomery.

17          Who is your next witness?

18          MR. TABATA: Our next witness is Dr. Steve  
19 Spengler and he's listed by his own name.

20          CHAIRPERSON SCHEUER: Let me remove -- let  
21 me remove Dr. Montgomery from the room, and let me  
22 bring on -- sorry, is it Mr. or Dr. Spengler?

23          MR. TABATA: It's Dr. Spengler.

24          CHAIRPERSON SCHEUER: Thank you, Mr.  
25 Tabata.

1 Dr. Spengler, when it's possible, if you  
2 can turn on your audio and video.

3 THE WITNESS: Okay. Hi.

4 CHAIRPERSON SCHEUER: Aloha, good  
5 afternoon. I'm going to swear you in.

6 Do you swear or affirm that the testimony  
7 you're about to give is the truth?

8 THE WITNESS: I do.

9 STEVE SPENGLER

10 Was called as a witness by and on behalf of the  
11 Petitioner, was sworn to tell the truth, was examined  
12 and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. TABATA:

15 Q Steve, would you please describe for us  
16 your professional background?

17 A Sure. My name is Dr. Spengler and I'm --

18 CHAIRPERSON SCHEUER: At least by me you're  
19 fading significantly in your audio. It's very faint.

20 THE WITNESS: (Inaudible.)

21 CHAIRPERSON SCHEUER: Come closer to your  
22 computer, perhaps.

23 THE WITNESS: Can you hear me now?

24 CHAIRPERSON SCHEUER: Far better.

25 THE WITNESS: Sorry, I was using cordless

1 headphones, my speaker on my computer is blown, but  
2 that's okay.

3 CHAIRPERSON SCHEUER: Mr. Tabata.

4 Q (By Mr. Tabata): Continue.

5 A I continue introducing myself?

6 Q Please describe for us your background.

7 A My name is Dr. Steve Spengler. I'm Vice  
8 President of Element Environmental, a consulting firm  
9 which is in Aiea. I have Bachelor of Science degrees  
10 in chemistry and geology from the University of  
11 California, Riverside and Santa Cruz, a Master's  
12 degree in geochemistry from the University of Hawaii,  
13 and a Ph.D. in hydrogeology from the University of  
14 Hawaii.

15 I have over 30 years of experience  
16 conducting environmental and water resource projects  
17 here in Hawaii, Asia, the Middle East and throughout  
18 the Pacific Rim.

19 MR. TABATA: We request Dr. Spengler be  
20 qualified as an expert in the field of environmental  
21 hydrogeology.

22 CHAIRPERSON SCHEUER: Are there any  
23 objections from the Parties?

24 MR. PANG: No objection from the City.

25 MS. APUNA: No objection from the State.

1 MR. GRANT: Intervenor has no objection.

2 CHAIRPERSON SCHEUER: Commissioners?

3 Seeing none, so qualified, Mr. Tabata.

4 Q (By Mr. Tabata): Steve, could you please  
5 summarize for us your written testimony?

6 A Yes. I'm going to read a condensed version  
7 of my written testimony, should take about eight  
8 minutes. And then I'm going to show you some  
9 pictures that relate to my testimony. Here I go.

10 My firm, Element Environmental, was  
11 retained by HHF Planners to evaluate the proposed  
12 project's impact to water quality to Kawa Stream,  
13 which is located near the Petition Area.

14 The stream's main course originates within  
15 the Hawaii State Veterans Cemetery and discharges  
16 into the southern portion of Kaneohe Bay. This  
17 stream is perennial due to baseflow that originates  
18 from springs located throughout the watershed,  
19 including a spring located below the cemetery's  
20 baseyard and maintenance facility.

21 Ephemeral drainageways within the Petition  
22 Area also carry site stormwater runoff towards the  
23 City's drainage system serving the lower residential  
24 subdivision that eventually feeds into Kawa Stream.

25 We conducted streamflow and water quality

1 monitoring of Kawa Stream and its tributaries between  
2 December 11, 2017, and February 20, 2018. In order  
3 to monitor runoff from the proposed Petition Area, we  
4 installed a temporary cutthroat flume, which measures  
5 streamflow volume within the drainageway serving the  
6 Lipalu Watershed about 200 feet mauka of the City's  
7 Lipalu Street catchment basin. This flume allowed  
8 continuous monitoring of stormwater flow in this  
9 ephemeral drainageway.

10 Manual and tipping gauges were also  
11 installed on the ridgeline to record rainfall that  
12 fell along the ridgeline above the watershed to  
13 record rainfall that fell along the ridgeline at the  
14 Petition Area during the study period. The volume of  
15 streamflow in the lower portions of Kawa Stream was  
16 obtained from the USGS gauging station located across  
17 from Bayview Golf Course.

18 Kawa Stream is currently in violation of  
19 State water quality standards and listed on the State  
20 Department of Health's 303(d) list. Total Maximum  
21 Daily Load, which is known as TMDL, standards, which  
22 reflect the maximum pollutant amount a waterbody may  
23 receive, were established for this stream during a  
24 prior water quality study conducted by Oceanit in  
25 2002 and updated in 2005.

1           Total Maximum Daily Load, TMDL, standards,  
2 were established for nutrients, mainly nitrogen and  
3 phosphorous, and total suspended solids in the  
4 stream. The TMDL study concluded that the pollutants  
5 leaving the watershed could enhance unwanted algae  
6 growth within Kawa Stream and Kaneohe Bay.

7           During our 71-day monitoring period, an  
8 estimated 590.5 tons of total suspended solids, 5.7  
9 tons of total nitrogen, and 2.9 tons of total  
10 phosphorous were entrained in water passing the USGS  
11 gauging station located just mauka of Kaneohe Bay and  
12 the Bayview Golf Course.

13           The majority of sediment and nutrients  
14 loads were transported in the stream during nine  
15 storm events that occurred during the monitoring  
16 period. While 82 percent of streamflow occurred  
17 during these nine storm events, 99.2 percent of the  
18 total suspended solids and phosphorous loads, and  
19 91.6 percent of the total nitrogen load occurred  
20 during these rainfall events.

21           MR. TABATA: Could you please slow down.

22           THE WITNESS: Sure, sorry.

23           This finding is consistent with previous  
24 USGS studies on Oahu that observed that a large storm  
25 event may deliver the equivalent of years, even



1 decades of pollutant load received by coastal waters.

2           Monitoring data collected from the Lipalu  
3 Watershed indicate that forested watershed  
4 contributed disproportionately large amount of the  
5 total suspended solids, and to a lesser degree,  
6 nutrients discharging into Kaneohe Bay. Total  
7 suspended solid, total nitrogen and total phosphorous  
8 concentrations measured in stormwater runoff leaving  
9 the Lipalu Watershed were significantly higher than  
10 samples collected from elsewhere in the watershed,  
11 including the Parkway site that receives runoff from  
12 the existing Hawaiian Memorial Park cemetery.

13           The runoff volume from this undeveloped,  
14 forested watershed represents approximately  
15 0.74 percent of the total water flow measured at the  
16 USGS Kawa Stream gauging station.

17           However, the TSS load leaving the area  
18 represents about 31.3 percent of the total suspended  
19 solids load measured at the gauging station,  
20 indicating this undeveloped forested portion of the  
21 Petition Area experiences high levels of erosion and  
22 sediment runoff during rainfall events.

23           This watershed also contributed 4 percent  
24 and 1.9 percent respectfully, of total nitrogen and  
25 total phosphorous mass measured at the USGS gauging

1 station during the monitoring period.

2 And we also looked for pesticides.

3 A total of 42 stream and groundwater  
4 samples were collected and analyzed for glyphosate,  
5 diuron and 2,4-D. Glyphosate was analyzed due to its  
6 widespread use and general ubiquity in the  
7 environment. Diuron and 2,4-D were analyzed due to  
8 the detection of these pesticides in a stormwater  
9 sample that was collected by the USGS from the newly  
10 installed USGS Kawa Stream Station in 2017.

11 Glyphosate, which is the active ingredient  
12 of the herbicide Roundup, was the most commonly  
13 detected pesticide with concentrations detected in 15  
14 to 42 samples gathered.

15 Diuron was detected in 7 of the 42 samples,  
16 while 2,4-D was only detected in a single sample.  
17 The estimated total mass of glyphosate in the roughly  
18 17.6 million gallons of runoff produced during the  
19 nine storm events within the monitoring period is  
20 estimated to be 12.9 grams, or less than a tablespoon  
21 of glyphosate. Therefore, it can be concluded that  
22 impacts from pesticide runoff to Kaneohe Bay are  
23 minimal.

24 Formaldehyde is a chemical used as part of  
25 the modern burial embalming process to temporarily

1 prevent decomposition. Therefore, water samples were  
2 collected and analyzed to detect the presence of this  
3 chemical to address potential concerns with its  
4 leaching into perched groundwater from the Veterans  
5 and existing Hawaiian Memorial Park cemeteries.

6 Four perched groundwater samples were  
7 collected from a small spring located outside of the  
8 Hawaiian Memorial property in this hillslope situated  
9 below Hawaiian Memorial Park's maintenance yard and  
10 at the well located at the northwestern corner of the  
11 cemetery expansion site. That's the well that feeds  
12 the damselflies. Formaldehyde was not detected in  
13 any of these samples at an analytical detection limit  
14 of 5 parts per billion. This is consistent with  
15 scientific studies that have found that formaldehyde  
16 will biodegrade to low levels in a few days if  
17 released to water. In addition, the predominant  
18 degradation product of formaldehyde in the  
19 environment, formic acid, rapidly biodegrades in  
20 soils.

21 In summary, the proposed project is  
22 expected to have an overall beneficial impact on the  
23 currently impaired water quality of Kawa Stream. The  
24 water quality data collected during this study found  
25 that the area below the existing Hawaiian Memorial

1 Park cemetery site had far lower total suspended  
2 solid and nutrient concentrations than were measured  
3 in runoff from the forested Lipalu Watershed, which  
4 currently experiences significant erosion during  
5 large rainfall events.

6 Cemetery expansion improvements would  
7 overall reduce existing site slopes, lowering the  
8 Lipalu Watershed. Turf grass landscaping and  
9 construction of retention basins would also allow  
10 rainfall infiltration, especially during smaller  
11 rainfall events. Implementation of these  
12 improvements should improve Kawa Stream's water  
13 quality and TMDL by reducing the amount of total  
14 suspended solids and nutrients existing in this  
15 watershed area and ultimately entering Kaneohe Bay.

16 So that concludes my written testimony.

17 I do have a PowerPoint that I could show  
18 that will give you some ideas of the locations where  
19 we collected samples. So is it okay if I put on  
20 "share screen".

21 CHAIRPERSON SCHEUER: Mr. Tabata, do you  
22 want your witness to do that?

23 MR. TABATA: Could you please authorize the  
24 witness to use "share screen"?

25 And, Dr. Spengler, your exhibit, would you

1 please refer to the exhibit number?

2 THE WITNESS: It's Exhibit SS-A and SS-B  
3 that were included in my written testimony.

4 CHAIRPERSON SCHEUER: Dr. Spengler, you  
5 should be able to share your screen is now.

6 MR. TABATA: For the record, Dr. Spengler's  
7 written testimony Petitioner's Exhibit No. 36.

8 THE WITNESS: I see my pdf. Can you see  
9 it?

10 CHAIRPERSON SCHEUER: Not yet.

11 THE WITNESS: Can you see this, what I'm  
12 sharing?

13 CHAIRPERSON SCHEUER: Not yet, nope.

14 THE WITNESS: Okay, share screen, I'm  
15 hitting the green share screen button on my end.  
16 It's seemingly not doing anything. There we go.  
17 That looks like someone else's computer. It looks  
18 like Derrickson's computer.

19 Now I can see you, Jonathan, while I'm  
20 seeing my pdf.

21 CHAIRPERSON SCHEUER: I'm not seeing it.  
22 We will give this half a minute more, and otherwise  
23 I'll ask you to orally summarize your points.

24 THE WITNESS: I don't know what else I can  
25 do on my end, because right now you're just like a

1 minimal screen on mine.

2 So this green share screen button on the  
3 bottom, I click it, select the window. There we go.  
4 I think I got it. Now can you see it?

5 CHAIRPERSON SCHEUER: It is coming up, yes.

6 THE WITNESS: Great, sorry about that.

7 Okay.

8 So I'm just going through these two  
9 exhibits that are in my written testimony.

10 So I talked about the spring that was  
11 located below the maintenance facility. So we call  
12 it the Cascade Spring. So this is a spring  
13 (indicating). There was a lot of discussion by Tom  
14 Nance, some of the previous people, about perched  
15 water. So this is showing basically perched water  
16 that's coming out of the ground somewhere around here  
17 (indicating) and forms a little spring and a little  
18 waterfall.

19 This is -- we collected a sample of  
20 groundwater, perched groundwater here for  
21 formaldehyde and nutrient analysis.

22 And right next to this spring there is this  
23 drainage culvert which drains the Hawaiian Memorial  
24 Park, and this also has perched groundwater that  
25 infiltrates it. So it's about a gallon,

1 gallon-and-a-half a minute that flows out of this.  
2 We also sampled this.

3 Now, there has also been -- there's been a  
4 lot of discussion about the well that serves as  
5 source water to the damselfly, so we also  
6 collected -- this is showing us a picture of us  
7 taking a sample out of the fractured well.

8 You can see the top of the well casing has  
9 been fractured. The previous consultant described, I  
10 guess, this was broken up by an umbrella tree or  
11 something.

12 So this is us taking a groundwater sample.  
13 This actually is a picture showing the seep that  
14 everyone was talking about. So that seep occurs just  
15 to the left of this dug well, and then slowly drains  
16 to the City and County drainage outlet right here  
17 (indicating).

18 We actually, inhouse, conducted the  
19 pesticide analysis using amino acid methods. We do  
20 this in our office. This allows us to detect  
21 glyphosate, diuron, 2,4-D. We can also look for  
22 pharmaceuticals down to about 50 parts per trillion  
23 levels detection limit. So you can see really low  
24 levels of pesticides during the study.

25 I'm going to go to the upper slide. So

1 Kawa Stream is a perennial stream. It originates  
2 from the Hawaiian Memorial Park, which is over here  
3 (indicating) and it also originates from that Cascade  
4 Spring, which is located -- this is the Veterans  
5 Cemetery, excuse me. And then it also originates  
6 below the Hawaiian Memorial cemetery.

7           So these are some flow measurements, the  
8 red dots that I made at various locations throughout  
9 the watershed after an extended dry period. So this  
10 is indicative of the volume of water that flows from  
11 the stream that's due to perched groundwater input to  
12 the stream.

13           Now, notice the Lipalu Watershed into which  
14 the proposed expansion is going to occur is normally  
15 dry. There's normally no flow within that ephemeral  
16 stream basin. I would estimate that the water in  
17 that streambed probably flows maybe 10 to 15 times  
18 per year on average.

19           So it requires a fairly large intense  
20 rainfall event to initiate enough runoff to initiate  
21 any kind of stream flow, or overland flow to reach  
22 the City and County's box culvert which is located  
23 below where we sampled.

24           The Parkway, I mentioned the Parkway as  
25 being a place where we sampled for nutrients, TSS



1 load, as being indicative of the runoff that was  
2 leaving from the existing Hawaiian Memorial Park,  
3 which is sort of located right here (indicating).

4 And so you can see that's -- we measure  
5 under dry conditions about 25-gallons per minute,  
6 relatively low flow rates of perched groundwater  
7 that's inputting into Kawa Stream under dry  
8 conditions.

9 If you note -- and this is where the USGS  
10 gauging station is, for those of you -- I think we  
11 had a meeting at the Bayview Golf Course. Bayview  
12 Golf Course has a put-put course, like a miniature  
13 golf course. So the USGS gauging station is located  
14 right across the street mauka of that little put-put  
15 golf course.

16 And you can see that the vast majority of  
17 perched groundwater enters into the stream basically  
18 as it flows -- kind of adjacent -- this is Castle  
19 High School, basically in the lower part of the  
20 watershed. It goes from like 86 and 64, so that's  
21 about 150 gallons a minute to 600 gallons a minute  
22 over a relatively short period of time. And that's  
23 all groundwater input.

24 Now, over here I've got some pictures  
25 showing Kawa Stream at different flow rates. So when

1 we measure streamflow, we measure in terms of cfs,  
2 which stands for cubic feet per second. So cubic  
3 feet per second is about 450 gallons a minute.

4 So under standard low flow conditions in  
5 Kawa Stream, when these kind of conditions are  
6 prevalent, you typically get 1 cfs or so. So about 1  
7 cfs, it would take about eight seconds to fill a  
8 55-gallon bucket with the flow here.

9 As you go up, you can see the water in the  
10 stream goes from being relatively clear. As the flow  
11 rates increase, it suddenly becomes more turbid,  
12 reflecting of increasingly higher total suspended  
13 sediment loads, so that the largest flow is the 744  
14 cfs, which was taken on the 5th of February, 2018.

15 To give you an idea of how much flow that  
16 is, if you imagine a typical backyard swimming pool,  
17 a 12 by 24 6-foot deep swimming pool, this amount of  
18 flow would fill that swimming pool in two seconds.

19 To give you an idea, the last storm event  
20 that we monitored before it destroyed our flume, the  
21 flow here (indicating) at this Kawa Stream gauging  
22 station went from 10 cfs, or about that, to 1000 cfs  
23 in 15 minutes. A massive steep hydrograph, which is  
24 indicative of Hawaii streamflow here in Hawaii.

25 That flow event that destroyed our flume,

1 the rainfall intensity was 2.51 inches in one hour.  
2 And by comparison, the 10-year storm event is  
3 2.94 inches. So that storm event, which actually  
4 conveyed the vast majority of the TSS that we  
5 measured during our monitoring period, probably  
6 reflected about a five-year storm event.

7           And this is the big picture. This is what  
8 the actual runoff from the Lipalu Watershed looks  
9 like. So it's very turbid, chocolate brown. This  
10 over here, this is a picture of our flume. I don't  
11 know if you guys can see it. We installed this  
12 wooden cutthroat flume which allowed us to monitor  
13 the runoff from the watershed during runoff events.  
14 And then it got collapsed, so at the peak storm, 1000  
15 cfs, the height of the stream was a foot-and-a-half  
16 above the top of our flume, and the flume didn't  
17 collapse because of that, it collapsed because there  
18 was water coursing down to the side of the flume and  
19 ended up collapsing the flume.

20           So this is a sample of the water that was  
21 put into a white bucket. So typically the total  
22 suspended sediment loads to measure in the watershed  
23 under low flow conditions are about one milligram per  
24 liter. This is 3,000 to 4,000 milligrams per liter,  
25 TSS. And so we were able to collect several samples

1 during runoff events from Lipalu Watershed, which  
2 showed -- and this is why this forested watershed  
3 currently is contributing a disproportionately large  
4 amount of the TSS load that's ultimately entering  
5 into Kaneohe Bay during these large rainfall runoff  
6 events.

7 That concludes my testimony. Can I shut  
8 this off?

9 CHAIRPERSON SCHEUER: Yes, please.

10 Is there any further direct, Mr. Tabata?

11 MR. TABATA: No. Dr. Spengler is available  
12 for cross.

13 CHAIRPERSON SCHEUER: County.

14 MR. PANG: The City has a few questions.

15 CROSS-EXAMINATION

16 BY MR. PANG:

17 Q Dr. Spengler, thank you.

18 Duane Pang for City and County of Honolulu.

19 Dr. Spengler, are you familiar with the  
20 preliminary grading plan that was prepared by Jami  
21 Hirota?

22 A Not intimately. I did read her testimony.

23 Q Do you know if, after the grading has been  
24 done, it would affect the groundwater flow into Kawa  
25 Stream?

1           A        You mean the streamflow, the runoff?

2           Q        The runoff into the stream.

3           A        Yes, yes, I'm aware of that.

4           Q        Will it affect it, either increase it or  
5 decrease it?

6           A        I could not quantify that. I've not done  
7 that analysis.

8           Q        So you're not quite sure whether after the  
9 grading, the water quality of Kawa Stream would be  
10 affected?

11          A        No, I'm sure that the water quality in Kawa  
12 Stream, it is going to be beneficially impacted by  
13 the proposed cemetery expansion, and that's basically  
14 because you can think of it simplemindedly.

15                    The portion of the watershed that's going  
16 to be converted from the currently forested watershed  
17 to cemetery land will not be contributing that  
18 chocolate-brown type of runoff to the stream.

19                    The runoff from the cemetery lands is going  
20 to contain significantly lower levels of TSS than is  
21 currently being produced from that forested watershed  
22 which is in the area where the expansion is going to  
23 occur.

24                    So the water quality will improve. Whether  
25 the total volume of runoff increases or decreases, I

1 did not do that analysis.

2 Q Okay. I have no further questions.

3 CHAIRPERSON SCHEUER: Thank you, Mr. Pang.  
4 Ms. Apuna?

5 MS. APUNA: No questions.

6 CHAIRPERSON SCHEUER: Mr. Yoshimori.

7 CROSS-EXAMINATION

8 BY MR. YOSHIMORI:

9 Q Hello, Mr. Spengler. I'm Grant Yoshimori,  
10 Intervenor.

11 I had a question. Glyphosate, that's  
12 Roundup; is that right?

13 A Correct.

14 Q You said that there was glyphosate measured  
15 at 343 to 2,831 ng per liter. I'm assuming that's  
16 nanograms per liter?

17 A Those are parts per trillion. So it's  
18 like, yeah, so it's like two parts per billion.

19 Q Okay. So you found that in the Parkway  
20 water samples, and you attributed that to HMP's  
21 current cemetery; is that right?

22 A So we have done a lot of subsequent  
23 sampling. I've published a couple of papers on  
24 glyphosate. It turns out that the vast majority of  
25 the glyphosate that's discharging from the Kawa

1 Watershed is actually originating from the  
2 residential communities.

3 Q Page 7 to 8 of your written testimony, it  
4 says that it suggests input of glyphosate in stream  
5 from HMP cemetery is similar to lower residents.

6 A That's different from -- we've subsequently  
7 done more sampling. I can now definitely say that  
8 the westside of the residential area for some reason  
9 produces a disproportional amount of glyphosate  
10 that's entering the stream.

11 Q So none of the glyphosate that you're  
12 seeing is coming from the Hawaiian Memorial Park?

13 A I wouldn't say "none", but I would say the  
14 vast majority of it is occurring from the residential  
15 areas.

16 I have a low tech way of evaluating  
17 glyphosate usage by looking at people's lawns. When  
18 you see like a beautiful manicured mono-cultural --  
19 mono-species lawns, that tends to be people that use  
20 a fair amount of glyphosate.

21 Q So you found no glyphosate in the  
22 undeveloped area of the Lipalu flow; is that correct?

23 A That is correct. We did -- yeah, that's  
24 correct.

25 Q So existing conditions you didn't find any

1 glyphosate within the Lipalu Watershed?

2 A We did not detect glyphosate, right.

3 Q Going back to Ms. Hirota's testimony, she  
4 testified during construction they're going to be  
5 building these basins designed for a two-year 24-hour  
6 storm. If a rain event occurs beyond that two-year  
7 24-hour storm, say for example, like the one that  
8 destroyed the flume that you had set up, would that  
9 increase the TMDL level in the Kawa Stream over the  
10 current levels?

11 A I think the detention basin will get  
12 saturated, but it will still be collecting some  
13 fraction of the TSS that's leaving the cemetery site.  
14 And more importantly, the nature of the land on which  
15 that greater than two-year storm event would be  
16 falling, is less prone to erosion because it's been  
17 graded and slopes have been reduced, and it's  
18 basically planted in turf grass.

19 So the total TSS loads I would expect, once  
20 the cemetery is built, even under those flood  
21 conditions, would be less than would occur under the  
22 existing undeveloped conditions.

23 Q Thank you.

24 I guess I was referring more towards during  
25 the construction phase.



1           She had mentioned that they would be  
2           developing in five-acre quantities. So during  
3           construction phase, if there was an event like that  
4           and the two-year 24-hour storm basins filled up, in  
5           the event like you had with the flume, would that  
6           increase the total TMDL?

7           A       Potentially. It would depend on the other  
8           types of BMPs that were installed during the course  
9           of construction.

10          Q       Thank you, Dr. Spengler, those are all the  
11          questions I have.

12                 CHAIRPERSON SCHEUER: Commissioners, I'm  
13           going to suggest that we take a break before we go  
14           into Commissioner questions of Dr. Spengler, unless  
15           there is some indication that there's not a lot.

16                 It is 1:59. We're going to take a ten  
17           minute recess, reconvene at 2:10 p.m.

18                 (Recess taken.)

19                 CHAIRPERSON SCHEUER: We're back on the  
20           record. Confirming the presence of myself,  
21           Commissioner Okuda, Commissioner Cabral, Ohigashi,  
22           Aczon, Giovanni and Chang. And we were moving to  
23           cross by the Commissioners of Dr. Spengler.

24                 Commissioners, questions for Dr. Spengler.  
25           Who wishes to go first?

1 Commissioner Chang.

2 COMMISSIONER CHANG: Thank you very much,  
3 Dr. Spengler, for your testimony here today. I just  
4 have just a very few followup questions.

5 I wanted to confirm my understanding of  
6 your testimony.

7 Formaldehyde, you did not, in your  
8 sampling, did not find formaldehyde in your samples?

9 CHAIRPERSON SCHEUER: I believe you're  
10 muted, Dr. Spengler. I am unmuting you. There you  
11 go.

12 THE WITNESS: Yeah, we did not find  
13 formaldehyde. And we consciously sampled at  
14 locations where we felt that we had the highest  
15 probability of actually detecting formaldehyde,  
16 namely the perched aquifer.

17 COMMISSIONER CHANG: The other question I  
18 have is, I understand your testimony to be that the  
19 cemetery's Hawaiian Memorial Park proposed  
20 improvements primarily to the landscaping will  
21 actually improve the water quality of Kawa Stream.

22 Is that correct?

23 THE WITNESS: That is correct.

24 COMMISSIONER CHANG: Okay, that's the only  
25 questions that I have. Thank you very much.

1 THE WITNESS: You're welcome.

2 CHAIRPERSON SCHEUER: Thank you,  
3 Commissioner Chang. Commissioners?

4 Commissioner Cabral.

5 VICE CHAIR CABRAL: Hard to get to the  
6 buttons to raise my hands and unmute. I'm old and  
7 technically challenged.

8 That question, thank you, Commissioner  
9 Chang, that question brought up a question in my  
10 mind.

11 In your professional position, do you have  
12 like a set of ethical standards that you must comply  
13 with? So my question would be, like if I was going  
14 to hire you, could I tell you -- because you just  
15 made reference to how you were really going to the  
16 locations where you might potentially find the  
17 greatest number of problems.

18 So I'm going, well, that in a sense, if  
19 you're the detective, makes sense. Or could I  
20 potentially be the client and hire you and say go to  
21 the places that you'll find no problems?

22 So that's my question. For the license  
23 that you have, or the standard by which -- like as a  
24 realtor, you know, all realtors swear to be ethical  
25 and honest and that. So I won't discuss that matter.

1 But, anyway, what is your kind of position on those  
2 type of things when you go, are you always looking  
3 for where the problems might be? How does that work?

4 If you could explain that, I would  
5 appreciate it.

6 THE WITNESS: I have my own ethical  
7 standards and I wouldn't purposely obfuscate  
8 something if I didn't feel like it made scientific  
9 sense.

10 In this case they hired us and really gave  
11 us no -- they didn't give us any guidance in terms of  
12 where they wanted us or didn't want us to sample. So  
13 they relied on us and our professional judgment when  
14 they said that one of the community concerns was  
15 potential of formaldehyde leaching from caskets into  
16 the groundwater. Then we searched around. We found  
17 the springs located right down-gradient of the  
18 existing cemetery. And we said, "ah, ha" this is the  
19 perfect place to look. If we are ever going to see  
20 formaldehyde, you would see it here.

21 So that's how we came to the conclusion of  
22 sampling those particular locations.

23 Then the glyphosate was based on our  
24 findings. We were hired by Surfrider Foundation the  
25 year before to do sampling throughout Kauai and Oahu.

1 And it turns out when we sampled throughout State of  
2 Hawaii, they all had glyphosate in them. So that led  
3 us to suggest to Helber Hastert & Fee and they agreed  
4 to allow us to analyze the stream samplings for  
5 glyphosate.

6 And I said in my testimony the reason we  
7 looked for the other two pesticides was the USGS had  
8 just recently installed that gauging station there,  
9 and they have a contract with State of Hawaii to do  
10 pesticide analysis of streams throughout the State of  
11 Hawaii and they just by chance had sampled Kawa  
12 Stream during a runoff event.

13 And I looked at what they detected, and  
14 they didn't look for glyphosate, but they detected  
15 diuron and 2,4-D?

16 And so because they detected that during  
17 that one runoff event, I suggested to Helber Hastert  
18 & Fee we should also look for those pesticides, and  
19 they agreed. And so that's -- in the case of this  
20 project -- and then the TMDL was driven by nitrogen  
21 and phosphorous and TSS.

22 That's why we collected samplings from the  
23 stream and various locations within the watershed for  
24 those parameters.

25 VICE CHAIR CABRAL: Thank you very much.

1 That's fascinating information. And I always comment  
2 I live in Hilo, and I actually live sort of uphill  
3 Waiakea Uka area where I've had some floods that go  
4 out to your photos there, that's going by my door,  
5 rapid rain flow that I had a pothole in my driveway  
6 that my Yukon could have been buried in once after a  
7 flood in November 2000, so I can appreciate the  
8 strength of water.

9 Thank you much very much.

10 CHAIRPERSON SCHEUER: Thank you,  
11 Commissioner Cabral.

12 Commissioners, further questions for  
13 Dr. Spengler? Seeing none. Mr. Tabata, any  
14 redirect?

15 MR. TABATA: No redirect, thank you.

16 CHAIRPERSON SCHEUER: Thank you very much,  
17 Dr. Spengler.

18 Mr. Tabata, care to preview the rest of our  
19 afternoon for us?

20 MR. TABATA: Yes. The next two witnesses  
21 are my Maya LeGrande and Susan Burr, after which  
22 followed Todd Beiler, Matt Nakamoto, Rosanna Thurman,  
23 and Trisha Kehaulani Watson, Dr. Watson.

24 CHAIRPERSON SCHEUER: I suspect we are not  
25 going to get through all of those today unless

1 they're very quick. What is your estimate?

2 MR. TABATA: I'm hopeful. Give us three  
3 more hours, and I think we will finish.

4 CHAIRPERSON SCHEUER: I don't know that we  
5 can give you three more hours. I think we can give  
6 you a solid two more hours.

7 MR. TABATA: We're willing to try.

8 CHAIRPERSON SCHEUER: Commissioners, I'll  
9 note in regards to this, on the circulated agenda, we  
10 do have an executive session listed, but I consulted  
11 with Executive Officer, and there's not a strict  
12 urgency on that matter, so my preference would be to  
13 go through with as many witnesses as possible as we  
14 can today, given their availability and availability  
15 of all the Parties.

16 Let's do it to it, Mr. Tabata.

17 MR. TABATA: Our next witness is Maya  
18 LeGrande listed under HMP-2.

19 CHAIRPERSON SCHEUER: I have promoted her  
20 to panelist.

21 Aloha.

22 THE WITNESS: Good afternoon.

23 CHAIRPERSON SCHEUER: I'm going to swear  
24 you in and then you'll provide your direct testimony  
25 and then be available for cross.

1           Do you swear or affirm the testimony you're  
2 about to give is the truth?

3           THE WITNESS: I do.

4           CHAIRPERSON SCHEUER: Please proceed, Mr.  
5 Tabata.

6                           MAYA LeGRANDE

7 Was called as a witness by and on behalf of the  
8 Petitioner, was sworn to tell the truth, was examined  
9 and testified as follows:

10                           DIRECT EXAMINATION

11 BY MR. TABATA:

12           Q       Maya, could you please provide for us your  
13 professional background?

14           A       Sure. I received a Master's degree in  
15 botany from University of Hawaii at Manoa and I have  
16 had a biological consulting firm specializing in  
17 botanical resources and have expertise in native  
18 Hawaiian plants, conservation biology, tropical and  
19 subtropical plants and Hawaii ecosystem restoration.

20                           I've been doing this work for over  
21 18 years and have had a wide range of projects and  
22 field locals throughout the Pacific and in the  
23 Hawaiian Islands, and have been recognized as an  
24 expert in the field of botany in front of the LUC, I  
25 think at least four times.



1 Q Thank you.

2 MR. TABATA: Request Ms. LeGrande be  
3 qualified as an expert in the field of botany.

4 CHAIRPERSON SCHEUER: Are there any  
5 objections from the Parties?

6 MR. PANG: City has no objections.

7 MS. APUNA: State has no objection.

8 MR. YOSHIMORI: Intervenors have no  
9 objections.

10 CHAIRPERSON SCHEUER: Commissioners? So  
11 qualified. Please continue, Mr. Tabata.

12 Q (By Mr. Tabata): Can you please summarize  
13 your written testimony?

14 A I'm going to try to be very succinct since  
15 we are on this timeframe.

16 So the scope of our study was -- we were  
17 retained by HHF Planners to conduct a botanical  
18 survey of the Petition Area and assess the proposed  
19 project's impacts on botanical resources.

20 The results of our study was that we didn't  
21 find any plants that are considered threatened,  
22 endangered or a species of concern. So there were no  
23 rare plants that we observed.

24 The entire survey area is characterized by  
25 what we would call a lowland alien wet forest, which

1 means it's dominated by introduced plant species.

2           A total of 109 plant species were observed  
3 within the survey area. Of those, 91 are aliens or  
4 introduced species, seven are Polynesian  
5 introductions, and the native plants, there were  
6 eight indigenous species observed, and three endemic  
7 species. Endemic means basically they're only found  
8 in the Hawaiian islands.

9           In the cemetery expansion area, the primary  
10 vegetation were alien trees, vines and shrubs and  
11 grass species.

12           The understory, basically anything below  
13 the canopy of trees, small shrubs and ground covers  
14 were really depauperate, which means there were areas  
15 where it was just bare ground, then in other areas  
16 there were things like small shrubs, grasses and fern  
17 species growing as ground cover, but the overall  
18 dominate understory would be like bare dirt.

19           I think I mentioned previously that there  
20 were seven Polynesian species and eight indigenous  
21 and three endemic.

22           In the planned cultural preserve area,  
23 there was a prior 2006 botanical survey that was done  
24 by our company. At that time the heiau area had been  
25 maintained, so it had been cleared and you could

1 actually see the heiau itself. And the two native  
2 koa trees that we found on the property are in that  
3 area and they look to be planted, so I don't think  
4 they were naturally extant in the area.

5           During the 2017 survey it looked like the  
6 maintenance of the heiau area hadn't happened in a  
7 long time, so it was overrun by a lot of weedy plant  
8 species.

9           The whole cultural area preserve, planned  
10 area for the cultural preserve is dominated by tree  
11 species such as hau and Christmas berry with a  
12 thicker understory of the Lawai fern in some areas.

13           So the proposed project, it would  
14 significantly alter the existing botanical resources  
15 in the area because of the extensive grading that is  
16 planned.

17           The majority of the plant species displaced  
18 from the proposed grading activities would be  
19 non-native.

20           Let's see, what else?

21           The native plant populations, including the  
22 ohia lehua and akia and ka'e'e population would also  
23 be displaced.

24           We did propose some mitigative measures,  
25 including collecting seeds or cutting from extant

1 indigenous and endemic plants and also developing a  
2 preservation plan for the cultural preserve area as  
3 well as an out-planting plan for the seep area to  
4 enhance the habitat for the native damselfly.

5 That concludes my summary.

6 Q Ms. LeGrande is ready for cross.

7 CHAIRPERSON SCHEUER: City and County.

8 CROSS-EXAMINATION

9 BY MR. PANG:

10 Q Good afternoon, Dr. LeGrande. My name is  
11 Duane Pang with the City and County of Honolulu. I  
12 have a couple questions.

13 On your written testimony you've provided  
14 some proposed mitigation measures. Will you be  
15 involved -- have they asked you to be involved in  
16 implementing those mitigation measures?

17 A Not directly, but there has been some  
18 discussion, and I would happy to be involved in the  
19 planning.

20 Q The City and County Honolulu is requesting  
21 recommending that there be a one-for-one replacement  
22 of large trees in that area. Is that feasible?

23 A Yes, I think that the Petitioner is willing  
24 to accept the recommendation from the DPP of  
25 replacing -- basically they suggested one-for-one

1 replacement of trees with diameters of six inches or  
2 greater.

3 So you would have to go through and do a  
4 count of six inches or greater and come up with a  
5 number.

6 They also had talked about trying to use  
7 field stock trees, which in this case, because the  
8 majority of trees are non-native, I would actually  
9 recommend utilizing some of the native species that  
10 are extant there, but also bring in some appropriate  
11 species instead of just utilizing the non-native  
12 plant stock.

13 But to answer your question, I think it's  
14 doable. It's just the number of trees is going to be  
15 large, and so you would have to find areas in the  
16 cultural preserve and on the perimeters which would  
17 actually add to the buffer for neighboring houses and  
18 then the rest of the cemetery.

19 Q Thank you. I have no further questions.

20 A You're welcome.

21 CHAIRPERSON SCHEUER: Thank you, Mr. Pang.  
22 Ms. Apuna?

23 MS. APUNA: No questions.

24 CHAIRPERSON SCHEUER: Intervenor, Mr.  
25 Yoshimori?

1           MR. YOSHIMORI: We have no questions.  
2 Thank you.

3           CHAIRPERSON SCHEUER: Commissioners?  
4 Commissioner Giovanni.

5           COMMISSIONER GIOVANNI: Thank you for your  
6 testimony.

7           So I realize that you have not done a  
8 comprehensive carbon footprint type greenhouse gas  
9 analysis for before and after the project might  
10 occur, but in general what would be your perspective  
11 on the impact on whether it would be significant if  
12 the deforestation occurs, but yet it's replaced on a  
13 tree by tree basis of trees greater than six inches?

14           THE WITNESS: First of all, that isn't my  
15 area of expertise. I'm actually a botanist that is  
16 more of a field botanist and I recognize species.

17           But in general, I would say that  
18 deforestation is going to be limited to just the  
19 Petition Area, so you're still going to have the  
20 majority of the hillside and that whole area still  
21 have the trees extant.

22           So you're not losing -- it's not like  
23 they're going in and clear-cutting the entire area  
24 behind the cemetery in the whole hillside. So I  
25 would say that if it's a one-for-one, you're not

1 going to have any net loss of trees, if you're going  
2 to be out planting them as well.

3 And the DPP, I think that they said in  
4 their Exhibit A-2 that the replacement trees are not  
5 limited to the Petition Area. So being able to  
6 extend that out-planting area would be helpful.

7 COMMISSIONER GIOVANNI: Thank you.

8 CHAIRPERSON SCHEUER: Thank you,  
9 Commissioner Giovanni. Commissioner Chang.

10 COMMISSIONER CHANG: Thank you, very much,  
11 Maya, for your testimony. I just have a few  
12 questions.

13 During the qualifications you indicated  
14 that you have an expertise in native Hawaiian plants,  
15 is that correct?

16 THE WITNESS: Yes.

17 COMMISSIONER CHANG: Are you familiar with  
18 plants that are generally used for traditional and  
19 customary practices?

20 THE WITNESS: Yes.

21 COMMISSIONER CHANG: In this particular  
22 area, what would those plants be, would you know?

23 THE WITNESS: So the only plants that -- so  
24 the native plants that would be utilized that are on  
25 the property right now would probably just be the

1 ohia lehua. It's limited. So there is less than a  
2 handful of those trees within the Petition Area. And  
3 then there's akia, which is another native plant, and  
4 it can be utilized for fishing, because it has a  
5 poisonous element to it.

6 Then there is some non-native plants that  
7 are widely used for traditional practices, and I  
8 think Lawai fern is one that has been mentioned and  
9 one that is collected from the area.

10 COMMISSIONER CHANG: Thank you for that.

11 So in the cultural preserve where, as I  
12 understand it, there won't be, you know, removal of  
13 the vegetation, is there a good sampling of these  
14 native plants within the cultural preserve as opposed  
15 to the area that's going to be developed?

16 THE WITNESS: Yes. So in the cultural  
17 preserve is where most of the Lawai fern is located,  
18 so it will be preserved. There are populations in  
19 the area that is to be modified, but in my opinion I  
20 saw the bulk of it within the cultural preserve area.

21 The other native plants could be moved into  
22 the area. There's very few of the native plants that  
23 they utilize for cultural practices.

24 COMMISSIONER CHANG: So I guess that's my  
25 next question. The area that's being proposed to be



1 developed, would there, in your opinion, be any  
2 adverse impacts to traditional and customary  
3 practices by removing those plants?

4 THE WITNESS: No.

5 COMMISSIONER CHANG: You feel there's  
6 sufficient, one, existing native plants or plants  
7 used for traditional and customary practice within  
8 the cultural preserve; is that correct?

9 THE WITNESS: I do think that there's  
10 sufficient plants within the preserve. But I also  
11 think that out-planting and utilizing a plan to  
12 increase the number in the cultural preserve would be  
13 appropriate. Yeah.

14 COMMISSIONER CHANG: And you also indicated  
15 that there may be, as part of mitigation, even  
16 outside of the Petition Area, the Petitioner has  
17 indicated a willingness to use native plants.

18 Was that your testimony? So outside of the  
19 Petition Area, for example, in the other parts of the  
20 landscaping of Hawaiian Memorial Park, that they  
21 would be willing to utilize native plants?

22 THE WITNESS: I haven't had a specific  
23 conversation with them about the native plant aspect,  
24 but my recommendation would be to utilize both  
25 non-native and native plants, because sometimes it's

1 appropriate to use native and sometimes it isn't, but  
2 I'm sure they would be willing to utilize native  
3 plants if it's part of a plan. I don't see any  
4 reason that they would not want to do that.

5 COMMISSIONER CHANG: Have you had any  
6 specific discussions with the Petitioner regarding  
7 those recommendations?

8 THE WITNESS: Not specifically about that.  
9 Not in my recollection, but -- I guess I can't like  
10 attest -- it's kind of a future design issue that I  
11 think that if I was part of it, or part of the  
12 planning, I would definitely recommend some native  
13 plants.

14 And, you know, like Dr. Montgomery and I  
15 have discussed, the plants that would be appropriate  
16 for improving the seep habitat, and those would be  
17 native.

18 So right now that area unfortunately is  
19 mostly non-native invasive species that aren't great  
20 for native habitat, so we had discussions about  
21 utilizing native plants in that area for sure.

22 COMMISSIONER CHANG: If I was to give you  
23 your wish that if the Land Use Commission was to  
24 adopt specific recommendations as part of the LUC  
25 approval -- and I'm in no way predetermining the

1 outcome -- but what would be your specific  
2 recommendations for purposes of addressing issues  
3 related to native plants and the replanting?

4           What would be some specific recommendations  
5 that you would like to see as conditions?

6           THE WITNESS: First and foremost I think we  
7 would look at recommending taking air layers and seed  
8 samples from the ohia trees that are existing on the  
9 property now, as well as seeds and cutting from the  
10 akia.

11           And then there is the seeding or ka'e'e  
12 which is an indigenous species in Hawaii, but it's  
13 not very widespread any more.

14           There are some really nice plants on the  
15 property and really old vines, so I would recommend  
16 moving the vines themselves, but also going in and  
17 trying to collect seeds for growing later.

18           And then on the next level would be  
19 conferring with native plant growers that know the  
20 area and we could recommend work together to suggest  
21 a list of species that would be appropriate for the  
22 area, like within the cemetery area as well as  
23 outside of the cemetery area.

24           Just overall landscape plan that would  
25 include all of that, that would be great.

1           COMMISSIONER CHANG: Excellent. Thank you  
2 so much. I appreciate your testimony. I don't have  
3 any other questions, thank you.

4           THE WITNESS: You're welcome.

5           CHAIRPERSON SCHEUER: Thank you,  
6 Commissioner Chang.

7           Commissioners, are there any further  
8 questions for Ms. LeGrand? Commissioner Wong.

9           COMMISSIONER WONG: Thank you, Chair.  
10 Thank you, Ms. LeGrande.

11           You know, when I was back in school, long  
12 time ago, we learned that, I guess, trees and plants  
13 help with catching water for the watershed.

14           Now, if we put native plants instead of  
15 invasive plants, how will that affect the water flow  
16 for the fly, the dragonfly?

17           THE WITNESS: Damselfly.

18           So yeah, correct, tree species are really  
19 important, especially in Hawaii, for collecting what  
20 we call, like when in mauka areas where the mist  
21 comes through, it catches droplets of water, and then  
22 it can percolate down, but that only works if there's  
23 ground cover.

24           So a tree specifically doesn't necessarily  
25 help the rain get down to the groundwater, because

1 you need all the elements.

2 So non-native plant species like what you  
3 have at the Petition Area right now, those non-native  
4 plant species make it really shaded underneath so  
5 nothing else can grow on the ground which makes all  
6 that runoff happen.

7 So when you design an area to -- I guess I  
8 can't speak to the engineering part of it -- but if  
9 you design the landscaping plan so that you have the  
10 different elements, you have the trees, then you also  
11 have understory that works with it, then it can  
12 capture that rainfall without runoff and it can  
13 percolate into the ground.

14 Does that answer your question?

15 COMMISSIONER WONG: And it appears that it  
16 will assist in the percolation process to help the  
17 fly, the damselfly, the damsel -- whatever it's  
18 called?

19 THE WITNESS: Yeah.

20 So the damselfly habitat rate now is in an  
21 understory of octopus trees, so you wouldn't  
22 necessarily go in and cut them all down, because they  
23 like the shade. But you could start improving the  
24 habitat by planting some native shrubs that would  
25 help stabilize the area. Does that make sense?

1 COMMISSIONER WONG: Yes.

2 So the other thing I have is, we had issues  
3 regarding possible rockfalls and mitigation. Would  
4 the native plants assist in reducing the rockfalls?  
5 You can say "yes", "no" or "I don't know".

6 THE WITNESS: I think I'm going to defer  
7 that to somebody who knows more about rockfall  
8 mitigation.

9 COMMISSIONER WONG: Thank you. That's all  
10 I have. Thank you, Chair.

11 CHAIRPERSON SCHEUER: Thank you,  
12 Commissioner Wong.

13 Are there further questions, Commissioners,  
14 for Ms. LeGrande? Seeing none. Thank you very much.

15 Oh, redirect, Mr. Tabata?

16 MR. TABATA: No redirect. Thank you.

17 CHAIRPERSON SCHEUER: Thank you very much,  
18 Ms. LeGrande.

19 THE WITNESS: Thank you.

20 CHAIRPERSON SCHEUER: Next up.

21 MR. TABATA: Next is Susan Burr under  
22 HMP-2.

23 CHAIRPERSON SCHEUER: So I think the camera  
24 might go -- here she is.

25 Good afternoon, Ms. Burr or Dr. Burr?

1 THE WITNESS: Ms. Burr.

2 CHAIRPERSON SCHEUER: I'm going to swear  
3 you in. Mr. Tabata will lead you through your  
4 direct.

5 Do you swear or affirm the testimony you're  
6 about to give is the truth?

7 THE WITNESS: Yes.

8 CHAIRPERSON SCHEUER: Please proceed, Mr.  
9 Tabata.

10 MR. TABATA: Thank you.

11 SUSAN BURR

12 Was called as a witness by and on behalf of the  
13 Petitioner, was sworn to tell the truth, was examined  
14 and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. TABATA:

17 Q Susan, could you please describe for us  
18 your professional background.

19 A I am a vice president with AECOS, an  
20 environmental consulting firm that does business in  
21 Hawaii and throughout the Pacific Basin.

22 At AECOS I've been project manager for  
23 about 300 projects dealing with marine and freshwater  
24 biology, wildlife delineations, jurisdictional  
25 determinations and mitigation and restoration

1 projects.

2 MR. TABATA: Thank you.

3 We request that Ms. Burr be qualified as an  
4 expert in the field of environmental science.

5 CHAIRPERSON SCHEUER: Can you be more  
6 specific, Mr. Tabata?

7 MR. TABATA: Yes, with emphasis on  
8 jurisdictional waters determination.

9 CHAIRPERSON SCHEUER: Any objections,  
10 Parties?

11 MR. PANG: No objections from the City.

12 MS. APUNA: No objections from the State.

13 MR. YOSHIMORI: No objections from  
14 Intervenors.

15 CHAIRPERSON SCHEUER: Commissioners?  
16 Seeing none. So qualified. Please continue.

17 Q (By Mr. Tabata): Could you please  
18 summarize for us your written testimony?

19 A AECOS was hired by HHF Planners to conduct  
20 a survey of surface water features associated with  
21 seeps in the western drainageway.

22 We were asked to conduct a wetland  
23 delineation, and also make a jurisdictional  
24 determination of other aquatic features in the area.  
25 So we made our assessment based on jurisdiction



1 authorized under the Clean Water Act and Army Corps  
2 of Engineer's policy.

3 The result of the survey are included as  
4 Figure 8 in the Appendix O in the Final EIS, and also  
5 Exhibit 37.

6 We were also requested to make a  
7 preliminary assessment of the drainageway in the  
8 eastern portion of the area, we call that the Poly  
9 Channel. And results of that survey are included in  
10 this Figure 2 in the memo in Appendix O of the Final  
11 EIS and also as Exhibit 37.

12 Our surveys were conducted in 2018, 2019  
13 and they were consistent with the Clean Water Act  
14 rules defining what constitutes waters of the U.S.  
15 that were in existence at that time.

16 Just this year, Army Corps and the United  
17 States Environmental Protection Agency published new  
18 rules defining what constitutes waters of the U.S.,  
19 and they're significantly different than when we  
20 conducted our initial assessment.

21 So in my testimony today I'll discuss the  
22 results of our surveys based on the rules that were  
23 in existence at time and also discuss how they will  
24 change with the new rules that will be implemented  
25 later this month.

1           So we made our jurisdictional  
2 determination. That is a preliminary assessment that  
3 was -- we were tasked with making that assessment to  
4 aid in the design and planning of this project, to  
5 best minimize and avoid any impact to waters of the  
6 U.S.

7           Ultimately, it's the Army Corps of  
8 Engineers that is responsible for making final  
9 determination. So when Hawaiian Memorial Park is  
10 ready to initiate construction, they will go to the  
11 Army Corps of Engineers for an official  
12 jurisdictional determination.

13           Jurisdictional waters, waters that are  
14 jurisdictional under the Clean Water Act are also  
15 called waters of the U.S. They include all tidal  
16 waters, territorial seeps, interstate waters, and a  
17 subset of streams, lakes reservoirs, and wetlands.

18           In the case of Hawaiian Memorial Park with  
19 this project, we made a wetland determination, and we  
20 also characterized the seep, the seep channel and  
21 other aquatic features, and finally we delineated the  
22 boundaries of what we determine to be jurisdictional  
23 waters.

24           The definition of waters of the U.S. that  
25 we followed when we conducted our survey were under

1 what we call the Clean Water Rule. The Clean Water  
2 Rule defined streams that are jurisdictional as  
3 having -- as streams that have a connection to other  
4 waters of the U.S., and the streams also needed to  
5 have physical indicators close such as --  
6 (indecipherable) and ordinary high water mark.

7 The most significant change that's been  
8 brought about by the new definition of waters of the  
9 U.S. is that ephemeral streams are now physically  
10 excluded from jurisdiction under the Clean Water Act.

11 So I would like to bring up Exhibit 37, if  
12 I can share stream. Should I do that now?

13 CHAIRPERSON SCHEUER: You should be  
14 authorized to do so.

15 THE WITNESS: So this is sort of the larger  
16 overview of most of the drainageways that we looked  
17 at. Over here is western drainageway, and this is  
18 the eastern drainageway (indicating).

19 So I'll start my discussion here at western  
20 drainageway, so I'll zoom in.

21 MR. TABATA: For the record, Chair, this is  
22 from the Final EIS Petitioner's Exhibit 6.

23 CHAIRPERSON SCHEUER: Thank you.

24 THE WITNESS: So this is the western  
25 drainageway. As you can see -- well, you can't

1 really see here, but where my little hand is, that's  
2 the start of the seep channel. You can see it's a  
3 little bit of a braided channel. It connects here  
4 with what we call the inside channel. And both  
5 inside channel and the seep channel enter the City  
6 and County's stormwater drain system here at the end  
7 of Ohaha place. The stormwater system connects to  
8 Kawa Stream which ultimately discharges into Kaneohe  
9 Bay.

10           So we started out our assessment in this  
11 area looking for wetlands (indicating). So we  
12 conducted -- we completed a wetland data  
13 determination point in the area that based on  
14 topography was most likely to be a wetland, and we  
15 did not find evidence of wetland, soils wetland  
16 vegetation, or wetland hydrology.

17           We next focused our attention on the seep  
18 and the seep channel. We found that it was best to  
19 characterize the seep channel as a stream rather than  
20 a wetland, because the channel has been carved by  
21 flowing water, and the vegetation occupied less than  
22 five percent of the channel. So it would be  
23 considered to be a stream.

24           We also then turned our attention to the  
25 incised channel. So the incised channel is fed by

1 these gullies or rills across the upland, and these  
2 two channels converge into a single channel. And  
3 that at this point, which is the 118 feet upslope  
4 with the confluence of the seep channel we began to  
5 see physical evidence of flow and (indecipherable).

6 And so at the time of our survey we  
7 determined that from this point downslope and the  
8 seep channel downslope would be considered to be  
9 jurisdictional waters.

10 So we were then, after we conducted that  
11 survey, we were taxed with making a preliminary  
12 assessment as to whether or not the channel in the  
13 eastern drainageway, what we call the Poly Channel,  
14 would be considered jurisdictional.

15 So what we found over here was basically  
16 three branches of the stream that converged and  
17 ultimately discharged into the City and County storm  
18 drain system here at end of the Lipalu Street, like  
19 the western drainageway, the City and County storm  
20 water system enters into Kawa Stream, which  
21 ultimately discharged into the Kaneohe Bay.

22 So throughout this channel, in all three  
23 branches, we found discontinuous indicators of flow  
24 and bed and banks.

25 So what we did, we marked the uppermost

1 point on these branches of where we found physical  
2 indicators of flow as shown here in the dark blue  
3 features.

4 So when we made our assessment in 2019, we  
5 concluded that the seep channel and a portion of the  
6 incised channel, and these blue sections of the Poly  
7 Channel would be considered to be jurisdictional  
8 under the Clean Water Act.

9 The new rules that go into effect later  
10 this month specifically exclude ephemeral streams, so  
11 all of the Poly Channel will no longer be considered  
12 to be waters of the U.S., and most of the incised  
13 channel would not be waters of the U.S., but the seep  
14 channel and the lower portion of the incised channel  
15 would still be considered waters of the U.S.

16 So what this means is that if the landowner  
17 proposes an activity such as grading or fill into the  
18 waters of the U.S. that we identify here, they would  
19 need to get a permit from the Army Corps of Engineers  
20 authorized under the Clean Water Act. That is called  
21 a Section 4 permit. And associated with that they  
22 would need a water quality certification from  
23 Department of Health.

24 But as I said earlier, ultimately it's the  
25 Army Corps of Engineers' purview to make this

1 determination. So prior to construction, the HMP  
2 would submit our report and their project plans for  
3 their determination. That's the end of my testimony.

4 MR. TABATA: She is available for  
5 cross-examination.

6 CHAIRPERSON SCHEUER: Thank you very much,  
7 Ms. Burr.

8 City and County.

9 MR. PANG: The City has no questions.

10 CHAIRPERSON SCHEUER: Ms. Apuna.

11 MS. APUNA: No questions.

12 CHAIRPERSON SCHEUER: Mr. Yoshimori.

13 MR. YOSHIMORI: No questions, thank you.

14 CHAIRPERSON SCHEUER: Commissioners?  
15 Commissioner Chang.

16 COMMISSIONER CHANG: Thank you.

17 Thank you very much, Ms. Burr. I  
18 appreciate your testimony.

19 So I just want to clarify, you have made --  
20 well, you've made a preliminary determination of  
21 jurisdiction, but ultimately, your statement is that  
22 that's really the purview of the Army Corps of  
23 Engineers; is that correct?

24 THE WITNESS: Yes, that's correct.

25 COMMISSIONER CHANG: Has there been

1 preliminary consultation with the Army Corps of  
2 Engineers regarding this project?

3 THE WITNESS: I have not consulted with  
4 them. I don't know if anyone else has.

5 COMMISSIONER CHANG: So under the EIS that  
6 was prepared, the preliminary determination -- let me  
7 ask you this question.

8 So when the EIS was prepared, AECOS made a  
9 preliminary determination that there was -- what  
10 determination did you make? What preliminary  
11 determination did you make?

12 THE WITNESS: We, as published in the EIS,  
13 we made a determination that the seep channel and a  
14 portion of the incised channel would be considered to  
15 be waters of the U.S.

16 COMMISSIONER CHANG: And under the new  
17 rules, what would be the change of that preliminary  
18 determination, if any?

19 THE WITNESS: Only the very lower portion  
20 of the incised channel in the western drainageway and  
21 seep channels would be waters of the U.S. So the  
22 larger incised channel would no longer be waters of  
23 U.S., and the Poly Channel would also not be  
24 considered waters of the U.S.

25 COMMISSIONER CHANG: So -- I'm just trying



1 to see what impact, if any, did your preliminary  
2 determination have on the EIS. For example,  
3 Department of Health reviews, the City and County of  
4 Honolulu SMA. Were there any regulatory issues or  
5 changes that have been impacted by the preliminary  
6 determination of jurisdiction that either something  
7 wasn't considered or something was considered?

8 Do you understand the question I'm asking?

9 THE WITNESS: I do, but I'm not involved in  
10 the EIS process for this project, so I really don't  
11 know what comments have been made or not made.

12 COMMISSIONER CHANG: So you somewhat worked  
13 in a vacuum in the sense that you were just looking  
14 at jurisdictional determinations of the -- but you  
15 weren't part of the, I guess, the man -- the EIS  
16 management team that looked at impacts of your  
17 preliminary determination on other regulatory  
18 reviews?

19 THE WITNESS: That's correct. We were just  
20 hired by HHF to make this jurisdictional  
21 determination. And then they used our report to  
22 prepare the EIS.

23 COMMISSIONER CHANG: Have you read the EIS?

24 THE WITNESS: I have read some portions of  
25 it.

1                   COMMISSIONER CHANG: Do you know whether,  
2 based upon what you read, do you know whether the  
3 planners, HHF, relied upon your preliminary  
4 determination of jurisdictional determination to  
5 include or not include other regulatory agencies?  
6 Again, the SMA or Department of Ag.

7                   THE WITNESS: I do not know how HHF  
8 Planners used our information in the EIS.

9                   COMMISSIONER CHANG: You also mentioned  
10 that the Army Corps has recently adopted new rules  
11 regarding ephemeral streams.

12                   Is it your understanding that the rules  
13 that would apply when, if and when, Hawaiian Memorial  
14 Park proceeds, it is the rules that exist at that  
15 time, not at the time they submitted their EIS? It's  
16 when they submit their specific project?

17                   THE WITNESS: Correct, it's when they  
18 submit their information to the Army Corps to make  
19 the jurisdictional determination. The Army Corps  
20 will use the rules that are in existence at the time  
21 that that's done.

22                   COMMISSIONER CHANG: Okay. Thank you very  
23 much. I appreciate your testimony.

24                   CHAIRPERSON SCHEUER: Thank you,  
25 Commissioner Chang.

1           Are there any other questions from the  
2 Commissioners for Ms. Burr.

3           I don't believe I see any. Any redirect,  
4 Mr. Tabata?

5           MR. TABATA: Yes. Let me are try to ask a  
6 question or two.

7                               REDIRECT EXAMINATION

8 BY MR. TABATA:

9           Q       Ms. Burr, the determination or the  
10 preliminary determination that you made is that those  
11 waterways you pointed out are jurisdictional,  
12 correct?

13           A       Correct.

14           Q       And the ramification of that, of the  
15 eventual determination of that question will, if it's  
16 in the affirmative that it is jurisdictional, then  
17 the result of that would be we will need a permit  
18 from the Army Corps of Engineers; is that correct?

19           A       Correct, to place fill in the water, you  
20 will need a permit.

21           Q       Correct, if there is going to be any  
22 building in those areas?

23           A       Right.

24           Q       So that was the purpose for your report?

25           A       Correct.

1 Q Thank you.

2 I have no further questions.

3 CHAIRPERSON SCHEUER: I'm going to suggest  
4 we take one more break before we proceed on. We are  
5 at 3:01. We will reconvene at 3:11.

6 Who are your next witnesses?

7 MR. TABATA: Our next witness will be Todd  
8 Beiler at HMF-2, and his examination will be  
9 conducted by Ben Matsubara.

10 CHAIRPERSON SCHEUER: Let's reconvene at  
11 3:12.

12 (Recess taken.)

13 CHAIRPERSON SCHEUER: It's 3:12 and  
14 confirming for the record that we have Commissioners  
15 Okuda -- Cabral. We're missing Commissioner Cabral.  
16 We have Commissioners Okuda, Ohigashi, Aczon, Chang,  
17 Apuna -- excuse me, Giovanni -- haven't promoted you  
18 to Commissioner.

19 We're awaiting Commissioner Cabral, and we  
20 have our next witness in front of us as well.

21 MR. MATSUBARA: That's correct.

22 CHAIRPERSON SCHEUER: Welcome back, Mr.  
23 Matsubara. And Commissioner Cabral has joined us, so  
24 we have all eight of our Commissioners and  
25 Commissioner Wong who is with the staff.

1 I will swear you in and then you can begin  
2 on your direct testimony, Mr. Beiler.

3 Do you swear or affirm the testimony you're  
4 about to give is the truth?

5 THE WITNESS: I do, yes.

6 CHAIRPERSON SCHEUER: Please proceed, Ben.

7 MR. MATSUBARA: Thank you, Mr. Chairman.

8 TODD BEILER

9 Was called as a witness by and on behalf of the  
10 Petitioner, was sworn to tell the truth, was examined  
11 and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. MATSUBARA:

14 Q Would you state your name and business  
15 address, please?

16 A My name is Todd Beiler. I'm President and  
17 Owner of Censeo Av+Acoustics, located at 155 Hamakua  
18 Drive, Suite C in Kailua.

19 Q What is your area of expertise?

20 A Area of expertise is acoustical engineering  
21 and conducting and completing environmental noise  
22 assessment.

23 Q Now, you've previously been qualified as an  
24 expert before the Land Use Commission, have you not?

25 A That's correct, yes.

1           MR. MATSUBARA: Chair, I would like to have  
2 Mr. Beiler be qualified as an expert in acoustics and  
3 conducting and completing environmental noise  
4 assessments.

5           CHAIRPERSON SCHEUER: If I heard your  
6 witness correct, it's Mr. Beiler, so you would want  
7 to confirm him as an expert.

8           Any objection from the Parties?

9           MS. APUNA: No objection.

10          CHAIRPERSON SCHEUER: City?

11          MR. PANG: I'm sorry, no objection.

12          CHAIRPERSON SCHEUER: Intervenor?

13          MR. YOSHIMORI: No objection.

14          CHAIRPERSON SCHEUER: Commissioners? So  
15 confirmed. Thank you.

16          Please continue.

17          Q        (By Mr. Matsubara): Mr. Beiler, could you  
18 identify the potential noise impact to the area  
19 surrounding the Petition Area due to the project  
20 construction, the increase in vehicular traffic on  
21 nearby roads, and long-term operation of the future  
22 cemetery expansion?

23          A        Yes.

24          Q        Now, you've prepared written testimony  
25 addressing those points, have you not?

1           A       That is correct, yes.

2           Q       And that testimony has been marked and  
3 identified as Exhibit 40.

4                   Now, could I ask you to summarize Exhibit  
5 40, since the Commissioners have already been  
6 provided copies of that exhibit, so your summary  
7 should be sufficient.

8           A       Yes. I would like to share screen at some  
9 point. Not quite there yet.

10                   Censeo was retained by HHF Planners to  
11 conduct the noise study, evaluate noise impacts. We  
12 began our noise study by conducting noise  
13 measurements of the existing ambient environment.  
14 Those noise measurements included one long-term  
15 measurement -- actually it might be good to bring up  
16 that share screen.

17                   CHAIRPERSON SCHEUER: You should be  
18 authorized to do so.

19                   MR. MATSUBARA: The exhibit on share screen  
20 is also attached to Mr. Beiler's testimony TB  
21 Exhibit 8.

22                   THE WITNESS: I know it's hard to see a lot  
23 of information on here, so you can zoom in, but as I  
24 was mentioning, we conducted noise measurements at  
25 one long-term location right here, noted by L1

1 (indicating). At the Ocean View Gardens, we measured  
2 sound continuously for six days in the fall of 2017.

3 The results from that noise measurements  
4 were a day time average sound level of 54 dBA and a  
5 nighttime average sound level of 47.

6 We also conducted noise measurements,  
7 short-term measurements for about 20 minutes in  
8 duration at each of the locations in the graph shown  
9 by S1, S2, S3 and S4.

10 At those locations, the noisiest location  
11 was along Kamehameha Highway at S1 near the entrance  
12 to Hawaiian Memorial Park and that noise level, we  
13 measure 70 dBA at that location, the dominant noise  
14 source, of course, being the highway.

15 We measured at S2 Ocean View Gardens  
16 measured sound level of 48 dBA. The next phase of  
17 our noise study included predictions of future sound  
18 levels due to construction noise activity.

19 We predicted sound levels at seven  
20 locations. At these seven locations we predicted  
21 future sound levels due to construction activity.  
22 For the purposes of the noise study, we divided the  
23 project construction phases into two main phases,  
24 earthwork phase and a post earthwork phase.

25 The earthwork phase is certainly the



1    noisiest of those phases, and for our analysis we  
2    assumed three breakers, three tractors, three  
3    scrapers and three haulers or trucks were operating  
4    simultaneously.

5               For the post earthwork phase, we assumed  
6    two backhoes and one paver was operating  
7    simultaneously.

8               Looking at the worst case scenario for  
9    noise transmission during that earthwork phase, at  
10   some of the residences that are farther away at 470  
11   feet, we're predicting a sound level of 74 dBA. At  
12   the closest distance at only 85 feet from the  
13   earthwork boundary we're predicting a sound level of  
14   91 dBA.

15              Noise is a function of distance. And a  
16   rule of thumb that we often use is you double the  
17   distance, the sound level will drop 60 feet. So if  
18   you're at 100 feet, you go to 200 feet, it drops 60  
19   feet. You go up from 200 feet to 400 feet, another  
20   60 reduction of sound level.

21              And a ten-decibel reduction in sound level  
22   is considered to be about half as loud to the average  
23   listener.

24              We also assessed the potential of  
25   construction induced vibration into the ground, and

1 based on the activities the earthwork phase with  
2 hydraulic rams, we believe that construction  
3 vibration will be felt and possibly annoying at  
4 sometimes.

5           However, when it comes to the risk of  
6 structural damage, we would consider, if that  
7 activity was to happen within 50 feet, 50 feet or  
8 less, then there could be a risk of structural  
9 damage.

10           If that activity was happening within  
11 50 feet to 100 feet of the structure, then that --  
12 care should be taken and things like monitoring are  
13 often recommended.

14           However, at the 150-foot buffer that we  
15 have for this project, we believe that the risk of  
16 vibration causing any damage is outside the normal  
17 zone of risk.

18           Our noise study also included some  
19 recommendations for reducing the noise impact, and  
20 these include scheduling of the construction  
21 activities to be during non-sleeping hours or in the  
22 daytime.

23           Use of mufflers on engines and motorized  
24 equipment, making sure the equipment is well  
25 balanced.

1           We also recommend using adjustable back-up  
2 alarms on some of the vehicles which, that basically  
3 assess -- you know, adjustable back-up alarm can be  
4 adjusted based on the ambient noise environment.

5           We recommend that the staging area for  
6 construction be located as far away from the homes as  
7 possible, and if necessary, temporary barriers could  
8 be used around noisy activities to block the line of  
9 site between the noise source and the noise receiver,  
10 very helpful.

11           That's a summary of my written testimony.

12           Q     Thank you, Mr. Beiler.

13           Mr. Beiler is available for  
14 cross-examination, Mr. Chairman.

15           CHAIRPERSON SCHEUER: Thank you very much.  
16 City and County.

17   CROSS-EXAMINATION

18 BY MR. PANG:

19           Q     Thank you, Mr. Beiler. This is Duane Pang,  
20 City and County of Honolulu.

21           In your written testimony on page 3, you  
22 indicated that you used the FDA construction  
23 guidelines.

24           A     That's correct, yes.

25           Q     And at least on the exhibit that you

1 provided, during construction the noise levels all  
2 met the FDA guidelines?

3 A Yeah. I guess I would say it this way.  
4 The sound source data that is included with the FDA  
5 guidelines was used as the source, noise source sound  
6 levels in our noise assessment.

7 Q And you also indicated that the State DOH  
8 does not have those quantifying noise levels, is that  
9 correct?

10 A That's correct, yeah.

11 Q And it would be the State Department of  
12 Health to regulate the noise during construction?

13 A That's correct.

14 Q I have nothing further.

15 CHAIRPERSON SCHEUER: Thank you very much.  
16 Office of Planning?

17 MS. APUNA: No questions.

18 CHAIRPERSON SCHEUER: Thank you very much,  
19 Ms. Apuna.

20 Mr. Yoshimori, Intervenor?

21 CROSS-EXAMINATION

22 BY MR. YOSHIMORI:

23 Q My name is Grant Yoshimori, Intervenor. I  
24 just had a couple questions.

25 You know, the tables that you were showing

1 of the estimated noise levels during construction, is  
2 that with or without the mitigations that you had  
3 mentioned?

4 A That is without any mitigation. I mean,  
5 some of those are -- you know, also common practice  
6 to have a muffler on an engine.

7 Q I don't recall seeing a table that had, I  
8 guess, with mitigation. Is there such a table?

9 A No. We did not do predictions of sound  
10 levels with mitigation. We just did kind of a  
11 worse-case scenario without mitigation.

12 Q What is the expected duration of those  
13 sound levels that you had put during the earthwork  
14 phase?

15 A I believe there -- someone might be better  
16 to answer that question as far as, you know, through  
17 the earthwork phase.

18 I do not know the answer how long that  
19 earthwork phase might last. However, I will say that  
20 the predictions were based on the worse-case scenario  
21 of the construction vehicles being as close as  
22 possible to the homes, so it would be at the edge of  
23 the earthwork boundary.

24 So construction activities that are further  
25 away from the edge of the boundary would be less than

1 those predictions.

2 Q And at what level, what decibel level --  
3 I'm assuming that's what dBA stands for -- at what  
4 decibel level is it considered harmful to hearing?

5 A Well, it depends on the duration of the  
6 event. So, you know, rock concerts can be 100  
7 decibel, 105 decibel at the sound mix position.

8 Other activities certainly can cause  
9 hearing damage but, you know, sort of the medical  
10 aspect of hearing loss is outside my area of  
11 expertise.

12 Q So you don't know what the recommended  
13 dangerous level would be?

14 I was just Googling and I saw 85 percent or  
15 85 decibels.

16 A There are some guidelines when it comes to  
17 workplace noise so, for example, OSHA has some  
18 guidelines for the work environment, and those  
19 regulations state that for eight hours of continuous  
20 sound level at 85 dBA, they recommend starting some  
21 kind of hearing conservation program or monitoring.

22 At a sound level of 90 dBA for an eight  
23 hour continuous day as an average exposure, that  
24 hearing protection is recommended.

25 Q There were a couple, I think particularly

1 around my house, that was over that threshold, and  
2 I'm assuming it's going to be during construction.

3 Should I be worried?

4 A I don't believe -- I don't know if I would  
5 be the right one to answer that as far as your worry.

6 CHAIRPERSON SCHEUER: Mr. Matsubara, is  
7 there another witness who would be able to answer the  
8 Intervenor's question?

9 MR. MATSUBARA: In terms of the  
10 construction schedule and duration of various phases  
11 of construction, is that what the question you're  
12 interested in?

13 MR. YOSHIMORI: Yes. Well, how long -- I  
14 was assuming that the -- I guess how long  
15 construction is going to be and what the estimated  
16 decibel levels are going to be, and if it's going to  
17 be -- if I will see that in my home, and if it's  
18 dangerous to me.

19 MR. MATSUBARA: He can answer what the  
20 noise level will be, and I would have to check with  
21 my civil engineer to determine the phase of  
22 construction and how long the grading will take and  
23 excavation will take.

24 So I would need to have a conversation with  
25 the civil engineer in that regard. But if there's a

1 way of telling you how long the excavation will take,  
2 I can provide that.

3 CHAIRPERSON SCHEUER: Perhaps not today,  
4 but when we next gather.

5 MR. MATSUBARA: I mean, the DOH, the State  
6 issues the noise permit, DOH does. And the noise  
7 permit doesn't limit the level of sound, it just  
8 determines when it can occur.

9 So you get the permit and you're told you  
10 can only operate within certain time periods, without  
11 a limitation on the decibels, assuming that it could  
12 be on and off, et cetera, so on.

13 So that's another factor to consider in  
14 that there is not a limitation on the State permit,  
15 just as to when the operations can occur.

16 CHAIRPERSON SCHEUER: You can continue with  
17 your cross, Mr. Yoshimori.

18 MR. YOSHIMORI: Actually, that is my last  
19 question. Thank you, Mr. Beiler. Thank you, Chair.

20 CHAIRPERSON SCHEUER: Thank you very much.  
21 Commissioners? Commissioner Giovanni.

22 COMMISSIONER GIOVANNI: Thank you, Chair.

23 So I would like to disagree with you, Mr.  
24 Tabata, (sid) about the noise permit. To my  
25 experience, it does include a dBA level that is



1 allowable during periods of construction and during  
2 periods of non-construction, and it does relate to  
3 times of day as well.

4           So I ask that you followup and report back  
5 to the Commission with more detail on that, if you  
6 don't mind.

7           MR. MATSUBARA: I will. I was just  
8 reviewing -- taking it from the testimony provided on  
9 page 5 relating to mitigation measures for  
10 construction of noise. And I was relying on the  
11 information provided there to answer your question.

12           Unless, Mr. Beiler, you could correct me  
13 and answer the question Commissioner Giovanni has.

14           THE WITNESS: It's been my experience that,  
15 you know, the noise limits that are suggested in the  
16 State noise regulations, are for -- often referred to  
17 for stationary mechanical equipment or similar  
18 devices.

19           So it wouldn't apply to your car noise or  
20 your neighbors' stereo, or something like that, just  
21 for stationary mechanical -- (indecipherable).

22           It's been my experience as well, working  
23 with the DOH on projects, that measurements -- I  
24 guess, part of the reason for a construction noise  
25 permit basically says we're going to make more noise

1 than what the State noise regulation is. Therefore,  
2 we're asking for a permit to do that.

3 And it's been my experience as well that  
4 the limitation is more on the hours of when you can  
5 exceed that noise limit versus what's the maximum  
6 level.

7 COMMISSIONER GIOVANNI: To my experience,  
8 sir, it has been both.

9 There is a normal noise limit for the  
10 operation of an industrial site, but during periods  
11 of construction, you can get a permit for exceeding  
12 those limits for construction periods of time, just  
13 as you say; but I am familiar with permits that do  
14 have some upper limit as well even during those  
15 periods, so I suggest that you just kind of follow up  
16 on that and report back to us on that.

17 Along the same lines, you refer to Mr. Pang  
18 in his question about who would be responsible for  
19 assuring compliance. And that you implied that it  
20 would be regulated by the Department of Health.

21 And I wonder if you could expand a little  
22 bit of what you mean by "regulated". And let me tell  
23 you what I mean.

24 Noise compliance, or compliance with noise  
25 permits many times is done on a response to a

1 complaint basis as opposed to continuous monitoring  
2 and triggering of noncompliance.

3           So, for example, in my experience if there  
4 was a Department of Health, a complaint to the  
5 Department of Health, for example, if somebody lived  
6 in the neighborhood and was concerned about the level  
7 of noise, they could file a complaint and then the  
8 DOH would respond to that complaint and make a  
9 determination.

10           But that's different than just regulating  
11 it on a proactive basis.

12           Is that your perspective as well, or is  
13 yours different?

14           THE WITNESS: Is that question for me?

15           COMMISSIONER GIOVANNI: It's for you, yes.

16           THE WITNESS: Exactly, I've had the exact  
17 same experiences.

18           COMMISSIONER GIOVANNI: Thank you. No  
19 further questions.

20           (Indecipherable.)

21           CHAIRPERSON SCHEUER: I'm sorry, I think I  
22 was speaking over Mr. Matsubara.

23           MR. MATSUBARA: I just wanted to inform  
24 Commissioner Giovanni that I will work with Mr.  
25 Beiler to address the questions he had raised a few

1 minutes ago.

2 CHAIRPERSON SCHEUER: Thank you very much.  
3 Sorry to interrupt.

4 Commissioners? Commissioner Chang followed  
5 by Commissioner Okuda.

6 COMMISSIONER CHANG: Thank you, Chair.  
7 Mr. Beiler, is that correct, Beiler?

8 THE WITNESS: That's correct, yes.

9 COMMISSIONER CHANG: I just have a few  
10 questions.

11 Is there contemplation of nighttime  
12 construction work that would require noise permit, do  
13 you know?

14 THE WITNESS: Not that I'm aware of.

15 COMMISSIONER CHANG: And your analysis --  
16 what kind of construction equipment was that based  
17 upon?

18 THE WITNESS: So that was based on -- I had  
19 it listed here -- want to make sure I get it right --  
20 during that noisy phase, a total of 12 vehicles  
21 operating simultaneously. So we have three breakers,  
22 three tractors, three scrapers, and then three truck  
23 haulers all operating at the same time.

24 COMMISSIONER CHANG: And do you know  
25 whether -- in one particular area of the proposed

1 project, they're going to have to cut approximately  
2 100 feet off that slope.

3 Do you know what kind of equipment they're  
4 going to use for that?

5 THE WITNESS: My understanding is that they  
6 would be using breakers, hydraulic ramps to do a  
7 portion of that construction.

8 COMMISSIONER CHANG: I'm not really  
9 familiar with the construction operation, but a  
10 hydraulic ramp, now is that going to cause any  
11 vibration?

12 THE WITNESS: Yes, it will cause vibration  
13 as impact to the ground, to the rock to break it up.

14 COMMISSIONER CHANG: Do you know whether  
15 that vibration will cause -- or what's the area of  
16 potential affect with that vibration?

17 THE WITNESS: So we would consider  
18 structures that are within 50 feet of that hydraulic  
19 ramp activity to be at a risk of structural damage,  
20 and so a close distance basically where that really  
21 becomes an issue for structural damage.

22 So we're at a much farther distance than  
23 50 feet from the homes or any structures.

24 COMMISSIONER CHANG: Is there a potential  
25 for any -- I don't have a map before me, so I can't

1 tell the distance between the proposed construction  
2 and -- what about any of the existing, for example,  
3 cemetery plots? Any of the subsurface features, the  
4 coffins or anything, is there any potential of that  
5 by the vibration?

6 THE WITNESS: We did not assess that as  
7 part of our consideration. You know, again, at close  
8 range, you know, I guess it could be a consideration,  
9 but, you know, I don't know exactly where those plots  
10 are going to be done and how -- maybe a better  
11 question for someone --

12 COMMISSIONER CHANG: And it's not so much  
13 new plots, but it's existing plots or existing  
14 features.

15 I know that there is always concerns for  
16 subsurface impacts to subsurface, especially  
17 potential to -- and I'm not saying there's so many  
18 burials, native Hawaiian burials in this place, but  
19 we are always concerned about vibrations that may  
20 cause impact to subsurface, whether features or  
21 remains.

22 So it might be helpful if you did take a  
23 look at, you know, what would be the zone of impacts  
24 on that vibration, even to any of the habitats, or  
25 any of the existing structures, because I have to

1 believe removal of that much material, and they're  
2 not proposing -- I mean they're only proposing to  
3 just use the equipment to excavate or to remove that  
4 slope.

5           You're not aware of them using any other  
6 kind of method to remove the slope?

7           THE WITNESS: That's correct, yeah. Yeah,  
8 that's correct. I'm not aware of any other way -- I  
9 assume you mean by blasting or anything like that.  
10 I'm not aware of that.

11           COMMISSIONER CHANG: Maybe we'll just  
12 ask -- I think Mr. Morford will come back up. I  
13 don't know what other witnesses have the expertise to  
14 confirm that. No one has talked about that. But,  
15 again, removal of that steep slope will probably  
16 require some kind of -- I don't know if existing  
17 heavy equipment is sufficient to do that.

18           And you had specific mitigation measures  
19 that you listed in your testimony, is that correct?

20           THE WITNESS: That's correct, conceptual  
21 recommendation.

22           COMMISSIONER CHANG: Do you stand by those  
23 recommendations?

24           THE WITNESS: Yes.

25           COMMISSIONER CHANG: Would it be fair to

1 say you would recommend that these mitigations be  
2 incorporated into any kind of a Land Use Commission  
3 condition, or are they already incorporated in other  
4 regulatory agencies? For example, Department of  
5 Planning or Department of Health?

6 So your proposed mitigations, are they  
7 covered by any other existing agency?

8 THE WITNESS: I would say that the  
9 recommendation for the time of construction is  
10 certainly already an item that is covered by the  
11 Department of Health. Others are also just standard  
12 practice. You know, you don't want a machine that's  
13 imbalanced out there doing that work, because it's  
14 not going to run very effectively. But, you know,  
15 machines that are unbalanced and produce more noise.

16 COMMISSIONER CHANG: Are there any specific  
17 conditions that are not covered by a regulatory  
18 approval or best management practices?

19 THE WITNESS: You know, I don't think that  
20 there's anything that would cover the location of  
21 staging areas or use of temporary areas.

22 I mean, some of the requirements -- this  
23 might go to what we were talking about before -- it  
24 comes to noise permits can be, you know, incorporated  
25 as something to consider. When it comes to



1 construction activities, a civil engineer may be  
2 better as far as the means and methods of the  
3 construction.

4 COMMISSIONER CHANG: All right. Thank you  
5 very much. I have no other questions.

6 CHAIRPERSON SCHEUER: Thank you very much,  
7 Commissioner Chang.

8 Commissioner Okuda.

9 COMMISSIONER OKUDA: Thank you very much,  
10 Mr. Chair.

11 Is it Beiler, Dr. Beiler?

12 THE WITNESS: Mr. Beiler.

13 COMMISSIONER OKUDA: Thank you very much.

14 This is more a technical measurement  
15 question. Is it true or not true that the Department  
16 of Health's decibel standard is based on a weighted  
17 ANSI, A-N-S-I, standard?

18 THE WITNESS: Yes, as far as the A weighted  
19 decibels using that -- there's an A -- I understand  
20 what you mean by the ANSI organization. The noise  
21 levels are -- that's right, the noise limits in the  
22 State regulation are A weighted.

23 COMMISSIONER OKUDA: Okay. And so there's  
24 different ANSI weights, standards A or, for example,  
25 B, correct?

1 THE WITNESS: Yes.

2 COMMISSIONER OKUDA: Your report and your  
3 opinions, did it use the same weighted standard that  
4 the Department of Health uses with respect to its  
5 decibel requirements or limitations?

6 THE WITNESS: Yes.

7 COMMISSIONER OKUDA: Okay, thank you.

8 I have no more questions for the witness,  
9 Mr. Chair.

10 CHAIRPERSON SCHEUER: Further questions  
11 from the Commissioners for Mr. Beiler?

12 I guess, if I may, Mr. Beiler. What I'm --  
13 tell me if this is outside your area.

14 What I heard from the Intervenor's  
15 questions, and we don't know yet how, whether or not  
16 this dBA is approved or what conditions might be  
17 proposed and agreed to.

18 You mentioned something in your testimony  
19 about certainly there will be levels at which noise  
20 and vibrations can be irritating. And so assuming  
21 for a moment the District Boundary Amendment is  
22 granted and the construction begins, are there also  
23 recommendations you can make on the process by which  
24 neighbors can have certain things available to them,  
25 like who to call when they start to like -- like,

1 okay, construction starts, who's going to inform  
2 them? How long it's going to go on?

3 I know the house across from me is being  
4 renovated. It's not knowing when they're showing up.  
5 Not knowing how long they're going to last, in  
6 addition to noise and vibration and all the other  
7 stuff going on.

8 Are there some best practices that can be  
9 put in place, not just in terms of putting mufflers  
10 on things and limiting vehicles, but on helping the  
11 neighbors, which I don't doubt for a second that this  
12 Petitioner wants to be a good neighbor. They  
13 wouldn't have gone through this DBA process a second  
14 time if they didn't have some concerns with  
15 responding to the neighbors.

16 What are some things that be can be done?

17 THE WITNESS: Certainly community outreach  
18 by the contractor can go a long way, just like you  
19 mentioned. Just knowing when the activities are  
20 happening can reduce the stress for the noise, at  
21 least you know when it's going to be there and when  
22 it's not going to be there. That certainly can be a  
23 very useful tool that you see contractors when  
24 they're doing their project that is very close to  
25 other residents. So it's going to happen all over

1 Honolulu when there is a concern.

2 So the method of, say, for example, to  
3 bring the sound level, we predicted a sound level of  
4 91 at the worse-case scenario, reducing down to below  
5 a 90-decibel sound level would be fairly easy when we  
6 block the line of site with the sound barrier, even  
7 if it's a temporary sound barrier. If we don't block  
8 the line of site, we don't get any attenuation. As  
9 soon as we block the line of site, we can see where  
10 the noise is happening, where the receiver is, almost  
11 immediately get a five-decibel reduction.

12 So 91 dBA can become 86 dBA by a temporary  
13 barrier around that activity.

14 CHAIRPERSON SCHEUER: Is there ongoing  
15 monitoring particularly in terms of vibration that is  
16 possible?

17 THE WITNESS: Yes. Construction noise and  
18 vibration monitoring is possible.

19 CHAIRPERSON SCHEUER: I have nothing  
20 further.

21 Commissioners, do you have anything? Any  
22 redirect, Mr. Matsubara? You're muted.

23 MR. MATSUBARA: Thank you.

24 -o0o-

25 REDIRECT EXAMINATION

1 BY MR. MATSUBARA:

2 Q Mr. Beiler, can you go over some of the  
3 mitigation measures you discuss in your report?

4 A Yes.

5 Q And you also list after that noise control  
6 methods which you are recommending.

7 A Yes. Let me get to that page here. Sorry,  
8 just going to grab some more light so I can read.

9 We have talked about scheduling and using  
10 exhaust mufflers, also using equipment that is the  
11 smallest size that can still -- the lowest power that  
12 can still do the work as recommended.

13 We suggested the quieter backup alarms for  
14 that kind of equipment. Insulating or enclosing some  
15 of the motorized pieces where that is feasible can be  
16 done.

17 Using electric equipment is often quieter  
18 than using pneumatic equipment. Rubber chucks and  
19 jackhammers can be helpful in mitigating that kind of  
20 noise. Using tools that are sharpened,  
21 well-balanced, as we talked about before.

22 And staging areas, again, to maximize that  
23 greatest distance between staging area and the homes  
24 and, again, the temporary barriers around noisy  
25 activities.

1           Q       Thank you, Mr. Beiler. I have no further  
2 questions.

3                   CHAIRPERSON SCHEUER: Thank you, Mr.  
4 Beiler, you're excused. And Mr. Matsubara -- sorry,  
5 Commissioner Chang. Come in late again, okay.

6                   COMMISSIONER CHANG: No, no, no. I just  
7 wanted to followup on the redirect.

8                   So, Mr. Beiler, in your listing of the  
9 proposed mitigation measures, is there an opportunity  
10 to coordinate with the neighbors on the mitigation  
11 measures that were not included? For example, my  
12 parents -- the city recently did a project right in  
13 front of their yard laying down a sewer/drainage  
14 alteration, or put in a new pipe. And so they  
15 actually offered some of the homes that were directly  
16 impacted, because of dust or noise, air-conditioning.

17                   So is that always a possibility as well,  
18 that you can discuss these mitigation measures based  
19 upon the potential impact?

20                   THE WITNESS: Well, obviously that wouldn't  
21 reduce sound levels to outside the home, but if a  
22 home is naturally ventilated and you close-up the  
23 windows, it certainly would reduce sound levels to  
24 the inside of the home; that's correct.

25                   COMMISSIONER CHANG: I would suspect those

1 that are closer to the sound -- I mean, as you said,  
2 the farther away the less dBA, but the closer -- and  
3 I think the Intervenor has mentioned his home is  
4 really right nearby.

5 So having a special condition that as you  
6 monitor, should impacts be greater than what may be  
7 already provided, but there's an opportunity to  
8 provide alternative, maybe customized mitigation  
9 measures for special circumstances?

10 THE WITNESS: Yeah, that's correct. Yeah.  
11 I mean we -- you know, the 150-foot buffer is a good  
12 distance that maybe other construction projects  
13 around town might not be able to afford but, yeah,  
14 your point is well taken.

15 COMMISSIONER CHANG: All right, very good.  
16 Thank you.

17 CHAIRPERSON SCHEUER: Commissioner  
18 Ohigashi.

19 COMMISSIONER OHIGASHI: Yeah, I just have a  
20 question. I'm just curious.

21 How effective is the Department of Health  
22 in enforcing noise complaints in regard to  
23 construction activity in projects that you've been  
24 involved in?

25 THE WITNESS: Yeah, so I think that's a

1 part of the noise permit process. So as the  
2 contractor is applying to do the construction  
3 activities, they list out all the kind of equipment  
4 that they're going to be using, where and what the  
5 process is, and it's up to the DOH to decide what, if  
6 any limitations, that they want to place on that  
7 issuance of that noise permit to the contractor.

8 We have seen it range quite a bit. You  
9 know, a lot of times it's based on the practical  
10 nature of the specific scenario. In this case sound  
11 barriers are the frequent technique to build up of  
12 plywood wall, if you will.

13 COMMISSIONER OHIGASHI: My question goes  
14 more to you've got your restrictions; you've got your  
15 permit. You violate them. What does the DOH do?

16 THE WITNESS: The DOH, if they are imposing  
17 a noise limit, they certainly can come out and do  
18 measurements. They have a staff available to do  
19 measurements. If a neighbor complains, then they can  
20 go out and do a measurement during the construction  
21 activities.

22 COMMISSIONER OHIGASHI: Have you ever had  
23 it occur to you in your practice?

24 THE WITNESS: I would say that we have  
25 certainly seen that done for measurements of



1 stationary mechanical equipment, but I haven't seen  
2 that done during construction.

3 COMMISSIONER OHIGASHI: How many  
4 inspectors, if you know, do they have?

5 THE WITNESS: I'm not sure how many that  
6 they have on staff.

7 COMMISSIONER OHIGASHI: I only bring this  
8 up because long time ago I was on the Liquor  
9 Commission on Maui. And we conducted noise studies  
10 on several establishments. And we found that  
11 Department of Health had limited resources, unable to  
12 enforce its own regulations, and we had difficult  
13 time in doing so.

14 I can't imagine during this pandemic where  
15 the Department of Health has increased its abilities  
16 to enforce it. So why I'm bringing this up is that  
17 really the question is, is that, how do we make sure  
18 that in this process -- how do we make sure that  
19 noise regulations are adhered to by the contractor  
20 and make sure that the Department of Health ensures  
21 the enforcement of any condition that we may put on  
22 it?

23 That's all I'm curious about. I don't know  
24 if you can answer that, but that's a rhetorical  
25 question.

1           CHAIRPERSON SCHEUER: Commissioner, you  
2 dropped off the very end.

3           COMMISSIONER OHIGASHI: Sorry. That's a  
4 question that I'm -- I ran out of breath -- that's a  
5 question that I have in my mind. I'm not sure if he  
6 can answer that question.

7           CHAIRPERSON SCHEUER: And I see you,  
8 Commissioner Aczon, I see you as well.

9           But, Mr. Beiler, do you have a response?

10          THE WITNESS: No, no response.

11          CHAIRPERSON SCHEUER: Commissioner Aczon.

12          VICE CHAIR ACZON: Just respond to  
13 Commissioner Ohigashi's question.

14                 Based on my experience, and during my  
15 construction days, DOH can shutdown the project if  
16 they are aren't complying to the noise.

17                 And I tend to agree with Commissioner  
18 Giovanni that besides the time of the construction  
19 there is also a noise limit on what -- address noise  
20 made to the project. And the process is you call DOH  
21 for the noise level. Then they send out inspector  
22 with a monitoring device, and if you exceed that,  
23 they can shutdown the project.

24                 And also it's based on the construction,  
25 DPP is the agency to call. So just, that is just

1 based on my experience. Maybe it's changed so...

2 CHAIRPERSON SCHEUER: Thank you,  
3 Commissioner Aczon.

4 Mr. Matsubara, do you have any further  
5 redirect being as we continued to move on?

6 MR. MATSUBARA: No, Mr. Chairman, no  
7 redirect.

8 CHAIRPERSON SCHEUER: Mr. Beiler, thank  
9 you. You're now officially excused. And we can move  
10 on with the Petitioner's -- who's next on your list,  
11 Mr. Matsubara?

12 MR. MATSUBARA: Matt Nakamoto, who is our  
13 traffic engineer.

14 CHAIRPERSON SCHEUER: And how long do you  
15 expect on his direct?

16 MR. MATSUBARA: You know, this is -- I may  
17 be mistaken, this is one project where traffic isn't  
18 a major issue or problem. Of course, I've been  
19 proven wrong before, but in this particular case it's  
20 pretty copacetic.

21 CHAIRPERSON SCHEUER: Let's go ahead with  
22 the direct, if that's okay with the Commissioners.

23 I will swear you in.

24 Do you swear or affirm the testimony you're  
25 about to give is the truth?

1 THE WITNESS: I do.

2 CHAIRPERSON SCHEUER: Please proceed, Mr.  
3 Matsubara.

4 MATT NAKAMOTO

5 Was called as a witness by and on behalf of the  
6 Petitioner, was sworn to tell the truth, was examined  
7 and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. MATSUBARA:

10 Q Would you state your name and business  
11 address, please?

12 A Yes. My name is Matt Nakamoto. Business  
13 address is 521 Sumner Street -- sorry, I'm  
14 blanking -- 96817, Suite 521, sorry -- 501, sorry.

15 Q Everybody's nervous, Matt, so don't worry.  
16 And your area of expertise, Matt?

17 A My area is transportation engineering.

18 Q And you've been previously qualified as an  
19 expert in traffic engineering before the Land Use  
20 Commission, have you not?

21 A That is correct.

22 MR. MATSUBARA: I would like to have Mr.  
23 Nakamoto certified as an expert for purposes of this  
24 docket, Mr. Chair.

25 CHAIRPERSON SCHEUER: Are there any

1 objections from the parties?

2 MR. PANG: City has no objection.

3 MS. APUNA: No objection from the State.

4 MR. YOSHIMORI: Intervenors have no  
5 objection.

6 CHAIRPERSON SCHEUER: Commissioners?

7 Okay, it's done. Proceed.

8 Q (By Mr. Matsubara): Could you briefly  
9 describe the purpose of your retention, Matt?

10 A Yes, I was retained to do transportation  
11 impact analysis report of the site.

12 Q And you prepared a written report and  
13 testimony regarding your assignment?

14 A That's correct.

15 Q And that's been marked as Exhibit 41, and  
16 it's been filed and distributed to the Commission.

17 So I ask you at this time if you could  
18 summarize your testimony, please.

19 A Okay. So we conducted the field  
20 observations and data collection at the two project  
21 driveways and the intersections of Kamehameha Highway  
22 across from Halekou Road and Mahinui Road on Tuesday,  
23 September 26th, and Saturday 30th, 2017.

24 We counted the weekday a.m., p.m. and  
25 Saturday peak hours of traffic.

1           Four distinct users are currently  
2 contributing to the traffic that is generated by the  
3 site. There is the HMP and HMP staff for funerals or  
4 burial site visitation. The employees of the  
5 Hawaiian Memorial Park mortuary. The Hawaii State  
6 Veterans Cemetery staff and visitors, as well as  
7 nearby residents walking for exercise within the  
8 site.

9           The combination of all of these users  
10 generates 106, 112 and 210 vehicles per hour during  
11 a.m., p.m. and weekend peak hours of traffic  
12 respectfully. This includes entering and exiting  
13 vehicles combined.

14           During our observations the traffic  
15 operated relatively smoothly at the project  
16 intersections and no major regional issues.

17           Although analytically there is some level  
18 of service, E and F for the minor improvements as is  
19 typical in major roadways that have minor approaches  
20 that are unsignalized. At Halekou Road intersection,  
21 the drivers were able to take refuge within the wide  
22 median after completing a left-turn maneuver.

23           Gap in the flow of traffic both upstream  
24 and downstream also occurred because there are  
25 traffic signals at other intersections.

1           I'm going to talk about our future  
2 projections. We predicted out to the year 2040 with  
3 a growth rate of 0.4 percent per year, so an  
4 aggregate it equates to approximately ten percent  
5 growth between the years 2017, when we did our field  
6 operations and data collection, and the year 2040  
7 which is like a long-term horizon year.

8           And so when you add that additional  
9 traffic, operations are anticipated to be relatively  
10 similar to existing conditions.

11           The project itself, as you may be aware,  
12 the site is going to increase the cemetery use by  
13 28 -- around 28 acres, which is anticipated to  
14 generate 25, 27 and 71 vehicles per hour during a.m.,  
15 p.m. and Saturday peak hours of traffic. On average  
16 this represents 29 percent in site-generated traffic,  
17 which is, this is a little bit generous or  
18 conservative just given all of the different uses  
19 that we stated thus far that are currently  
20 contributing to the traffic on-site.

21           Just to put this in perspective, it is  
22 anticipated roughly nine vehicles per hour in either  
23 direction would make their way to and from the more  
24 busy intersections such as like Likelike Highway and  
25 Kamehameha Highway intersection, where the total

1 volume is actually 4500 to 5000 vehicles per hour.  
2 So therefore, the increase in overall traffic on a  
3 regional level would be negligible, like at that  
4 intersection that I just mentioned, it would get  
5 about 0.2 percent at that.

6           During the Saturday -- because the mortuary  
7 will generate more traffic due to funeral operations,  
8 that would increase to only about 20 vehicles per  
9 hour in any direction, so it's still actually not  
10 that heavy, closer to 4500 to 5000 vehicles per hour  
11 at that intersection.

12           We also anticipated that even less traffic  
13 would make its way down to the Pali Highway,  
14 Kamehameha Highway, Kalaniana'ole Highway  
15 intersections.

16           So because -- I'll talk about the  
17 recommendations within the report. I want to note  
18 that the State Department of Transportation at the  
19 time we prepared our study was evaluating the traffic  
20 signal warrant study at the Halekou Street and the  
21 Kamehameha Highway intersection at the time, so  
22 therefore, our traffic study actually just studied it  
23 both ways, with and without a traffic signal, leaving  
24 it to the discretion of DOT as to what actually does  
25 happen there.



1           And so with the traffic signal, if it were  
2 to be installed, then the operations at Halekou and  
3 Hawaiian Memorial Park Driveway 2 and Kamehameha  
4 Highway intersection would improve to level service E  
5 (indecipherable).

6           Q       Excuse me, Matt, could I ask you to slow  
7 down a little bit?

8           A       So in addition to considering the traffic  
9 signal at the Halekou Road intersection, we also did  
10 recommend restriping at each of the project driveways  
11 to provide a shared left-turn through lane, and a  
12 dedicated right-turn lane to improve the traffic  
13 flow.

14                 So in their February 12th, 2020 letter  
15 referenced as Petitioner's Exhibit 58, Hawaii  
16 Department of Transportation stated that the  
17 project's contribution to traffic at the Halekou  
18 Street, Kamehameha intersection and associated pro  
19 rata share of the traffic signal if it were  
20 constructed would be negligible, and therefore, no  
21 pro rata share would be required.

22                 In that letter also -- a previous letter  
23 actually, sorry -- they also requested that in  
24 addition to the striping changes that we recommended,  
25 that they also -- Petitioner also provide for

1 appropriate traffic control plans that in the event  
2 that some activity within HMP and/or areas contained  
3 within its boundaries may cause traffic issues at the  
4 access driveways.

5 And that will conclude my testimony.

6 CHAIRPERSON SCHEUER: Any further direct?

7 MR. MATSUBARA: No further direct.

8 Mr. Nakamoto is available for  
9 cross-examination.

10 CHAIRPERSON SCHEUER: Beginning with the  
11 County.

12 CROSS-EXAMINATION

13 BY MR. PANG:

14 Q Mr. Nakamoto, your written testimony on  
15 page 3, you talk about future traffic conditions and  
16 impacts. And the second paragraph in the second  
17 sentence says: The project is forecast to generate  
18 approximately only 25, 27 and 71 additional trips.

19 Is that 25, 27 and 71 in addition as more  
20 than what is currently being done?

21 A That is correct. In addition to the  
22 existing traffic that is coming in and out of the two  
23 project driveways, this additional traffic per hour  
24 would be added.

25 Q So in 2040 there would be 25, 27 and 71

1 additional trips?

2 A That is correct. And this is a combination  
3 of the entering and exiting traffic across two  
4 driveways.

5 Q No further questions. Thank you very much,  
6 Mr. Chair.

7 CHAIRPERSON SCHEUER: Thank you, very much.  
8 Ms. Apuna?

9 MS. APUNA: No questions.

10 CHAIRPERSON SCHEUER: Mr. Yoshimori for Hui  
11 o Pikoiloa.

12 MR. YOSHIMORI: No questions. Thank you.

13 CHAIRPERSON SCHEUER: Commissioners?  
14 Commissioner Okuda.

15 COMMISSIONER OKUDA: Thank you, Mr. Chair.

16 Mr. Nakamoto, as part of your retention  
17 with respect to this project, were you asked to  
18 review at any time traffic being generated during  
19 construction?

20 THE WITNESS: I was not. I can go further.  
21 That is typically done at a later stage.

22 Construction traffic impacts are better known at a  
23 point when we are getting closer to design and having  
24 a contractor, because we won't know what the  
25 contractor's capacity would be and their schedule.

1 So it's not standard for us not to do it at this  
2 juncture.

3 COMMISSIONER OKUDA: Let me ask you this.

4 Even though it might not be your standard  
5 practice, at any time did anyone connected with this  
6 project mention to you potential traffic issues  
7 arising during construction?

8 THE WITNESS: Not specifically, no.

9 COMMISSIONER OKUDA: How about generally,  
10 was that mentioned to you at any time generally?

11 THE WITNESS: I mean, that's normally --  
12 it's not something that people explicitly bring up to  
13 me in advance. We know that those things become more  
14 prevalent when we know what the construction is going  
15 to be like, because there's certain things we have to  
16 address during that later stage which are not known  
17 at this time, which would include like the vehicles,  
18 we don't know at this time.

19 We don't know schedule, and a lot of it is  
20 dependent upon who is selected in the future.

21 COMMISSIONER OKUDA: I apologize for this  
22 next question because it was based on my  
23 understanding of what the statements were made in the  
24 Final EIS. So this may or may not be relevant at  
25 this point.

1           Were you asked at any time to comment,  
2 either orally or in writing, about potential of  
3 having or hauling excavated material from the project  
4 site to the PVT landfill in Nanakuli?

5           THE WITNESS: I was not.

6           COMMISSIONER OKUDA: Did you at any time  
7 form an understanding that that was going to be  
8 something that might take place, meaning hauling  
9 excavated material from the site to the PVT landfill?

10          THE WITNESS: I was not.

11          COMMISSIONER OKUDA: Thank you very much.

12          Thank you, Mr. Chair. No further  
13 questions.

14          CHAIRPERSON SCHEUER: Thank you very much.  
15 Commissioner Chang.

16          COMMISSIONER CHANG: Thank you, Mr.  
17 Nakamoto. I'm going to followup a little bit on  
18 Commissioner Okuda's question, but not so much as to  
19 PVT.

20                 What we did hear today from the civil  
21 engineer is that even if it doesn't -- that there may  
22 be other places that these truckloads of soil may go  
23 to.

24                 So will the Petitioner be required to  
25 prepare a traffic plan when there is a determination

1 about the schedule, and whether they need to remove,  
2 you know, truckloads of soil from the site, will they  
3 be required to prepare a traffic plan on that?

4 THE WITNESS: Yeah. I'm not 100 percent  
5 sure. I know a lot of times in working with the City  
6 they will require such a plan, like a construction  
7 management plan.

8 I would just rely upon whatever the State  
9 does require. In such cases we can identify whatever  
10 is of importance which can include, like, the routes  
11 that the vehicles are going to take, for instance, as  
12 well as possibly the impact of the deliveries.

13 COMMISSIONER CHANG: Is that a  
14 reasonable -- there seems to be some uncertainty  
15 about whether that is required or not.

16 Is that a reasonable LUC condition that if  
17 they are going to be hauling off a certain volume of  
18 material, truckloads off the site, that they be  
19 required to prepare a traffic plan with all of the  
20 necessary notifications and, you know, whether there  
21 are like off-duty police officers or something; is  
22 that a reasonable condition?

23 THE WITNESS: I wouldn't offer to say  
24 whether or not it's reasonable, but I wouldn't say  
25 that it's without precedent. I've definitely done

1 those kind of reports before.

2 COMMISSIONER CHANG: Okay. Thank you.  
3 Very good. I have no further questions.

4 CHAIRPERSON SCHEUER: Thank you,  
5 Commissioner Chang.

6 Commissioners, anything further?

7 Commissioner Wong.

8 COMMISSIONER WONG: Thank you, Chair.  
9 Thank you Mr. Nakamoto.

10 The question I have is, you know, I was  
11 reading your curriculum vitae and it deals with  
12 Daniel K. Inouye International Airport.

13 Which portion of that were you dealing  
14 with? Are you dealing with the new construction  
15 project out there or -- which portion was it done  
16 first?

17 THE WITNESS: It's not dealing with the  
18 Diamond Head concourse. So actually there have been  
19 a bunch of different traffic consultants involved  
20 with that project, and I don't want to name the other  
21 ones.

22 COMMISSIONER WONG: So the question I have  
23 is just hypothetically, when they did the rent-a-car  
24 portion of the DOT, the airport, you know what  
25 they're building right now? They had to do some

1 grubbing and digging of dirt and take it away.

2 Did you ever work on that portion?

3 THE WITNESS: I definitely did not.

4 COMMISSIONER WONG: The reason I'm asking  
5 you, just in your estimation, hypothetically, if  
6 let's say we have 57,000 tons of material, how much  
7 truckloads would it go out a day, you would assume,  
8 between the site?

9 THE WITNESS: Usually that information  
10 would be fed to me by the contractor, because I'm not  
11 really suited to estimate that. Really depends on  
12 what their operating capacity is.

13 COMMISSIONER WONG: It's just -- I was just  
14 thinking of a rough like, you know, there will be 100  
15 trucks going out of that site or not, or if you have  
16 any understanding of how long it would take or how  
17 much days just to take out that much?

18 THE WITNESS: I would say that in all of my  
19 years of having done this though, I haven't seen the  
20 trucks being impacted like by volume. And, in fact,  
21 I think a lot of cases the concern is more relate --  
22 I don't think it's a factor here, but in a lot of  
23 cases concern will actually be the parking, and also  
24 maybe the documentation of what the roadway  
25 conditions are nearby.



1           But the traffic volume, I can't speak to  
2 what this is going to be, but it hasn't been high  
3 enough to making an impact -- a lot of the  
4 construction activity is occurring outside of the  
5 peak hours of traffic. The deliveries and stuff  
6 might be concentrated during times when people are  
7 not -- you know, occurring on an on-going basis as  
8 opposed to really during the peak hours of traffic.

9           COMMISSIONER WONG: Just because I was  
10 thinking of Hawaii Loa College, that's around there,  
11 and there's also an elementary school in that area  
12 also. How would that be affected by the construction  
13 portion?

14           THE WITNESS: So, I mean, I really can't  
15 speak to what it is going to be. But in the past I  
16 haven't really seen that that would really be a major  
17 factor, you know, the construction traffic volume.

18           COMMISSIONER WONG: Okay. Thank you very  
19 much. Thank you, Chair.

20           CHAIRPERSON SCHEUER: Commissioner Okuda.

21           COMMISSIONER OKUDA: Thank you, Mr. Chair.

22           One question to followup on Commissioner  
23 Wong's question.

24           If the evidence showed that this site would  
25 generate 3,800 dump truckloads leaving the site,

1 would that create any type of concern in your  
2 professional opinion?

3           When I say "concern", it would be to have  
4 some type of followup mitigation or other action to  
5 be taken if the number of truckloads that are  
6 anticipated to leave the site hauling excavated  
7 materials would be at least 3,800 trucks?

8           THE WITNESS: It all would depend on  
9 duration, time of day, frequency, and how that 3,800  
10 vehicles would be spread out over time.

11           In a lot of cases too there is a potential  
12 for being reactive about these things. I know we  
13 want to be proactive, but I think it's a good  
14 practice to know ultimately -- like I was saying  
15 earlier, when we get closer to construction, and, you  
16 know, we are going to have to be smart enough to know  
17 those are things we're going to have to look into.

18           It really depends. Even if you talk about  
19 100 per day, you look at regular traffic along a  
20 roadway, average is about 10 percent of the 24-hour  
21 traffic that would occur during a peak hour.

22           I mean, yeah, if you were going to dump  
23 like 200 vehicles per hour during a peak hour that  
24 would be a problem. But I really couldn't see that  
25 happening just because you would need to have like

1 200 vehicles on hand, which I don't think it's likely  
2 to occur.

3 In a lot of cases -- now, I can't speak to  
4 the magnitude of this, but I've dealt with  
5 construction traffic of like maybe nine vehicles per  
6 hour, which is like the maximum they can do back and  
7 forth. So the order of magnitude, I couldn't imagine  
8 would be to that point, let's say like 100 vehicles  
9 per hour, you know, on a consistent basis.

10 COMMISSIONER OKUDA: Thank you very much.

11 CHAIRPERSON SCHEUER: Is there anything  
12 further, Commissioners?

13 Any redirect, Mr. Matsubara?

14 MR. MATSUBARA: No redirect, Mr. Chair.

15 CHAIRPERSON SCHEUER: My intention is to at  
16 this time is to dismiss this witness and prepare to  
17 recess this hearing and reconvene on June 24th. I  
18 don't think we have the time or stamina to take up  
19 the remainder of the witnesses of the Petitioner.

20 MR. MATSUBARA: We have two more witnesses,  
21 not counting rebuttal witnesses. It's a convenient  
22 break now, because the testimony would be related --  
23 the testimony relating to archaeological inventory  
24 survey and cultural impact analysis is done by Honua,  
25 so it's convenient to break now and then have those

1 last two witnesses.

2 And then depending on what rebuttal may be  
3 necessary after the other parties present their case,  
4 there may be additional witnesses. But we will have  
5 Mr. Morford, and we will have other witnesses  
6 potentially, depending on what issues arise and what  
7 questions the Commissioners have.

8 CHAIRPERSON SCHEUER: Thank you.

9 Before we move to recess and reconvene on  
10 the 24th, are there any procedural questions or  
11 matters from any of the Parties, starting with the  
12 City?

13 MR. PANG: No, Mr. Chair. No further  
14 issues from the City.

15 CHAIRPERSON SCHEUER: OP?

16 MR. MATSUBARA: Just one question. Is the  
17 24th also going to be a "ZOOM" hearing?

18 CHAIRPERSON SCHEUER: Yes.

19 MR. MATSUBARA: Thank you.

20 MS. APUNA: No questions from OP.

21 MR. YOSHIMORI: No questions from  
22 Intervenor. Thank you.

23 CHAIRPERSON SCHEUER: Commissioners?

24 Commissioner Okuda.

25 COMMISSIONER OKUDA: Thank you, Mr. Chair,

1 and you can rule me out of order if my next statement  
2 is out of order. And no one should take this to mean  
3 anything one way or the other.

4 For me personally, maybe these last two  
5 days has been educational for everyone to get more  
6 information, and for me personally, I wouldn't hold  
7 it against anybody if people sat down and talked --  
8 (indecipherable) but it's not to indicate a bias one  
9 way or another, it's just a personal statement.

10 Thank you, Mr. Chair.

11 CHAIRPERSON SCHEUER: Thank you.

12 Mr. Executive Officer, any further  
13 announcements?

14 EXECUTIVE OFFICER: No, Mr. Chair.

15 Thank everybody for their participation in  
16 this experiment. First time we've done this.

17 And I would like to commend Riley Hakoda,  
18 Chief Clerk, and Scott Derrickson, Planner, for their  
19 incredible work in figuring out all of the logistics.

20 CHAIRPERSON SCHEUER: I would second that.

21 Just noting that I was really relieved when  
22 I read the Star Advertiser article this morning.

23 There was one sentence that said, oh, by the way, it  
24 was done via "ZOOM". That there wasn't a large story  
25 about how the State was unable to technically manage

1 how to do this with public witnesses and testifiers.  
2 So I thought it was a great success in that regard.

3 EXECUTIVE OFFICER: You should also know  
4 that I have been getting text and e-mails from other  
5 executive directors and chairs asking us how we did  
6 it, and wanting to know if they can utilize our  
7 system.

8 CHAIRPERSON SCHEUER: For a fee, they can.  
9 With that, and I really want to thank the  
10 Commissioners who -- you've now been asked to open  
11 your homes and businesses for this work in addition  
12 to all the other commitments you've made to the State  
13 of Hawaii in exercising this, so thank you very much.

14 Thank you to the Intervenor as well, who I  
15 know you, along with us, the only people who are not  
16 paid in this matter, to be a part of this. So thank  
17 you very much. And I will recess this hearing and  
18 reconvene it on June 24th.

19 MR. MATSUBARA: Thank you, Commissioners.

20 (The proceedings adjourned at 4:22 p.m.)  
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## CERTIFICATE

1  
2 STATE OF HAWAII )  
3 COUNTY OF HONOLULU ) SS.  
4 )

5 I, JEAN MARIE McMANUS, do hereby certify:

6 That on June 10, 2020, at 9:00 a.m., the  
7 proceedings contained herein was taken down by me in  
8 machine shorthand and was thereafter reduced to  
9 typewriting under my supervision; that the foregoing  
10 represents, to the best of my ability, a true and  
11 correct copy of the proceedings had in the foregoing  
12 matter.

13 I further certify that I am not of counsel for  
14 any of the parties hereto, nor in any way interested  
15 in the outcome of the cause named in this caption.

16 Dated this 10th day of June, 2020, in Honolulu,  
17 Hawaii.

18  
19 /s/ Jean Marie McManus  
20 JEAN MARIE McMANUS, CSR #156  
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23  
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