

RE: H.R. No. 136
H.D. 1

Honorable Calvin K.Y. Say
Speaker, House of Representatives
Twenty-Sixth State Legislature
Regular Session of 2011
State of Hawaii

Mr. Speaker:

Your Special Investigative Committee established to investigate the county of Hawaii Department of Water Supply pursuant to House Resolution No. 136, House Draft 1, and having been directed to report to the Speaker of the House of Representatives by H.R. No. 136, H.D. 1, entitled:

"ESTABLISHING AN INVESTIGATIVE COMMITTEE TO INVESTIGATE THE COUNTY OF HAWAII DEPARTMENT OF WATER SUPPLY"

begs leave to report at follows:

Introduction

House Resolution No. 136, H.D. 1, (2010), ("House Resolution"), established a special investigative committee to investigate the Hawaii County Department of Water Supply ("Investigative Committee"). (A copy of the House Resolution is attached to this report as Appendix A.)

The Investigative Committee consisted of:

- (1) Representative Robert N. Herkes, Chair;
- (2) Representative Faye Hanohano, Vice-Chair;
- (3) Representative Jerry L. Chang;
- (4) Representative Cindy Evans;
- (5) Representative Denny Coffman;



- (6) Representative Ken Ito;
- (7) Representative Sharon Har;
- (8) Representative Mark Nakashima; and
- (9) Representative Clift Tsuji.

Consistent with the directive of the House Resolution, the Investigative Committee specifically examined the status and handling of the Ocean View - Kahuku water system construction project on the island of Hawaii. Over the course of its work, the Investigative Committee has narrowed the scope of its examination to inquiries that it believed would ensure the progress of the water construction system project. The Investigative Committee believes that the speedy completion of the water system is in the best interest of the Ocean View community.

Background

Hawaiian Ocean View Estates ("Ocean View") is a community of about 5,000 residents in Kahuku near the southern tip of Hawaii Island. It is a remote rural community located in one of the driest and most drought-stricken areas of the State. The community has no central distribution point for residents' water supply.¹ Instead, Ocean View residents must rely on catchment or water delivery to their homes to meet their water needs. During the Cayetano administration, funds were appropriated by the Legislature to construct a water system for the Ocean View community, but those funds were not released. In 2005, \$6,000,000 was appropriated by the Legislature, again, to construct a water system for Ocean View. In 2006, those funds were released by Governor Lingle to the Mayor of Hawaii County, Mayor Harry Kim, for the development of a water well, fill station, and an appropriately-sized water storage tank.

At the time, Mayor Kim faced the options of issuing a request for proposals for the design and build for the project or assigning the project to the Hawaii County Department of Water Supply ("DWS") for management. The Mayor turned the project over to DWS, however, there is no written agreement between Hawaii

¹ The nearest Hawaii County Department of Water Supply filling points are located approximately fifteen miles away in Waiohinu to the east or Ho'okena to the north.



County and DWS for the management of the project. DWS contracted with SSFM International to prepare Phase I of the project, which included designing the water system and preparing the environmental assessment. Community members provided input on the design of the project and were reportedly pleased with the design and findings of the environmental assessment. Since that time, Phase I was completed and a production well was constructed with sufficient capacity for the water system. The production well has now been in place for two years. However, no progress had been made toward Phase II of the project, which includes installing the pumping mechanism, constructing the water storage tank, and constructing the filling station.

DWS contracted with Bolton, Inc., to complete Phase II of the water system project. Bolton, Inc., prepared a new design for the remainder of the project that differs significantly from the original design that was evaluated in the environmental assessment and reviewed by the community. The original design provided for four filling stations to accommodate water hauler trucks; however, the new design provides for only two filling stations. In addition, the original design provided for a fence and landscaping to shield the filling area from neighboring homes. The new design eliminated the fence and landscaping. This design change angered neighboring landowners who expressed concern over possible noise, debris, and disturbances from the use of the filling station.

As of April 2010, approximately \$2,700,000 of the \$6,000,000 appropriated for the water system project has been expended. DWS has expressed concern that the remaining funds are insufficient to complete the project as designed. Currently, there remains approximately \$3,300,000 in appropriated funds for the project. The current Hawaii County Mayor, Mayor William P. Kenoi, has pledged an additional \$400,000 in county funds toward the completion of the project.

On April 26, 2010, the House of Representatives formally requested information related to the progress of the water system construction project from Mayor Kenoi and the Hawaii County Board of Water Supply. (Appendix B.) The Department of Water Supply, through the Mayor's Office, responded to those requests on May 21, 2010. (Appendix C).

Investigative Committee Action and Recent Progress

During the interim between the 2010 and 2011 Regular Sessions, the Chair of the Investigative Committee has continued



to communicate with all interested parties in order to move the water system construction project forward. The Chair and members of the Investigative Committee met with Mayor Kenoi in early July 2010 and were able to collaborate on a strategy for completing the project. The Chair communicated with the Board of Water Supply, and met with its chair in person, to express concerns and request its cooperation in completing the water system. (Appendix D.) In addition, the Chair has maintained an ongoing dialogue with Ocean View residents, attending community meetings and frequently corresponding with individual residents of Ocean View, to ensure that community interests are heard and the Ocean View community's needs are met by the new water system.

As a result of communications with those involved in the project, considerable progress has been made in recent months toward the completion of the water system construction project. (See Appendix E and Appendix F.) Recent progress includes:

- (1) Grading and preparing the filling station site and access road;
- (2) Connecting the pipeline from the production wellhead to the filling station site several blocks away;
- (3) Completion of a contract with Water Resources, Inc., for the purchase and delivery of a submersible pump;
- (4) Submission and review of plans for a 300,000 gallon concrete water storage tank;
- (5) Preliminary arrangements with Hawaiian Electric and Light Company to supply electricity to the filling station once completed;
- (6) Revision of the filling station design to restore plans for protective landscaping and fencing to preserve the privacy of neighboring homes; and
- (7) Establishment of a tentative project completion date of October 3, 2011.

Despite these recent positive developments, the Investigative Committee is concerned that DWS's choice of a concrete water storage tank for the project may not reflect the better value and improved earthquake resistance of steel tanks of comparable size. In addition, the Investigative Committee is concerned that DWS's overall materials and design standards deserve review to ensure that they provide the best value. (Appendix G and Appendix H.)



The Investigative Committee convened a public meeting on January 6, 2011, which was attended by a quorum of committee members. At the meeting, members were updated on the progress of the water system construction project and heard testimony from Milton Pavao, Manager of DWS, Kurt Inaba, Head of DWS Engineering Division, and Don Nitsche, Ocean View resident. Written testimony was submitted by Rell Woodward, Ocean View resident. The Investigative Committee also reviewed an email from Mr. Inaba informing the committee that reservoir construction is expected to begin in February or March 2011.

Conclusions and Recommendations

After reviewing the progress of the Ocean View - Kahuku water system construction project, the Investigative Committee offers the following conclusions and recommendations:

- (1) Progress on the water system project had stalled by April 2010, but open and frank communications among members of the House of Representatives, Mayor Kenoi, DWS, Hawaii County Board of Water Supply, and the Ocean View community have restarted work on the project. It is expected to be completed in October 2011.
- (2) The Investigative Committee is concerned that the former Hawaii County Mayor delegated responsibility for the water system construction project to DWS without a formal agreement for its completion and operation. The Investigative Committee strongly urges Mayor Kenoi to enter into a formal agreement with either DWS or the Ocean View community for the ongoing operation of the water system and filling station.
- (3) The Ocean View community raised concerns that the contractor, Bolton, Inc.'s, design/build plans and changes to the previous water system design were not in the best interest of nearby homeowners or the community as a whole. These concerns have been resolved. The Investigative Committee strongly urges DWS and its contractors to facilitate continued open communications with the Ocean View community as this project progresses.
- (4) The Investigative Committee is concerned that DWS design standards are more conservative and expensive than necessary when compared to design standards used in the



public sector or other municipalities for comparable water projects. DWS is encouraged to review, and revise if necessary, its standards for design and materials to ensure the best value and quality for the taxpayers of Hawaii County.

- (5) The Investigative Committee will continue to review the budget and expenditures for this project with the Department of Accounting and General Services to verify that the state moneys appropriated for this project are used appropriately.

The Investigative Committee appreciates the cooperation of all the parties involved in construction of the Ocean View-Kahuku water system, and it is optimistic that major obstacles to the completion of the project have been resolved. Members of the Investigative Committee plan to continue to monitor the progress of the water system construction project to ensure its completion on schedule and successful operation.

The records and information received will continue to be made available at the Legislative Reference Bureau library.

Respectfully submitted on
behalf of the members of the
Special Investigative Committee
on the County of Hawaii
Department of Water Supply,



ROBERT N. HERKES, Chair



Appendix A

HOUSE OF REPRESENTATIVES
TWENTY-FIFTH LEGISLATURE, 2010
STATE OF HAWAII

H.R. NO. 136
H.D. 1

HOUSE RESOLUTION

ESTABLISHING AN INVESTIGATIVE COMMITTEE TO INVESTIGATE THE
COUNTY OF HAWAII DEPARTMENT OF WATER SUPPLY.

1 WHEREAS, the United States Geological Survey reports that
2 fresh ground-water withdrawals on the island of Hawaii during
3 1995 were about 109 million gallons per day; and
4

5 WHEREAS, withdrawals for public supply in 1995 were about
6 23 million gallons per day, withdrawals for agricultural use
7 were about 13 million gallons per day, and withdrawals for
8 domestic and commercial uses were about 6 million gallons per
9 day; and
10

11 WHEREAS, \$6 million was allocated to build a water system
12 in or around the Ocean View-Kahuku area on the island of Hawaii;
13 and
14

15 WHEREAS, the money was released to Mayor Harry Kim's
16 administration and then from the Office of the Mayor to the
17 County of Hawaii Department of Water Supply (DWS) which employed
18 SSFM International to engage in planning and construction of the
19 project and to conduct the required environmental assessment
20 (EA), which has since been approved; and
21

22 WHEREAS, an extended delay ensued after the EA was approved
23 concerning appropriate tanks needed for the project, location of
24 the fill outlets and generally, the timeline for the completion
25 of the project; and
26

27 WHEREAS, DWS then contracted with Bolton Inc. to complete
28 the system, however, reports have come forward that Bolton Inc.
29 has faced some legal action regarding past projects it has been
30 contracted to work on and may have also altered the water system
31 project's size; and
32



1 WHEREAS, the community that is depending on the completion
2 of this project is questioning the status of the money and the
3 project; and
4

5 WHEREAS, there have been severe roadblocks encountered by
6 those persons seeking information on the status and handling of
7 the Ocean View-Kahuku water system construction project; now,
8 therefore,
9

10 BE IT RESOLVED by the House of Representatives of the
11 Twenty-fifth Legislature of the State of Hawaii, Regular Session
12 of 2010, that:
13

- 14 (1) The House of Representatives hereby establishes a
15 special investigative committee to investigate the
16 status and handling of the Ocean View-Kahuku water
17 system construction project on the island of Hawaii;
18
- 19 (2) The chairperson of the investigative committee shall
20 be the Representative of the fifth District and the
21 Vice-chairperson shall be the Representative of the
22 fourth District; the remaining membership of the
23 committee shall be composed of seven members appointed
24 by the Speaker of the House of Representatives;
25
- 26 (3) The purpose and the duties of the investigative
27 committee and the subject matter and scope of its
28 investigatory authority shall be to:
29
- 30 (A) Determine the status of the water well and
31 overall water system project;
32
- 33 (B) Provide for an audit of the money allocated to
34 the water system in Ocean View;
35
- 36 (C) Determine whether an amendment to the EA was
37 required relating to the change in project scope
38 after the EA was approved; and
39
- 40 (D) Determine upon what basis Bolton Inc. was
41 retained and whether its contract with DWS



1 complied with the State Procurement Code under
2 Chapter 103D, HRS;

3
4 (4) The investigative committee shall have every power and
5 function allowed to an investigating committee by law,
6 including without limitation the power to:

7
8 (A) Adopt rules for the conduct of its proceedings;

9
10 (B) Issue subpoenas requiring the attendance and
11 testimony of witnesses and subpoenas duces tecum
12 requiring the production of books, documents,
13 records, papers, or other evidence in any matter
14 pending before the Committee;

15
16 (C) Hold hearings appropriate for the performance of
17 its duties, at such times and places as the
18 Committee determines;

19
20 (D) Administer oaths and affirmations to witnesses at
21 hearings of the Committee; and

22
23 (E) Report or certify instances of contempt;

24
25 provided that the investigative committee is requested
26 to voluntarily limit, as much as possible, the use of
27 its subpoena power to produce witnesses, documents,
28 and other evidence, and voluntarily limit the scope of
29 its investigation, as much as possible, to a review of
30 appropriate publicly-available information on the
31 subject matters within the committee's review;

32
33 (5) The investigative committee shall be appointed by the
34 Speaker of the House of Representatives exclusively
35 from the membership of the House of Representatives;

36
37 (6) The investigative committee is authorized to exercise
38 its powers continuously throughout the interim periods
39 between the 2010 and 2011 Regular Sessions, and shall
40 thereafter be dissolved unless further extended by the
41 House of Representatives; and



1 (7) The investigative committee may continue beyond the
2 periods set forth in paragraph (6) for the purpose of
3 monitoring and, if necessary, to propose the amendment
4 or repeal of any legislation enacted as a result of
5 the committee's efforts;
6

7 now, therefore,
8

9 BE IT FURTHER RESOLVED that the State Procurement Office
10 (SPO), with its own staff and other support staff is requested
11 to gather, analyze, and interpret the information submitted to
12 the investigative committee, and report this information to the
13 investigative committee; and
14

15 BE IT FURTHER RESOLVED that the SPO is further requested to
16 work under the direction of the investigative committee and
17 provide such technical, staffing, and other assistance to the
18 investigative committee as may be necessary, including providing
19 assistance in collecting, reviewing, analyzing, and interpreting
20 documents, testimony, and other evidence obtained by the
21 committee, and in coordinating the day-to-day work of the
22 committee; and
23

24 BE IT FURTHER RESOLVED that the Legislative Reference
25 Bureau is requested to assist the investigative committee in
26 conducting analyses, as appropriate, and in drafting appropriate
27 implementing legislation as requested by the committee; and
28

29 BE IT FURTHER RESOLVED that the Department of the Attorney
30 General is requested to provide the investigative committee with
31 copies of documents as may be available, and in providing legal
32 analyses as needed, to the extent that the Attorney General's
33 participation in the work of the committee does not
34 impermissibly conflict with any litigation of which the Attorney
35 General is a party; and
36

37 BE IT FURTHER RESOLVED that all other departments,
38 agencies, and offices of the State, as appropriate, are
39 requested to cooperate with and provide assistance to the
40 investigative committee with respect to its investigation; and
41



1 BE IT FURTHER RESOLVED that the investigative committee
2 shall submit to the House of Representatives a report no later
3 than 20 days prior to the convening of the Regular Sessions of
4 2011; and

5
6 BE IT FURTHER RESOLVED that certified copies of this
7 Resolution be transmitted to the Chair of the Board of Water
8 Supply, Manager of County of Hawaii Department of Water Supply,
9 Mayor of the County of Hawaii, the Governor, Comptroller,
10 Administrator of the State Procurement Office, Hawaii County
11 Legislative Auditor, and Attorney General.
12

Appendix B

CALVIN K.Y. SAY
SPEAKER

HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813



April 26, 2010

The Honorable William P. Keno
Mayor of the County of Hawaii
25 Aupuni Street
Hilo, HI 96720

Dear Mayor Keno:

This is a formal request that your office and the Board of Water Supply address concerns over the Ocean View water project.

During the Legislative Session of 2005 an appropriation of \$6,000,000 was approved in the budget with the funds to go to Hawaii County for the development of a water well and adjoining system with a storage system of appropriate size fill stations to accommodate four water hauler trucks and other amenities. The money was released on April 19, 2006 by Governor Lingle to the Mayor of Hawaii County, Mayor Kim, for this project.

Mayor Kim had a number of options available to him at that time including issuing a RFP for design/build for the project or turning the project over to the Hawaii County Department of Public Works to implement. Mayor Kim's decision was to turn the project over to the Department of Water Supply (DWS). The State looks to the Mayor's office to provide answers on this project.

It is our understanding that DWS contracted with a private firm to design the project and to complete an Environmental Assessment (EA). Community members in Ocean View have advised this Committee that they were very happy with the design and EA.

Additionally, we understand that the water well was completed two years ago with sufficient head to supply the community with needed water. It is also our understanding that not much has happened since that time.

Furthermore, it is our understanding that DWS has contracted with Bolton, Inc. to finish the project and it is our understanding that the new design prepared by Bolton, Inc. differs significantly from the original design, and what was shown in the EA and approved by the community.

The original design provided for four fill stations to accommodate water hauler trucks. The area of the fill station also had a fence and landscaping to shield the area from the neighboring landowner. This was detailed in the EA. The revised design calls for two fill stations not

Honorable Billy Kenoi
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April 26, 2010

designed for water hauler trucks and removed the fence and landscaping. These are significant changes that reduce the value and operability of the fill station and differ from the approved EA. We are requesting that your office provide the House of Representatives of the Hawaii State Legislature with the following:

1. A complete audit of all funds received from the appropriation, how they were expended, what services were received and what funds are remaining,
2. A copy of the original plans and EA and information on who was retained as a consultant for this project,
3. A copy of the current agreement with Bolton, Inc. and details of the procurement process used as required by law,
4. A copy of the design submitted by Bolton, Inc., cost of the design, and the name of the individual or individuals who approved the design,
5. An analysis of how the Bolton plan differs from the original plan and the EA,
6. An analysis of whether Bolton's design/build contract contains the requirement to design and construct a concrete water tank,
7. A summary and comparison of the number of steel water tanks of comparable size or larger to those proposed in this project as compared to the number of concrete water tanks of comparable size or larger in the Department of Water Supply's system,
8. A copy of all reported problems concerning steel water tanks, if any, from the Department of Water Supply,
9. A report summarizing the specifics of all concrete water tanks Bolton, Inc. has designed and/or built for any projects including, but not limited to, information concerning the size and dimensions of the tank, scope and location of the project, duration of construction period, and completion or estimated completion date,
10. Any record of public hearings in Kahuku to obtain community input on the new design and the community reaction,
11. A timetable for completion of the project with plans and costs and availability of funds,
12. A statement from the Board of Water Supply regarding whether they will accept the complete system for operation with an operational plan,
13. A copy of any Audit done by the Hawaii Council Legislative Auditor on the Department of Water Supply,
14. A statement concerning the status of the requirement to bring 3-phase power to the pump site and plans for any alternative means of power,
15. Any plan developed for the operation of the system upon completion, and
16. Any other information you wish to submit to help clarify the management of this project.

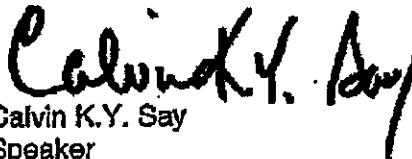
Honorable Billy Kenoi
Page 3
April 26, 2010

The information requested is to be submitted to the Speaker of the State House of Representatives at the Hawaii State Capitol in Honolulu no later than June 1, 2010. Upon receipt of the information the Speaker of the State House of Representatives and the Chair of the special investigative committee created by House Resolution 136, H.D. 1, will examine the information for accuracy and clarity. At the end of this process the following decisions will be made:

1. Accept the information and determine if any legislative relief is required, or
2. Subpoena certain documents and individuals for further examination.

It is unfortunate that, despite efforts by many groups and individuals to obtain information on the project, many questions remain unanswered. It is important to the taxpayers of this State and the residents of Kahuku on Hawaii Island to get satisfactory answers to these questions. How Hawaii County and the Hawaii County Department of Water Supply have managed this appropriation will weigh heavily on any further State appropriations to Hawaii County and Hawaii County Department of Water Supply.

Sincerely,


Calvin K.Y. Say
Speaker

cc: Chair, State House Committee on Finance
Chair of the Special Investigating Committee
Vice Chair of the Special Investigating Committee
Members of the Hawaii County County Council
Governor Linda Lingle
Attorney General Mark Bennett



Appendix C

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

May 21, 2010

TO: The Honorable William P. Kenoi, Mayor
Office of Management

FROM: Milton D. Pavao, Manager

SUBJECT: HAWAIIAN OCEAN VIEW PROJECT
OFFICE OF MANAGEMENT ASSIGNMENT NO. 7830

In response to the State of Hawai'i House of Representatives' formal request through the Mayor of the County of Hawai'i, dated April 26, 2010, for the Ocean View water project, the Department of Water Supply provides the following information.

Due to the two (2) year time constraint to encumber the State funds, our Department contracted with SSFM International (Consultant) to design the exploratory well bid documents, Phase I, and prepare a Request for Proposals (RFP) for the development of the well, reservoir, and fill station, Phase II. This hybrid procurement process was necessary to ensure we would meet the time constraints for encumbrance of funds, since no preliminary plans were done prior to notice of funding allocation. Prior to the completion of Phase I, the RFP was received and ultimately awarded; thereby encumbering the funds in the allotted time. Phase I is completed and proved to be a successful well with adequate yield for a fill station.

The Hawaiian Ocean View Estates (HOVE) Water Facilities Project (Project), Phase II, was let out as a design-build (DB) project through the RFP process. The Consultant was contracted with the Department of Water Supply (DWS) to develop the DB contract which included a 30% design of the project. The remaining design requirements became the responsibility of the Contractor, Bolton Inc. (Bolton), who was awarded the DB contract. There were two proposals received by DWS in the original RFP, one from Bolton Inc. and the other from Goodfellow Brothers, Inc. (GBI). The proposals were submitted with preliminary designs of what the potential offerors would be able to design and construct within the project's limited budget and design requirements. Because Bolton was the only offeror who could propose a system that would include a portion of the fill site, they were awarded the contract. GBI's proposal did not include any improvements beyond the well and reservoir site within the project's budget (\$3.4M). Funds were neither adequate or available to build the entire project as wished for by the community, and outlined in the Environmental Assessment (EA).

Bolton is now in the design phase of the project (nearing completion) and will commence construction upon obtaining necessary approvals and permits for the construction plans. Currently, the NPDES is being processed; and upon issuance of the NPDES permit, the Contractor proposes to install the

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The Department of Water Supply is an Equal Opportunity provider and employer.

transmission waterline from the well/reservoir site to the fill station. The well/reservoir site plans are also being designed; and upon completion of that design, plans will be submitted to the County for building permits. The County agreed to provide additional funding (\$400K) to upsize the reservoir from a 100,000-gallon reinforced concrete reservoir to a 300,000-gallon reinforced concrete reservoir. This funding also included proposed changes to the fill site. The proposed alterations to the design have drawn concern from the neighboring property owners (Kirk and Sherry Mattos). The changes were proposed by the Contractor as a result of a meeting with members of the community and DWS to try to increase the number of standpipes for the water haulers. Upon notification of their (Mattos') concern, DWS and the Contractor realized that the proposed changes would in fact be inconsistent with the efforts promised in the EA. DWS and the Contractor are working with the Mattos' to construct a site that minimizes the impact to them, and is consistent with the EA. Although not all of the work scoped in the EA can be completed with the available funds, we will ensure that the impact will not exceed the full build-out of the project.

We would also like to point out that not all of the community members were happy with the proposed design and EA; but the overwhelming majority of the community was in favor of and realized the need for the project. We heard opposition to the location of the well site and transmission waterline route, location of the fill site, as well as the standards that the project is being built to (Hawai'i DWS Water System Standards 2002).

Listed Items:

1. *A complete audit of all funds received from the appropriation, how they were expended, what services were received and what funds are remaining.*

We have enclosed copies of the three contracts that were issued that show the dollar amounts and entail what each contract was issued for, copies of the payments for land acquisition, and a summary adding up the total amounts and showing that \$148.49 of the \$6,000,000.00 was not encumbered. (Attachments 1-5). This information, including all facts and figures, is obtainable from the State of Hawai'i, Department of Accounting and General Service (DAGS) also.

2. *A copy of the original plans and EA and information on who was retained as a consultant for this project.*

Please see Attachment 2, for the plans of Phase I, the exploratory well drilling contract. Enclosed are a set of the original 30% design drawings provided by SSFM for the RFP in the DB procurement process and a copy of the original EA completed by SSFM's consultant, Geometrician Associates. (Attachments 6 and 7).

3. *A copy of the current agreement with Bolton, Inc. and details of the procurement process used as required by law.*

Please see the contract provided in Question 1, HOVE Water Facilities Project, which is the contract for Bolton. (Attachment 3). Within the contract, Appendix B - General

Requirements and Covenants for Design-Build Contracts was used as the guideline for the Request for Proposal process. This document was developed with this project but for use as a general reference for future design-build projects should the need arise. The process outlined in this document complies with §103D-303 Competitive Sealed Proposals which differs from §103D-302 Competitive Sealed Bids. The time constraint to encumber the funds did not allow us to proceed with the §103D-302 Competitive Sealed Bids process which is our typical bid process, because Phase 1 (Exploratory Well) of this project would not have been completed in time to allow for a complete design and subsequent bid process. Funds had to be encumbered within two (2) years from date of release.

4. *A copy of the design submitted by Bolton, Inc., cost of the design, and the name of the individual or individuals who approved the design.*

The cost of the design by Bolton is located in the HOVE Water Facilities Project contract provided in Question 1. (Attachment 3). We have enclosed the design drawings submitted by Bolton that are currently in review by the Operations and Engineering Divisions of the Department of Water Supply (DWS). (Attachment 8). Ms. Shari Komata, the Project Engineer, will compile the reviews and return for revisions and re-submittal prior to the Manager approving the plans.

5. *An analysis of how the Bolton plan differs from the original plan and the EA.*

Bolton's original design plan, that has not been approved by the DWS; was to accommodate the request of the committee representing the water haulers; that one standpipe for commercial water haulers was not adequate for the number of water haulers. The design submitted was to have the standpipes and spigots along the access way of the flag lot, thereby decreasing the amount of land needed to be developed and allowing for two or possibly three standpipes to be installed in a row. (See attached drawing, Attachment 9, or in Attachment 8.) This was Bolton's effort to accommodate the request of the water haulers and yet keep the costs within the available funds. It is now being redesigned again to assure that the improvements are consistent with the EA.

Bolton's initial response to the RFP was to follow the design layout of the fill site as shown in the EA but reduce the amount of pavement to approximately 1/3 of the design layout provided by SSFM for the EA and the DB process. (Attachment 10). Overall, the project being designed is consistent with the EA. However, due to budget constraints, only a portion of the fill station site will be constructed and no additional waterlines beyond the fill station site will be installed (waterline to provide fire protection to the commercial area).

6. *An analysis of how the Bolton's design/build contract contains the requirement to design and construct a concrete water tank.*

In keeping with the Department of Water Supply of the County of Hawai'i's Water System

Standards, Bolton's DB contract contains the requirement to design and construct a 100,000-gallon reinforced concrete reservoir. During the DB process, Bolton has continually assured the Department and the review panel that DYK, Inc., will be the sub-contractor for a reinforced concrete reservoir built to Hawai'i DWS Water System Standards 2002, as amended. DYK, Inc.'s credentials from the RFQ process are enclosed as part of Bolton's DB team. (Attachment 11). A change order will be issued to upsize the reinforced concrete reservoir to 300,000 gallons upon certification of the additional funds by the County.

7. *A summary and comparison of the number of steel water tanks of comparable size or larger to those proposed in this project as compared to the number of concrete water tanks of comparable size or larger in the Department of Water Supply's system.*

There is currently only one steel tank in service 300,000 gallons or larger and that is currently in the process of being replaced. It is a 500,000-gallon steel tank located in Hilo; and upon completion of the new 1.0-MG reinforced concrete reservoir, it will be permanently removed from our water system. Currently, there are 70 reinforced concrete reservoirs (tanks) 300,000 gallons and larger in our system. The following is a list of the reinforced concrete reservoirs by size:

- 30 - 300,000 gallons
- 16 - 500,000 gallons
- 1 - 800,000 gallons
- 19 - 1,000,000 gallons
- 4 - 2,000,000 gallons

For your information, over the years, the Department has replaced a number of steel tanks 300,000 gallons and larger that were deemed structurally unsound, some of which were taken out of service due to leaks or the potential of a catastrophic failure. The continual maintenance requirement of steel tanks along with their vulnerability to vandalism has caused the Department to discontinue its use many years ago. Steel tanks are no longer included in our Water System Standards. The seismic activity of the Big Island, especially Ocean View, is another factor to preclude the use of steel water tanks.

8. *A copy of all reported problems concerning steel water tanks, if any, from the Department of Water Supply.*

The Department has experienced a lot of issues regarding our steel tanks. With a total number of tanks in our system exceeding 200, it is imperative that the Department construct new reservoirs that will minimize the amount of time that needs to be spent on the maintenance of the reservoir structure, as we are faced with trying to maintain the older structures, many of which are nearing the end of their useful lifespan. Corrosion is the major issue with the steel tanks and has caused structural failure and many leaks. We have been faced with lowering water levels in some of these tanks to minimize the leaks, as well as minimize the possibility of catastrophic failures. In these situations, we are faced with lowering the system capacity

to service our customers, as well as lowering the fire protection capacity. In the case where the structure was deemed unsafe by a structural engineer, temporary bracing was used on a steel tank that was being replaced. We have also had to do an emergency repair to a tank after the earthquake of 2006 where the steel "buckled." The tank was emptied immediately, and a temporary tank was put up in its place while the repairs were done. We have found that the roofs of many of our steel tanks are not safe to just walk on, and we have had difficulty in performing sanitary surveys with the State of Hawai'i, Department of Health. We are having a difficult time installing adequate fall prevention devices as they need to be attached to the roof, which probably cannot support the required loads. We, therefore, have not allowed or accepted steel tanks into our system as they have not been part of our Water System Standards for many years.

9. *A report summarizing the specifics of all concrete water tanks Bolton, Inc. has designed and/or built for any of the projects including, but not limited to, information concerning the size and dimensions of the tank, scope and location of the project, duration of the construction period, and completion or estimated completion date.*

As the DB process has always indicated that Bolton will have DYK, Inc., construct the reinforced concrete reservoir for this project, DYK, Inc., was evaluated for their expertise and experience in this area and not Bolton. Therefore, DYK, Inc., has provided the information requested for the reinforced concrete reservoir; and the initial schedule is in Bolton's contract showing the construction period. (Attachment 3). As the plans are not approved and are being delayed during this period of investigation, we have not determined a new estimated completion date. As of the latter part of April 2010, we anticipated the project completion in approximately 15 months.

10. *Any record of public hearings in Kahuku to obtain community input on the new design and the community reaction.*

Please see attached minutes of the May 23, 2007 and November 27, 2007 public hearings held in Kahuku (Ocean View). (Attachment 11). In addition, our staff has attended numerous community meetings to inform the community of the progress. At those meetings, the same handful of residents attended; and these residents constantly request changes and/or additions to the design. When told that funds are not sufficient to accomplish their request, they become frustrated and apprehensive of the entire process.

11. *A timetable for completion of the project with plans and costs and availability of funds.*

The last timetable submitted by Bolton for the DB portion is attached, but it is not updated to show the delays which occurred due to design review and comments. (Attachment 13).

The availability of funds are shown in Bolton's contract, with the exception of the \$400,000 change order, provided by the County of Hawai'i, that is not issued due to confirmation of availability of funds and ongoing changes in the design scope. (Attachment 3).

12. *A Statement from the Board of Water Supply regarding whether they will accept the complete system for operation with an operational plan.*

The Water Board of the County of Hawai'i has not discussed the acceptance of the HOVE water system, as it has not been placed on any Water Board agenda for them to do so at this time. When the County of Hawai'i requests to dedicate the HOVE water system to the DWS, the Water Board will need to discuss its acceptance and operation with DWS staff. Should the Water Board accept dedication of the HOVE water system, it will be operated and maintained by our Ka'u district staff, with added support from our Hilo Operations staff.

13. *A copy of any Audit done by the Hawai'i Council Legislative Auditor on the Department of Water Supply.*

The audit done by the Hawai'i Council Legislative Auditor on the Department of Water Supply is currently in draft form and not available for public release until it is reviewed and accepted by the Water Board and County Council.

14. *A statement concerning the status of the requirement to bring 3-phase power to the pump site and plans for any alternative means of power.*

Hawaii Electric Light Company, Inc. (HELCO) has been contacted by Bolton's electrical consultant on the requirements for this project and is currently in design to have the necessary power brought to the project site. HELCO hopes to complete the work by the end of 2010, barring delays such as obtaining easements for their work.

15. *Any plan developed for the operation of the system upon completion.*

A plan has not been developed for the operation of the system until the Water Board confirms acceptance of the water system for DWS to operate. (See also response to Item 12, above.)

16. *Any other information you wish to submit to help clarify the management of this project.*

DWS would like to point out that the estimates used for the funding of the project were done by the latest, mid-2004. Contracts bid out around that time and up to around the end of 2005 were typically within their respective budget. Since then, however, it was not unusual to have projects come in 50% or more over the budgeted amount. These projects were bid using the competitive sealed bids process, which typically yields the lowest bids possible. This information is provided as a probable cause to why there was not adequate funding to build the entire project as outlined in the EA.

Enclosed is a copy of the Ka'u to South Kona Water Master Plan, completed in September 2004, that was the basis for the initial cost estimate when requesting funds from the State of Hawai'i and design for the current project. (Attachment 14).

The Honorable William P. Kenoi, Mayor
Page 7
May 21, 2010

We are also enclosing a timeline of the major events of the project as well as our routing time and sequences of a contract with State funds that were appropriated to the County of Hawai'i. (Attachments 15 and 16).

Please refer to Attachment 17 for a summary of all the updates provided to various members of the community regarding the project.

Although a few individuals are now saying they are not getting answers, the fact is that DWS has continually worked with these individuals to explain each step in the process. The exception to this is Kirk and Sherry Mattos. As explained earlier, the change in design was a result of a meeting between DWS, Bolton, and a 3-member committee including Mr. Don Nitsche who also said that he represented the water haulers. Mr. Nitsche explained what would be good enough for them to go in and fill their trucks. He did not want the "standpipe" with the overhead outfall; he just wanted the hose connection to fill into the bottom of their tanker. Also, the community's effort to obtain \$400,000 of additional funding to increase the reservoir from a 100,000-gallon reinforced concrete reservoir to a 300,000-gallon reinforced concrete reservoir through the County was being considered. These funds would also be used to add the second connection for the haulers, including more meters. To make this work, Bolton agreed to work with the arrangement drafted for the particular meeting.

We would also like to mention that Mr. Loren Heck brought to our attention a number of times that we should keep them informed as to how much funds would be needed and that the community may be able to come up with the additional funds. It was explained that it might be difficult to just take their money (private funding) and include it in the contract, as that may be violating procurement laws because the contract was awarded and executed. It was further explained that it might be possible for the community to do their own improvements once the project is completed. We may still look down this road as an option to help fulfill some of the missing pieces to the project if the community wishes to do so.

Mr. Heck mentioned in his testimony that he contacted HELCO, and that they said they do not have any request yet. We are not sure who was spoken to at HELCO, but DWS has confirmed that HELCO is working on the request for 3-phase power to the well site. Mr. Heck also mentioned that he contacted DYK, Inc. (Bolton's Tank Sub-Contractor), and he was concerned with the status of the reservoir, as they did not receive a Contract Change Order yet. Although it is true that the Contract Change Order has not yet been fully executed, it is in the process of being executed and should not delay the contract, as Bolton has ordered the design consultants to move forward on the 300,000-gallon reinforced concrete reservoir design. The design consultants have completed making the changes to the entire site for the larger reservoir. It is not as simple as changing a label on the plans from 100,000 to 300,000-gallon reinforced concrete reservoir. All details including grading, waterlines, control buildings, and even the reservoir details needed to be adjusted. Adjustments to quantities for excavation, backfill, concrete, and steel also had to be made.

In summary, DWS feels that we have maintained our communication with the representatives of the community; and we did explain that during this "design" phase, there will be a substantial amount of

The Honorable William P. Kenoi, Mayor
Page 8
May 21, 2010

time before any change in progress is realized. Bolton's design consultants have been making progress in finalizing the plans, including communications with HELCO for the required 3-phase power to the well site.

Our Department has been extremely cooperative in attending requests for community meetings. At these meetings, we have explained that only what can be done within the availability of funds will be constructed. The handful of residents that attend fail to understand this, and consequently accuse our Department of misuse of funds. This investigation will once and for all prove that our Department handled this project and its funding professionally and competently with the best interests of the community always in mind. Also, we would like to mention that our Department has not and will not receive any compensation for administering this project. All labor costs of our Engineers and staff are being paid for by the Department. We agree to do so in an effort to bring the project to fruition in cooperation with and as a favor to the County of Hawai'i. A lot of time and energy has been spent on this project in the effort to please the community's wishes. However, not all their wishes can be realized. This has caused frustration and dissatisfaction on both sides. Unfortunately, their dissatisfaction has resulted in accusations and further delays. In the future, it is our sincere hope that we will be consulted prior to introducing the type of Resolution that triggered this investigation. If we were consulted, this information would have been relayed in a manner that would have saved a lot of time, energy, and money and prevent any possible delays to the project.

We hope that the information provided to you is to your satisfaction and that you will find that there is a substantial effort by all parties involved to make this project happen.

Sincerely yours,



Milton D. Pavao, P.E.
Manager

KYI/SHK:dms

Atts.

copy - Chair, State House Committee on Finance
Chair of the Special Investigating Committee
Vice Chair of the Special Investigating Committee
Members of the Hawai'i County Council
Governor Linda Lingle
Attorney General Mark Bennett
✓ Representative Robert Herkes

Appendix D



HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

June 22, 2010

Chairperson Dwayne T. Mukai
Water Board of the County of Hawai'i
345 Kekūānaō'a Street Suite 20
Hilo Hawai'i 96720

Dear Chairperson Mukai and Water Board Members:

Pursuant to HR 136 HD1, 2010 Regular Session, an investigative committee has been appointed by the Speaker of the House to look into the problems surrounding the Hawaiian Ocean View Estates (HOVE) water development project. The members consist of the seven Hawai'i Island representatives and the chair and vice chair of the House Committee on Water, Land and Ocean Resources.

To our knowledge, there is no formal agreement between the Mayor's Office and the Department of Water Supply (DWS) to complete the project and to operate it upon completion. Does the Board have a position on requiring the DWS to complete the project and then operate it? Would the Board support an action by the Mayor to remove the project and the funding from the DWS at this time? Under what conditions would the Water Board accept a dedication of the water tank and well?

I am enclosing a letter dated May 21, 2010 addressed to Mayor Kenoi from the Manager of the DWS in response to Speaker Say's request for information about the project. Does the Board support this as an official response from the DWS?

Also, in the May 21st correspondence the Manager of the DWS indicated that there are insufficient funds to complete the project as designed, but to date he has not indicated what amount is necessary to complete the project.

As the Chair of the Investigative Committee and on behalf of the committee members and the community, I would appreciate the Board's written comments and an update on any plans the Board may have to ensure the completion of the project as designed.

Any further information you may be able to provide would also be appreciated.

Respectfully,

A handwritten signature in black ink, appearing to read "R. N. Herkes".

Rep. Robert N. Herkes
Chair, Investigative Committee

Enclosures:

HSCR 1381-10 and HR 136 HD1

HR 136 HD1 memo appointing investigative committee members

April 26, 2010 letter from Speaker Say to Mayor Kenoi

May 21, 2010 letter from DWS Manager to Mayor Kenoi

Appendix E



HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

September 10, 2010

Mr. Milton D. Pavao, Manager
Hawai'i Department of Water Supply
345 Kekuanaoa Street, Suite 20
Hilo, Hawai'i 96720

Mr. Dan Bolton
Bolton Construction, Inc.
P. O. Box 898
Kailua-Kona, Hawai'i 96745

Dear Messrs. Pavao and Bolton:

First, I want to commend you for working toward the completion of the Hawai'i Ocean View Estates Water Facilities Project. I was pleased to learn that construction began on August 9, 2010, as promised. It is my understanding that since that time, the site for the fill station has been graded, the tank site has been further graded, and the tank access road has been placed. I am also pleased to learn that the process of placing the pipeline from the well to the fill station is underway. I am hopeful that this speedy progress will continue so that the residents of Hawai'i Ocean View Estates (HOVE) may finally enjoy faster easier access to potable water in their neighborhood by the estimated completion in September 2011.

At this time, however, I am concerned that crucial elements of the project need additional attention. For example, I have learned that none of the contracts for the submersible pump, the concrete storage tank, or the station power supply have been completed. These are all elements of the project that may involve negotiation and, in the case of the pump and tank, specialized construction and delivery times. Certainly, without these components of the project in place, the completion of the HOVE Water Facilities Project by the target date may be endangered. In the interest of keeping me informed of events that affect my district, I request that you provide me the expected dates for:

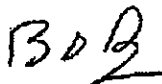
- (1) Completion of the contract to purchase the submersible pump, along with the name of the vendor, the pump's cost, and the estimated delivery date;
- (2) Completion of the contract to purchase the concrete storage tank, along with the name of the vendor, the tank's cost, and the estimated delivery date; and
- (3) Finalization of the contract with Hawai'i Electric Light Company for providing power to the pumping and fill stations.

Also, I would like to see copies of the plans for the filling station and of the project as a whole. I have previously requested these documents, or an update on their status, and have received neither from you.

In the past, members of the Ocean View community and I have suggested amending the plans for the filling station to include a gate along the access road. Ideally, users would only be able to access the filling station during daylight hours. This would ensure that homes adjoining the filling station lot are not disturbed at night by noise from vehicles entering the station and users filling their tanks. In addition, we have suggested that if the filling station is gated and locked at night, there would be no need for lighting, as it also may disturb the homes neighboring the filling station. We have also discussed, and reached agreement on, completely fencing in the filling site to further prevent disturbances to the neighbors. Please let me know the status of these proposed changes to the filling station plans and how you plan to incorporate them into the design for the filling station.

Again, I want to commend you for your efforts to advance this project. I also thank you in advance for responding in a timely manner to my requests for information.

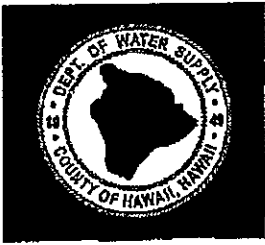
Sincerely,



Robert N. Herkes
Representative, 5th District
(808) 586-8400

cc: The Honorable William P. Kenoi, Mayor

Appendix F



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

September 22, 2010

Honorable Robert N. Herkes, Representative
Hawaii State Capitol, Room 016
Honolulu, HI 96813

HAWAIIAN OCEAN VIEW ESTATES WELL FACILITIES PROJECT

In response to your letter dated September 10, 2010, we are working with the contractor, Bolton, Inc., in getting the requested information on the following items:

1. Completion of the contract to purchase the submersible pump, along with the name of the vendor, the pump's cost, and the estimated delivery date;
2. Completion of the contract to purchase the concrete storage tank, along with the name of the vendor, the tank's cost, and estimated delivery date; and
3. Finalization of the contract with Hawaii Electric Light Company, Inc., for providing power to the pumping and fill stations.

The submersible pump will be ordered through Water Resources International, Inc., subcontractor to Bolton, Inc., when the submittals are approved. The submittals are currently being updated as the original pump submittal is obsolete. Once it is ordered, we will be able to obtain an estimated date of delivery from Bolton, Inc. The submersible pump is included in the costs under bid item: "Well outfitting at the assumed pumping rate of 200 gpm (Centrilift-is approved for this project)" in the amount of \$511,500.00.

DYK Inc., subcontractor to Bolton, Inc., has submitted plans for the 300,000-gallon reservoir; and the Department has just completed its review and is returning the plans to the contractor for revisions prior to approval. The concrete reservoir price is \$991,910.00.

All of our projects do not have contracts with Hawaii Electric Light Company, Inc. (HELCO). Our electrical consultants will design and submit the plans and open a ticket or work order with HELCO to provide the necessary power to our facilities. The electrical consultant for this project has already initiated a ticket that HELCO is currently working on to get power to the well site by the end of this year.

Although we are still reviewing plans and submittals, attached is a tentative project schedule submitted to us by the contractor. We are making every effort to have the contractor adhere to the schedule.

... Water, Our Most Precious Resource ... Ka Wai A Kāne ...

The Department of Water Supply is an Equal Opportunity provider and employer.

Honorable Robert N. Herkes, Representative
Page 2
September 22, 2010

Should you have any questions or need further information, please contact us.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'M. Pavao', with a long horizontal line extending to the right.

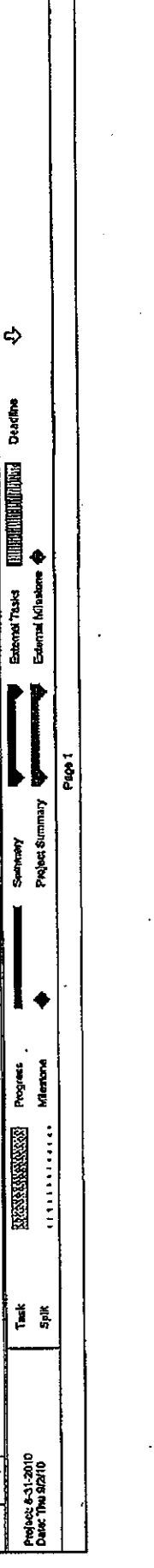
Milton D. Pavao, P.E.
Manager

SHK:dms

Att.

copy - Mayor William Kenoi

ID	Task Name	Duration	Start	Finish	Est. AM	Approved	Steps	October	November	December	January	February
1	Department of Water Supply Hawaiian Onsite View Estates Water Pail	280 days	Wed 8/17/10	Fri 9/30/11								
2	Permitted Construction Activities	43 days	Wed 8/17/10	Fri 10/2/10								
3	Well Site	23 days	Wed 8/17/10	Fri 8/18/10								
4	Mass excavation	20 days	Wed 8/17/10	Fri 9/10/10								
5	Construction of Transmission Main 6" & 8" Waterlines	43 days	Wed 8/17/10	Fri 10/29/10								
6	6" Waterline	43 days	Wed 8/17/10	Fri 10/29/10								
7	8" Waterline	43 days	Wed 8/17/10	Fri 10/29/10								
8	Approved and Permitting	45 days	Tue 9/7/10	Mon 11/22/10								
9	Well Site	10 days	Tue 9/7/10	Mon 9/14/10								
10	DWS approval of 300,000 gallon reservoir	6 days	Tue 9/7/10	Mon 9/13/10								
11	Building Permit application 300,000 gallon reservoir	26 days	Tue 9/7/10	Mon 10/18/10								
12	DWS approval of Cooled Building	4 days	Tue 9/7/10	Mon 9/13/10								
13	Building Permit application for Cooled Building	26 days	Tue 9/7/10	Mon 10/18/10								
14	DWS approval of Well "Site Plan"	6 days	Tue 9/7/10	Mon 9/13/10								
15	Public Works approval of Well "Site Plan"	10 days	Tue 9/7/10	Mon 9/27/10								
16	Fill Site	48 days	Tue 9/7/10	Mon 11/15/10								
17	DWS approval of revised Fill Site Plan	6 days	Tue 9/7/10	Mon 9/13/10								
18	Submit for NPDES	40 days	Tue 9/7/10	Mon 11/8/10								
19	Public Works approval of revised Fill Site Plan	15 days	Tue 9/7/10	Mon 10/4/10								
20	Grading Permit application	10 days	Tue 9/7/10	Mon 9/13/10								
21	Construction Activities	250 days	Tue 10/19/10	Mon 10/29/11								
22	Well Site	200 days	Tue 10/19/10	Mon 8/22/11								
23	Well Site 300,000 gallon reservoir	100 days	Tue 10/19/10	Mon 8/22/11								
24	Cooling Building / Well Closures and Testing / FLECO	120 days	Tue 3/28/11	Mon 8/22/11								
25	Site Work	60 days	Tue 3/28/11	Mon 8/22/11								
26	Fill 610	30 days	Tue 11/9/10	Mon 12/20/10								
27	Mass Grading	10 days	Tue 11/9/10	Mon 11/22/10								
28	Waterlines / Approaches	20 days	Tue 11/9/10	Mon 12/6/10								
29	Site Work	30 days	Tue 11/9/10	Mon 12/20/10								
30	Final Inspection	30 days	Tue 8/23/11	Mon 10/31/11								
31	Public Works	30 days	Tue 8/23/11	Mon 10/31/11								
32	DWS	30 days	Tue 8/23/11	Mon 10/31/11								



Appendix G



HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

December 7, 2010

Mr. Milton D. Pavao, Manager
Hawai'i County Department of Water Supply
345 Kekuanaoa Street, Suite 20
Hilo, Hawai'i 96720

Dear Mr. Pavao:

On behalf of the members of the Special Investigative Committee established under House Resolution 136, House Draft 1, Regular Session 2010, I would like to thank you and your department personnel for your ongoing assistance and cooperation in the matter regarding the Hawaiian Ocean View Estates water well project.

Although we are very appreciative of your efforts to move the project forward toward completion, there are a number of questions that have been raised from various individuals and organizations regarding a number of the Hawai'i County Department of Water Supply's (DWS) design standards.

The concerns expressed are that certain design standards required by DWS may or may not be deemed as "excessive" or "more conservative" than required by other State of Hawai'i water departments or by the private sector. These include, but may not be limited, to the following:

WATER STORAGE TANK

It is the Committee's understanding that the DWS will only accept a steel reinforced concrete tank for water storage, and that there is only one manufacturer in the State that can meet this requirement.

- If this is the DWS design standard, what is the name and address of the manufacturer?
- How many concrete tanks fitting this description does the DWS have in its inventory and in use?
- How many steel tanks does the DWS have in use and in its inventory?
- How many of these concrete tanks were damaged during the 2005 earthquake?

SUBMERSIBLE PUMP

It is the Committee's understanding that the DWS will only accept one brand of submersible pump.

- If this is the DWS design standard, who is the manufacturer and/or local agent and what are their addresses or contact information?

PVC OR CPVC PIPE

It is the Committee's understanding that the DWS is the only water system agency, public or private, that will not utilize plastic pipes in any of its systems.

- If so, what is the rationalization for this decision?

DESIGN STANDARDS

Are the DWS design standards published or available on-line? Specifically:

- The design standards for water storage tanks.
- The design standards for submersible water pumps.
- The design standards that prohibit the use of PVC or CPVC pipes.

The Committee would appreciate receiving this information before the end of the year.

Sincerely,



Rep. Robert N. Herkes, Chair
HR 136 HD1 Special Investigative Committee

c: HR 136 HD1 Special Investigative Committee Members
Chair Dwayne T. Mukai, Hawaii County Water Board
Mayor William P. Kenoi
Speaker Calvin K.Y. Say

Appendix H



HOUSE OF REPRESENTATIVES

STATE OF HAWAII
STATE CAPITOL
HONOLULU, HAWAII 96813

January 4, 2011

Special Investigative Committee
Hawaii House of Representatives
Hawaii State Capitol
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Committee Members:

Re: Hawaii Ocean View Estates

In light of the work of the special investigative committee on the Ocean View - Kahuku water system construction project, and my own research, I am concerned that the design standards of the Hawaii County Department of Water Supply (DWS) are in need of revision. In the past, DWS has expressed concern that water storage systems should be resistant to earthquake and seismic activity. Although I agree that earthquake resistance is critical, I am led to believe that DWS's own design standards do not reflect the latest technologies in earthquake resistant materials, which, in some cases, are also less expensive than the materials and designs currently required by its standards. To illustrate, please consider the following examples:

Storage tanks. After the 2006 Kiholo earthquake, DWS did not report severe damage to any tanks in its system. DWS, however, considers "severe" damage to be damage that results in catastrophic failure of the tank, such as leakage or bursting. A number of tanks sustained substantial damage that required millions of dollars to repair. In addition, the open reservoir at Waimea was damaged and also required repairs at a significant expense.

I am aware that it is possible to design concrete water storage tanks using conventional reinforcing techniques, instead of the post-tension system that is currently favored by DWS. It would also appear that DWS prefers the conventional tank design, used by frequent DWS subcontractor DYK, to the exclusion of other designs that may offer comparable strength at a lower price. From my research, I am led to question whether the costs and benefits of concrete storage tanks, as compared to metal storage tanks, have been fully explored by the Department of Water Supply or its contractors.

Pumps. From my research, it not clear that DWS has a consistent standard for pump design. In the case of the Ocean View water project, the pump that will be supplied was

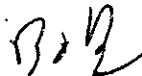
substituted and approved over the pump design called for in the project specifications. In the past, DWS has been adamant about maintaining one standard pump manufacturer so that replacement parts are interchangeable. Regardless, additional parts are often needed due to variations in pump sizing. In the past, DWS has allowed substitutions of pump designs when pressured by owners and developer; however, I understand that these requests are rare due to fear of recrimination.

Pipes. DWS has claimed in the past that ductile iron pipes provide superior earthquake resistance over PVC pipes. It is not clear, however, that DWS has compared ductile iron to high-density poly-ethylene (HDPE) pipe. HDPE pipe is generally less expensive than ductile iron pipe, and research suggests that it is more earthquake resistant. In addition, in other areas with frequent seismic activity, such as Japan, California, and Seattle, design standards require the use of more flexible materials for pipe joints in both above-ground and buried water systems. Despite the higher earthquake resistance of HDPE, and special joint requirements in other areas, DWS continues to insist on ductile iron pipe in its design standards for Hawaii County.

Although the work of the special investigative committee is coming to an end, I would encourage the Hawaii County Department of Water Supply to revisit its design standards and consider alternative materials and design specifications that may be more earthquake resistant, thereby promoting increased safety and providing greater value for the residents of Hawaii County.

Thank you both for your assistance in this matter. I look forward to hearing from each of you at your earliest convenience.

Very truly yours,



Robert N. Herkes
Representative, 5th District