

MINUTES

DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAI‘I
WATER BOARD MEETING

March 28, 2017

Hilo Operations Conference Room, 889 Leilani Street, Hilo, HI

MEMBERS PRESENT: Mr. Craig Takamine, Chairperson
Mr. Russell Arikawa, Vice-Chairperson
Mr. Bryant Balog
Mr. Leningrad Elarionoff
Ms. Brenda Iokepa-Moses
Mr. Jay Uyeda
Ms. Kanoë Wilson
Mr. Keith K. Okamoto, Manager-Chief Engineer, Department of Water Supply (ex-officio member)

ABSENT: Ms. Susan Lee Loy, Water Board Member
Director, Planning Department (ex-officio member)
Director, Department of Public Works (ex-officio member)

OTHERS PRESENT: Ms. Jessica Yeh, Deputy Corporation Counsel
Mr. Craig Masuda, Deputy Corporation Counsel
Mr. Gerald Yamada, GW Construction
Ms. Wendy Yamada, GW Construction
Mr. Eleot Kaipo, Qualified Plumbing
Mr. Dwight Kokubun, AIA Lectrician
Mr. Dayle Kajiyo, AIA Lectrician
Ms. Nancy Cook-Lauer, Hawai‘i Tribune-Herald
Mr. David Corrigan, Big Island Video News

Department of Water Supply Staff

Mr. Kawika Uyehara, Deputy
Ms. Kaiulani Matsumoto, Information and Education Specialist
Mr. Kurt Inaba, Engineering Division Head
Mr. Richard Sumada, Waterworks Controller
Mr. Clyde Young, Operations Division
Mr. Eric Takamoto, Operations Division
Mr. Warren Ching, Operations Division
Mr. Lawrence Beck, Engineering Division

CALL TO ORDER – Chairperson Takamine called the meeting to order at 10:00 a.m. He announced that this would be Mr. Jay Uyeda’s last meeting as his term is ending. He has contributed a lot to this Board over the years and was thanked for his hard work. Mr. Uyeda thanked both the Board and the Department and added that he had no idea what he was getting into before joining the board; but as his term progressed, it was very beneficial to be on the Board. Hopefully he may have a future opportunity to

again serve on the Board after the required time has passed. Chairperson Takamine announced that Ms. Susan Lee Loy had also come to the end of her term. She has also contributed greatly to this Board and will be missed. He also introduced the Department's new Deputy Corporation Counsel, Ms. Jessica Yeh.

STATEMENTS FROM THE PUBLIC – Chairperson Takamine noted that Mr. Gerald Yamada would reserve his statements until Agenda Item 7(B) Job No. 2005-870, Laupāhoehoe (Manowai‘ōpae) 0.5 MG Reservoir.

APPROVAL OF MINUTES:

Ms. Wilson noted an error in the Minutes of the February 28, 2017, Water Board Meeting, where it listed her in attendance. She was not present at that meeting.

ACTION: Mr. Arikawa moved to approve the amendment to the Minutes; seconded by Mr. Uyeda and carried unanimously by voice vote. Minutes of the February 28, 2017, Water Board Meeting were approved as corrected.

APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL – Chairperson Takamine noted Supplemental Agenda handed out today to add to the Agenda Item NORTH KONA (C) JOB NO. 2017-1058, PALANI DEEPWELL A REPAIR.

MOVE UP AGENDA ITEM

Chairperson Takamine asked that Agenda Item Miscellaneous (B), Job No. 2005-870, Laupāhoehoe (Manowai‘ōpae) 0.5 MG Reservoir be taken up first. He asked that Mr. Gerald Yamada come forward to provide information on this matter.

MISCELLANEOUS:

B. JOB NO. 2005-870, LAUPĀHOEHOE (MANOWAI‘ŌPAE) 0.5 MG RESERVOIR:

The Manager-Chief Engineer stated that the Board will hear from the contractor on this project, Yamada Paint Contracting, Inc., dba GW Construction. They request additional consideration for a time extension due to issues experienced by their subcontractor. They have brought forward additional information on the project for the Board's consideration and possible action.

Mr. Gerald Yamada asked the Board for relief on the time extension and brought documentation to show a timeline on the two items in question--the motor control center and the pump. The pump took a little longer, and the exhibits show why it was delayed. The document lists: Item 1, November 5, 2014, Notice to Proceed was issued; Item 2, November 7, 2014, the subcontractor, Qualified Plumbing, ordered the pump (Exhibit A); submittal was reviewed by the Department and approved on January 6, 2015 (Exhibit B). Item 4, November 24, 2015, the pump was ordered and arrived on the jobsite, which was within their construction time schedule. The pump that was received was something totally different from what was approved by the Department and ordered by the subcontractor. The Department reviewed and rejected the pump on January 4, 2016. The manufacturers flew in on January 15, 2016 (Item 7), at which time they came up with a plan to remediate and rebuild another Department of Water Supply pump rather than ordering another pump which would take 10 months to arrive. It was completed, tested, and commissioned on June 13, 2016. On the back page of Mr. Yamada's submittal was a timeline and delay, which is 90 working days. He noted that the project was way ahead of schedule in the beginning, until it was delayed by these items,

which pushed them over the timeframe. This documentation is to show the Department what caused the delay and was something beyond their control and asked they not be fined liquidated damages for going over the 30 days, which is what the Department is asking for.

Chairperson Takamine asked for clarification if their request was for 30 days of relief.

Mr. Yamada replied that they request they not be penalized and he understood the Department was going to penalize them for 30 days. As brought forth at a previous Water Board meeting, the language in the Department's General Requirements and Covenants (GRCs) does not provide for relief from manufactured items beyond the contractor's control, such as the State of Hawai'i Department of Accounting and General Services (DAGS), and the other Procurement documents. That exact language cannot be found in the Department's GRCs. They are hoping it can be added in.

The Manager-Chief Engineer provided some background from the Department's standpoint. The General Requirements and Covenants (GRCs) of the Department of Water Supply which are referred to in the Department's projects do not allow for a situation like this. The Department empathizes with the contractor and his subcontractor but could not find a way within the GRCs to allow for relief in this situation. Realizing that subcontractors are often at the mercy of manufacturers and do not get the typical consideration as an outfit doing large volume, there is hardship on the subcontractors and sometimes the general contractor. What the Department has been doing on more recent projects is adding in language within its bid documents that allow for time extensions due manufacturer delays. This case is being brought forth to the Board today because that language was not included in this particular project and, therefore, the only language is in the GRCs.

Mr. Arikawa referenced Exhibit C, a letter from Qualified Plumbing, indicating they had received the booster pump and control panel on November 24, 2015. He asked if there were any shipping or payment documents to show that it did arrive on that date.

Mr. Yamada showed the Board an email, noted for the record as a timeline of emails detailing when the Department of Water Supply Inspector inspected the pump and discussion about the inspection.

Mr. Masuda read the email, dated Monday, January 4, 2016, at 5:22 p.m. sent to Joey Hong. It does not, as Mr. Yamada had indicated, state the date of the November issue that Mr. Arikawa was asking about. It does state: "Joey, re: Laupāhoehoe Booster Pump, DWS is rejecting the installed booster pump. Can you bring the correct pump per the approved submittals? Please advise on ETA. Time is of essence. Possible project delay. Thank you. Gerald Yamada."

The Manager-Chief Engineer offered, for consideration by the Board, that the Department can assume the date is correct, because the Department's Inspectors would have that information available if it arrived around or on that timeframe and bring that forth to the Board.

Mr. Arikawa clarified that he was not questioning their integrity but rather ensuring that everything is within this timeline that was provided.

Ms. Wilson asked about Exhibit C where it indicates the control panel was received on November 24, 2015, and were looking at an installation date of December 17. In the next sentence, it states the intention was to complete the installation but they had to check on a larger control panel.

Mr. Yamada asked the subcontractor to come forward and explain.

Mr. Eleot Kaipo of Qualified Plumbing explained that the pump was wrong and the control panel was way bigger than the size it was supposed to be. It was as big as the door and could not fit in the control room. They had to take everything out of the box, put it into a smaller box to fit in the room, and mount some [equipment] on the outside, and have approval from DWS on the design.

Mr. Yamada showed the Board a picture of it. It was totally different from what was ordered. They stripped out the cabinet, ordered a new cabinet, pulled the parts out of there, and reconfigured it to make it work, after they got it approved by DWS.

Ms. Wilson noted a communication in the submittals brought today where Mr. Yamada had asked if the pump was going to arrive the same as the submittals. He had recognized there was an issue.

Mr. Yamada replied he did. The DWS could have just rejected the whole system but instead approved reconfiguration/rewiring, etc.

Ms. Iokepa-Moses appreciated all of the work done by the contractor and subcontractors. They were on it from the start, and these events were way out of their control. Her question was regarding the reconfiguration that was approved in the end and whether it cost DWS any more money in the end.

The Manager-Chief Engineer replied that it cost the Department more time, not money. He would support not penalizing the contractor for that 30-day extension because they put their part in, doing the extra work and tried to accommodate the Department and not make the project delayed another 10 months awaiting the correct equipment to arrive. The Department appreciates that effort.

Mr. Yamada added that at no time was the water system ever down. They always had the system running.

Mr. Elarionoff noted from today's agenda, there are three other projects for award with bids that came in under the engineer's estimates. To be hard-nosed on this issue may not be a good policy because future bids may start to come in higher so the contractors can cover themselves for situations like this. From his point of view, he would be willing to work with them on this issue.

Mr. Uyeda agreed.

Chairman Takamine spoke to his fellow Board members that he is very sympathetic to the contractor because when you are in construction and you bid a job, you have certain things you think are supposed to happen and one of those is the material you ordered to come in correctly. In this situation, it was not even close. He sympathizes because Qualified Plumbing is a small business and that is what the Board is here for. The Board cannot penalize small businesses like that when it is not their fault. He hoped the rest of the Board agreed with him. He asked Mr. Yamada how many days this delay caused.

Mr. Yamada stated it was 100-plus calendar days/98 working days.

Chairperson Takamine asked if that was what they were asking for.

Mr. Yamada replied they do not want be penalized for that 30 days.

The Manager-Chief Engineer commented that the Department's attitude towards contractors is to work with them. He felt that everyone here could attest that they have been trying to work together through this process. However, the real issue here is that the Department's hands are tied by the

contract and the General Requirements and Covenants. He does not have the authority to break the Departments rules and regulations, and that is why he thought it was fair to bring this forward to the Board for its consideration because this body has that authority. If the Department did not feel it was justified, it would not be on the agenda. He hoped the Board would recognize that the Department also empathizes with the contractor and he could attest that this contractor and subcontractors were way ahead of schedule in the beginning. The Department was looking forward to a project done ahead of time. This is something very unfortunate, especially to Qualified Plumbing; but at the same time, the Department does not have the authority to deviate from what is in black and white. It is a tough position for the Department to be faced with.

In response to Mr. Elarionoff’s question of whether he would be sympathetic with them if he had his own way, the Manager-Chief Engineer replied he would.

Chairperson Takamine called for a Motion.

ACTION: Mr. Arikawa moved to accept the recommendation; seconded by Ms. Wilson and carried unanimously by voice vote.

The Manager-Chief Engineer clarified that the recommendation is to grant the appropriate time extension such that the contractor, GW Construction, is not assessed liquidated damages.

Mr. Masuda asked the maker of the Motion, and its second if they understood the Motion to be just for relief from liquidated damages in this case. Liquidated damages do not apply. Mr. Arikawa and Ms. Wilson affirmed.

(The contractor and his subcontractors thanked the Board and left the meeting at 10:20 a.m.)

SOUTH KOHALA:

A. JOB NO. 2015-1031, PARKER RANCH DEEPWELL REPAIR – REQUEST FOR ADDITIONAL FUNDS:

The contractor, Derrick’s Well Drilling & Pump Services, LLC, is requesting a contract change order for the Parker Ranch Deepwell Repair. The contract change order is to cover costs associated with the change in the scope of work for rewind of the submersible motor and associated well extraction and installation caused by the failure of the well starting equipment. Staff is recommending approval of this change order work over the rebidding of this project as it would be the most expeditious method for returning this well to service. It is estimated that approval of a change order could save 1 to 1½ months over rebidding. Any delays to the completion of this project will in turn cause delays to the completion of ongoing construction upgrades at the Waimea Water Treatment Plant and further delay proceeding with Job No. 2015-1025 to replace the water treatment plant’s flocculation system. The additional fees are as follows:

Original Contract Amount:	\$444,000.00
Original Contingency amount:	44,400.00
1 st Change Order:	-\$ 1,235.00
1 st Additional Contingency request:	\$ 34,251.00
2 nd Change Order (inclusive of 1 st Additional Contingency Request):	\$ 78,651.00
Total Contract Amount	\$521,416.00

The Manager-Chief Engineer recommended that the Board approve an increase in contingency of \$34,251.00 for a total contract amount of \$521,416.00 to Derrick's Well Drilling & Pump Services, LLC, for JOB NO. 2015-1031, PARKER RANCH DEEPWELL REPAIR.

MOTION: Mr. Arikawa moved for approval of the recommendation; seconded by Mr. Elarionoff.

The Manager-Chief Engineer explained that the motor failed almost immediately after start-up. The motor was pulled under warranty provisions; and after teardown and analysis, it was revealed this is not a warranty-related issue. Further evaluation showed it was a fault in the Department's control system topside that caused this failure. Instead of sending out for rebid, it was felt that the more prudent approach would be to increase contingency and allow the current contractor, who is still on the job, to just finish and get it operational. Mr. Eric Takamoto, project engineer, was present to answer any technical questions.

In response to Mr. Elarionoff's question of what can be done to make sure this does not happen again, Mr. Takamoto replied that new protocols have been put in place to ensure that prior to any start-up on future repairs, the Department's electricians will review all electrical equipment, making sure all equipment is in good condition for start-up so no faults occur. In this particular instance, the fault occurred in a piece of equipment called a contactor. The contacts were corroded. Due to that corrosion, when a motor is turned on, it is going to be asking for a certain amount of amps; however, due to corrosion, it will ask for more than what is typical or what the contacts are rated for, resulting in overheating and shorting, causing damage to the motor.

The Manager-Chief Engineer noted that the Department will do what it can in the future to ensure that equipment, topside, is in good condition and also look at possibly hiring a third-party electrical contractor, if necessary, to help evaluate certain electrical requirements in conjunction with these well repairs to hopefully avoid this type of situation.

Chairperson Takamine asked if Invoices 1102 and 1103 from Derrick's Well Drilling, provided today, totaling \$78,651.00 were the cost of removal and reinstallation of the pump.

Mr. Takamoto replied that was correct.

Ms. Wilson asked if this stays within the scope of the original project.

Mr. Takamoto replied it does.

Mr. Uyeda asked what the cost of \$18,326.00 on Invoice No. 1103 was for.

Mr. Takamoto replied it was to rewind and repair the motor which had burned out.

Mr. Uyeda asked if there was any cost on this change order for the repair in the motor control center.

Mr. Takamoto replied no. The part that was faulty was replaced with the spare inventory on hand from the Department. It was in-house.

ACTION: Motion was carried unanimously by voice vote.

NORTH KONA:

A. JOB NO. 2017-1059, KĒOPŪ DEEPWELL REPAIR:

This project consists of furnishing all labor, materials, tools and equipment necessary to remove the existing pump, motor, and column assembly; install a submersible pump and motor, column assembly, power cable, sounding tubes, well level transducer, and all appurtenant materials; chlorinate the well and pumping assembly; and complete an efficiency test; in accordance with the specifications.

Bids for this project were opened on March 16, 2017, at 2:30 p.m., and the following are the bid results:

Bidder	Bid Amount
Beylik Drilling & Pump Service, Inc.	Non-Responsive
Derrick's Well Drilling & Pump Services, LLC	\$219,000.00

Project Costs:

1) Low Bidder (Derrick's Well Drilling & Pump Services, LLC)	\$ 219,000.00
2) Contingencies (10.0%)	\$ 21,900.00
Total Cost:	<u>\$ 240,900.00</u>

Funding for this project will be from DWS's C.I.P. Budget under Deepwell Pump Replacement. The contractor will have 210 calendar days to complete this project. The Engineering estimate for this project was \$325,600.00.

The Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2017-1059, KĒOPŪ DEEPWELL REPAIR, to the lowest responsible bidder, Derrick's Well Drilling & Pump Services, LLC, for their bid amount of \$219,000.00, plus \$21,900.00 for contingencies, for a total contract amount of \$240,900.00. It is further recommended that either the Chairperson or the Vice-Chairperson be authorized to sign the contract, subject to review as to form and legality by Corporation Counsel. Mr. Warren Ching, project engineer, was on hand to answer questions.

ACTION: Mr. Arikawa moved for approval of the recommendation; seconded by Ms. Wilson and carried unanimously by voice vote.

B. JOB NO. 2017-1060, HUALĀLAI DEEPWELL REPAIR:

This project consists of paying for all labor, materials, tools and equipment necessary for the replacement of the existing deep well submersible pump and motor, power cable and all appurtenant materials, such as cable guards, strapping, etc; chlorination and testing of the well and pumping assembly; electrical work and reconfiguration and replacement of well discharge piping assembly; in accordance with the specifications.

Bids for this project were opened on March 16, 2017, at 3:00 p.m., and the following are the bid results:

Bidder	Bid Amount
Beylik Drilling & Pump Service, Inc.	\$377,475.00
Derrick's Well Drilling & Pump Services, LLC	\$327,000.00

Project Costs:

1) Low Bidder (Derrick’s Well Drilling & Pump Services, LLC)	\$ 327,000.00
2) Contingencies (10.0%)	\$ 32,700.00
Total Cost:	<u>\$ 359,700.00</u>

Funding for this project will be from DWS’s C.I.P. Budget under Deepwell Pump Replacement. The contractor will have 210 calendar days to complete this project. The Engineering estimate for this project was \$566,000.00.

Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2017-1060, HUALĀLAI DEEPWELL REPAIR, to the lowest responsible bidder, Derrick’s Well Drilling & Pump Services, LLC, for their bid amount of \$327,000.00, plus \$32,700.00 for contingencies, for a total contract amount of \$359,700.00. It is further recommended that either the Chairperson or the Vice-Chairperson be authorized to sign the contract, subject to review as to form and legality by Corporation Counsel.

MOTION: Mr. Arikawa moved for approval of the recommendation; seconded by Ms. Wilson.

Mr. Arikawa questioned the difference between the engineer’s estimate and the bids that came in.

Mr. Takamoto explained that the engineer’s estimate was to more accurately capture the actual project cost. He included the materials the Department is furnishing for this repair, at a cost of \$160,000.00. The estimate also included the 10% contingency.

Mr. Arikawa asked if that meant the supplies were already paid for and were in-house items.

Mr. Takamoto replied that was correct.

Ms. Iokepa-Moses suggested it may help in the future to compare oranges to oranges and have the estimates exactly for what the contractor would be doing.

Chairperson Takamine added that perhaps the engineer’s estimate could be shown with a note after it for “X” amount representing other costs.

The Manager-Chief Engineer agreed that was a good suggestion.

Mr. Uyeda noticed for both Keopu and the Hualālai wells, the contract calendar days were about the same. He asked if the Department was comfortable with that number the days for repair.

Mr. Takamoto replied yes. It was coincidence that his project and Mr. Ching’s project had the same amount of time for project completion.

ACTION: Motion was carried unanimously by voice vote.

C. JOB NO. 2017-1058, PALANI DEEPWELL A REPAIR:

This project consists of furnishing all labor, materials, tools and equipment necessary to install a submersible pump and motor, column pipe, column couplings, check valves, sounding tubes, pump cable, and appurtenances, such as cable guards, strapping, etc; chlorinate the well and pumping assembly; and complete an efficiency test; in accordance with the specifications.

Bids for this project were opened on March 23, 2017, at 2:00 p.m., and the following are the bid results:

Bidder	Bid Amount
Beylik Drilling & Pump Service, Inc.	\$356,850.00
Derrick's Well Drilling & Pump Services, LLC	\$313,700.00

Project Costs:

1) Low Bidder (Derrick's Well Drilling & Pump Services, LLC)	\$ 313,700.00
2) Contingencies (10.0%)	\$ 31,300.00
Total Cost:	<u>\$ 345,000.00</u>

Funding for this project will be from DWS's C.I.P. Budget under Deepwell Pump Replacement. The contractor will have 180 calendar days to complete this project. The Engineering estimate for this project was \$330,000.00.

Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2017-1058, PALANI DEEPWELL A REPAIR, to the lowest responsible bidder, Derrick's Well Drilling & Pump Services, LLC, for their bid amount of \$313,700.00, plus \$31,300.00 for contingencies, for a total contract amount of \$345,000.00. It is further recommended that either the Chairperson or the Vice-Chairperson be authorized to sign the contract, subject to review as to form and legality by Corporation Counsel.

MOTION: Ms. Wilson moved for approval of the recommendation; seconded by Mr. Elarionoff.

The Manager-Chief Engineer noted that this was Mr. Ching's project. This one was closer and the timeframe shorter.

Mr. Uyeda asked if the Department was confident in having one contractor doing three wells in Kona at the same time. He asked how many wells, out of the three, are operating.

The Manager-Chief Engineer replied that none of the three are operating. These three are part of the four wells that are currently down in Kona.

In response to Ms. Iokepa-Moses' question of whether the contractor has enough manpower to work on these simultaneously, Mr. Ching stated that he believed Derrick's Well Drilling has two crews they usually run. For them to do all three at the same time may be difficult.

Mr. Arikawa noted that was a good question and asked what the priority is on the three wells.

Mr. Ching replied the first priority would most likely this one, the Palani Deep Well, simply because it is the most straightforward and highest GPM. Next would be Hualālai Deep Well, which is the next highest GPM, and then Keopu Deep Well.

The Manager-Chief Engineer noted that there is a lot of manufacturing time with pumps and motors. The actual work that Derrick's Well Drilling will be doing will be during the manufacturing process. They will extract the damaged well, and they could do that in sequence with the three projects. The big question will come on the installation part. When the time comes close to that point, it will be seen whether there is a challenge or not.

Ms. Iokepa-Moses thought this would be one example where these three jobs, all successfully bid on by one contractor, should be monitored to see how many time extensions, if any, are gone through at the end of the projects; and say if they are as close as \$20,000 off, it might have been worth going to Beylik Drilling if Derrick's has two other existing successful bids with this Department. It would be good to see how it all pans out.

Chairperson Takamine thought that was a good idea. He added that they also need to be given the benefit of the doubt and hopefully, the three installations will not occur exactly at the same time. He had a good feeling they will be successful.

Mr. Uyeda asked if Derrick's Well Drilling were aware they were going to be awarded three projects and also how many well installation rigs they have.

Mr. Ching replied they do, and they have one rig.

The Manager-Chief Engineer stated that the Department is bound by Procurement Laws. These projects were put out to bid with the timeframe felt was realistic to complete. It has no control over who bids. The Department has faith the bidders will bid based on knowing what their timeframes are, expecting to get the job, and expecting it to be done on time. If not, they are required, prior to submitting their bid, to provide the Department with a request for information or something that says they are going to have a problem with a timeline and ask it to be extended. That would be during the pre-bid process so every potential bidder operates on that same information. Both contractors would know that instead of 210 calendar days, this one is now 240, and things like that, because it all affects their price. As Chairperson Takamine said, at this point, we have to remain optimistic that this one contractor can get all three jobs done in the contract timeframe.

Chairperson Takamine asked if the Department could keep a close eye on all three projects and keep the Board updated, that would be beneficial.

Ms. Wilson noticed all three of these repairs are submersible pumps and motors was curious to know what the Department would be doing with protocols in place, especially in this area where three submersible pumps and motors are down almost simultaneously.

The Manager-Chief Engineer stated that, moving forward, the Department is going to invest a little more up front in capital and drill two smaller holes on the same site instead of putting in large 1,000-gpm or 1,400-gpm pumps. The hope is that smaller capacity wells will be less problematic. If one well goes down, there would be half capacity with the other one. The Department will probably stop doing these big high-capacity, high-elevation pumps and motors because they are not making them like they used to, apparently. They used to last a whole lot longer than they do now.

Chairperson Takamine asked if there other places in the nation that face similar situations such as depth of wells, and if not the United States, perhaps other countries or other islands that maybe can be looked at to see what they have done and what they have been successful with and see if this Department can implement something similar. He asked if it has ever been taken into account in the past.

Mr. Young stated that he has been looking at that for years because this Department has some of the deepest set wells. He has even been told they are some of the deepest set wells in the Country, so it is kind of unique in that sense. Anything over 1,000 feet is extremely deep. There are a few places where some private wells are also deep, but most of them are on the Big Island. Oahu or the outer islands have mostly shallower set wells.

Chairperson Takamine asked how other places are, such as Japan or the Philippines.

Mr. Young replied he did not look at foreign countries.

Mr. Uyeda shared his experience with their resort's private wells. They are lower GPM, lower horsepower, and they have been fortunate that they have been in the ground a long time without failing. He agreed with the Manager-Chief Engineer's point to try lower capacity wells.

In response to Mr. Elarionoff's question of whether the Department can demand better quality, the Manager-Chief Engineer stated that performance is built into the specifications, typically on efficiency. His earlier comment was an off-the-cuff non-professional evaluation because the Department is specifying the same types of pumps and motors but is not getting the same lifespan. In answer to Mr. Elarionoff's question about warranty, he replied they usually have a two-year warranty.

Ms. Wilson asked how many customers are impacted because of these wells being down.

The Manager-Chief Engineer replied there was no loss of service. The Department's Kona personnel have been working their magic in keeping water flowing to everyone. In the past, the Department relied more heavily on its basal sources. Out of thirteen wells in Kona, seven are high level, six are basal, so the Department is putting more dependence back on the basal sources, such as Kahalu'u Shaft and Kahalu'u Well Field, and even Holualoa Well. When these three wells come back online, the Department will be able to rely more on the high-level wells versus basal and reduce pumping on the shaft.

ACTION: Motion was carried unanimously by voice vote.

MISCELLANEOUS:

A. WATER USE AND DEVELOPMENT PLAN - UPDATE:

The Commission on Water Resource Management (CWRM) at its February 14, 2017, meeting approved Phase 2 of the Water Use and Development Plan Update and authorized the Department of Water Supply to proceed with the compiled Phase 1 and 2 plan for further approval by the Water Board and, subsequently, the County Council. The compiled plans have been completed and are being submitted for approval to hold public hearings, prior or subsequent to the Water Board meetings in April and May. The public hearings are required by the Board (one each in Hilo and Kona) before the Board can approve the plan.

The Manager-Chief Engineer recommended that the Board approve the compiled Phase 1 and Phase 2 Water Use and Development Plan Update for public hearings in April and May of 2017.

MOTION: Mr. Arikawa moved for approval of the recommendation; seconded by Ms. Wilson.

Mr. Inaba explained that the Department went through the process to get CWRM's blessing on the document. The next step, based on the Hawai'i County Code, is for the Water Board to hold a public hearing in East Hawai'i and one in West Hawai'i. It was thought appropriate to hold them in conjunction with the next two Water Board meetings which will be in Hilo and then in Kona. Subsequent to those hearings, the next step is Water Board. After that, it will be submitted to the Hawai'i County Council for their adoption. They would have 90 days to act on it, and if they do not do anything, it is deemed approved. Once that gets done, it is taken back to the CWRM for them to formally adopt it into the Hawai'i Water Plan.

The Manager-Chief Engineer stated that if the Board has any comments or suggestions on this particular document, this is the first step. Those comments would be incorporated because this has gone through approvals from CWRM staff and the Commission itself. It is now in the formal approval and adoption process.

Mr. Arikawa joked that it took him three days to read it and after finished, he had to go back to Page 1 because he had forgotten what he had read. It was very in-depth and they did a wonderful job. He would have to depend on the rest of the Board members and the Department to say it is okay.

Mr. Elarionoff asked if he would be able to make comments at the public hearings because he has not had a chance to read the entire document; only part way.

The Manager-Chief Engineer replied yes.

Mr. Inaba clarified that this is specifically for the Keauhou Aquifer, the North Kona Water System.

The Manager-Chief Engineer noted that this is a result of years of effort between the Department and the CWRM staff, and a lot of input from the Commission on Water Resource Management.

In response to Chairperson's Takamine's question of how long it took for this document to be drafted, the Manager-Chief Engineer stated that Phase I was completed and submitted for approval in May of 2015. After receiving approval on the scope of the second phase, it was submitted and adopted towards the end of 2016 and officially accepted by the Commission on Resource Management at its February 14, 2017, meeting.

Chairperson Takamine thanked the Department for meeting the deadlines and the great job done during this process.

ACTION: Motion was carried unanimously by voice vote.

B. JOB NO. 2005-870, LAUPĀHOEHOE (MANOWAI'ŌPAE) 0.5 MG RESERVOIR:

Taken up earlier.

C. UPDATE RE: NATIONAL PARKS SERVICE'S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:

The Manager-Chief Engineer reported that there has been no information on the petitioner's process to appeal the latest decision from February 14, 2017; however, this Department has correspondence from Special Counsel that might be informative to the Board. If the Board chose to discuss that correspondence with Deputy Corporation Counsel, it would be appropriate to move into Executive Session. Chairperson Takamine moved to Item D.

D. EXECUTIVE SESSION RE: NATIONAL PARKS SERVICE'S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:

ACTION: Mr. Arikawa moved that the Water Board convene an executive meeting, closed to the public, pursuant to Hawai'i Revised Statutes, Sections, 92-4 and 92-5(a)(4) for the purpose of consulting with the Water Board's attorney on questions and issues pertaining to the Water Board's powers, duties, privileges, immunities and liabilities; seconded by Ms. Wilson and carried unanimously by voice vote. (Executive Session began at 10:55 a.m. and ended at 11:01 a.m.)

Once the Board moved out of Executive Session, Mr. Masuda noted, for the record, that it was for advisory only to Water Board's Counsel as to the rights and liabilities of the Board. There was nothing to vote on after exiting Executive Session.

E. **WATERSHED PROTECTION FUND:**

The Manager-Chief Engineer stated that another part of the discussion throughout the process of the National Park's petition to designate was a strong suggestion by one of the Commissioners of on the Commission of Water Resource Management (CWRM) that this Department look into doing something for watershed protection. One idea, similar to the Department's energy CIP fund, is a separate fund with one penny per thousand gallons which goes specifically to organizations or agencies through an MOU (Memorandum of Understanding) that is signed by the Water Board for specific projects that will end up benefiting the Department's customers. A penny per thousand equates to about \$90,000 per year. The Department has met with the Nature Conservancy, the State of Hawai'i, DLNR's Division of Forestry, and also routinely attends the Three Mountain Alliance meetings and things of that nature. There are opportunities for the Department to participate. Today's discussion is to see whether or not that is something the Board wants to consider and the Department could further evaluate possible rates and partnerships moving forward.

Ms. Iokepa-Moses asked if this would affect the customers' rates.

The Manager-Chief Engineer replied it would, similar to the energy CIP rate. It would be a supplemental rate on top of their normal consumption and the power cost charge. The other way to fund this would be to budget a certain amount every year. This is all for consideration.

Mr. Uyeda stated that his recommendation would be to place it on an agenda for public hearing to gather input from the public. Another suggestion would be to look into what other agencies or private companies are participating in regarding watershed and what kind of watershed program.

The Manager-Chief Engineer stated that a public hearing would be required any time the Department proposes a change to the water rates. Even if it is incorporated within the Department's O&M budget, that goes through the budget hearing process. From his understanding, Maui and Oahu have a fund for watershed protection. He will discuss this topic with the other Water Managers.

Ms. Iokepa-Moses indicated she would be more prone to have the Department support this initiative instead of putting it back on the public for them to pay.

Mr. Uyeda added that whatever fund the Department participates in, it stays close to home.

The Manager-Chief Engineer agreed that is exactly the Department's primary concern. Division of Forestry was asked if we do partner with them, would the funds go back to Oahu or would it stay on this island. They said it stays over here. Internally, the Department has already identified the priority areas it would like to see if it does contribute something like this. Engineering has come up with a priority system--Kona, Waimea (because that is the Department's single surface-water source), and thereafter would be Ka'u.

Mr. Elarionoff stated his main concern was that it goes to some legitimate cause.

The Manager-Chief Engineer stated that is where the Board can help the when it establishes this fund and gives it to somebody. He envisions something like an MOU between the Board and that entity

indicating it is giving them money but that money has to be used for a specific purpose, outlined in the MOU.

Ms. Iokepa-Moses stated that is why she felt like it should be the Water Board backing this, financially, because if you have the public paying for it, by right, the public should be directing where this money is being spent as well. If the Department wants to be in control of making the best decision it can for where that money is going, it should be the one supporting this, financially.

The Manager-Chief Engineer agreed. He said what they could do is come up with several options to bring to the Board as possible funding options and the Board can weigh in on those options and pros and cons then move forward to public hearings and things of that nature.

Ms. Wilson commended the Department on this because watershed protection is huge and would definitely like see a component with educational outreach our keiki as well. It is really important for them because they are the next generation and will be our stewards as well. She agreed with Ms. Iokepa-Moses and would like to see the Department and the Board come up with some good criteria on how and who to best work with and develop those partnerships and collaborations. This will be very successful if done right.

The Manager-Chief Engineer stated that if it is budgeted every year, it will be consistent versus a penny per thousand, which is all based on the consumption.

Mr. Arikawa mentioned the rapid Ohia death and global warming affecting the watershed, and thought this was a very good idea.

The Manager-Chief Engineer stated that there are a lot of things going on concurrently. There is the Fresh Water Council which is comprised of all water managers and other major stakeholders in the State and their task is water security. There is a current Act in Session Laws 2016 that established the Water Security Advisory Group, of which they are all a part of. A lot of things are going on with water security and making sure we have fresh water in perpetuity. This would be the Board and Department contribution directly. He agreed that it is time and is a good move on our part.

F. MONTHLY PROGRESS REPORT:

Questions were asked about the following projects. Construction on the Paukaa Waterline project has not started, but Notice to Proceed is April 9.

The Ike Place Water System Improvements (Improvement District) Manager's Report was submitted to Councilperson Karen Eoff's Office. Resolution mandated that a report be provided. It now goes back to Council for further consideration. The Department has informed them it does not have the funds available up front for the engineering and design costs. It is the Department's understanding that the County of Hawai'i, Finance Department, is incorporating that into their bond requirements if this project moves forward. Mr. Uyeda asked how the homeowners would be assessed. Mr. Inaba replied that it depends on the funding source. If it is under the USDA Rural Utilities program, it can be spread out over 31 years. In response to Mr. Balog's question of whether the construction cost would be the Department's responsibility, the Manger-Chief Engineer replied it would only be for internal costs to administer the project, such as project inspection. The capital cost and engineering are supposed to come under that funding source and be assessed the homeowners as part of their payback requirements.

Queen Ka‘ahumanu Highway – contractor waiting on final paving. Pressure test and tie-ins would occur after that time.

G. REVIEW OF MONTHLY FINANCIAL STATEMENTS:

Mr. Arikawa asked about the Worker’s Compensation line item that had increased. Mr. Sumada explained that the worker’s compensation bills come in sporadically. Some months, that expense may be a lot higher than other months.

Mr. Leningrad asked for an explanation of Line Item 5320 Contractual Services on Page BUD3.

Mr. Sumada explained that there was a project, Āinako and Aina-nani Waterline Replacement, that the Department spent \$226,000 on and then it was determined they were not going to complete the project. Normally when construction projects are completed, all the costs are capitalized into property accounts, such as waterlines, etc., that are then depreciated over time. Because this project was not completed, the costs do not become capitalized but are expensed. This one was applied to the Engineering operating budget to be expensed in this current year.

Mr. Inaba added that this represented the consultant and in-house expenses. When the project comes up again, it will have to be placed in the new budget.

H. DEPARTMENT OF WATER SUPPLY PROPOSED OPERATING AND 5-YEAR CAPITAL IMPROVEMENT PROJECTS (C.I.P.) BUDGETS FOR FISCAL YEAR 2018:

The Department’s Fiscal Year 2018 Operating Budget, totaling \$54,178,000 and 5-Year C.I.P. Budget for Fiscal Year 2018-2022, totaling \$72,200,000, have been distributed for the Board’s review. A public hearing was held prior to this meeting to accept testimony. The Board may change either Budget, or adopt them as presented over two readings.

The Manager-Chief Engineer recommended that the Water Board approve the Department’s Fiscal Year 2018 Operating and 5-year C.I.P. budgets for Fiscal Years 2018-2022 on this first of two readings.

ACTION: Mr. Arikawa moved for approval of the recommendation; seconded by Ms. Iokepa-Moses and carried unanimously by voice vote.

I. MANAGER-CHIEF ENGINEER’S REPORT:

The Manager-Chief Engineer reported that he travelled to Washington, DC, last week as part of the American Water Works Association National Water Matters Fly-In. It is their attempt to collectively bring all representatives nationwide to the Congressional Delegations to ensure that they keep drinking water as a priority. He was fortunate to meet with Congressional Delegates or their staff and was impressed with their knowledge of water issues in the State, especially the Keauhou Aquifer. It seemed like the Drinking Water Revolving Fund and the Water Infrastructure Finance Innovation Act funding will be retained in some form. The other thing brought forward to the Delegation was that the exempt status of municipal bonds be retained.

In response to Mr. Arikawa’s question of how the Water Board vacancies are moving along, the Manager-Chief Engineer replied that Mr. William Boswell, nominee for District 8, appeared in front of the Council Planning Committee and should be appearing in front of full Council for confirmation on April 5. Mr. Nestorio Domingo, nominee for District 7, could not appear at the committee hearing and may be pushed

back to mid April. He noted that is Mr. Uyeda's district. District 4 is still vacant. He invited the Board to let him know if they think of anyone who could fill District 4 and he would send it along to the Mayor's Office.

Ms. Wilson asked about Legislative Bills. Mr. Uyehara stated that since the Legislature started, the Department submitted testimony on about four or five proposed Bills regarding water conservation measures, appropriating budgets to the counties for water rebate programs, and also HB100 HD1 today, which he understand the House may have taken out some of the funds appropriated for watershed protection. The Department submitted testimony in support of the original version of HB100 which had included the funds for watershed protection across the state. The Manager-Chief Engineer added that HB100 is basically the budget Bill from the House side. The Senate has its accompanying Bill. HB100 had close to \$3 million budgeted for watershed protection and the HD1 took it all out. The letter to the Legislature is asking them to put it back in. Another Bill is the conservation rebate program, which is another initiative from the Freshwater Initiative Council. It puts a burden on the Department in that it requires the Department to match the funding by half. If it goes through, the Department will return to the Board with types of programs and/or appliances it will use to qualify. Each County would have discretion on how to implement the program.

J. CHAIRPERSON'S REPORT:

Chairperson Takamine mentioned that he traveled to the Bay area last week, and it had him thinking about bottled water and travelling. Any time he travels, he tries to drink the tap water as much as possible, which gives him the sense of how great the Big Island water is. He does not like bottled water in his household and promotes refillable containers. He often tells people that the water from the bottle is probably not as good as what you can get from the tap. He thought perhaps the Department could look into ways of touting the quality of its water to educate the public. It would also help cut down on the amount of water bottles that end up in the landfill. Ms. Wilson added that installing Hydroflask water fountains would be really nice. The Manager-Chief Engineer stated he would look into that.

ANNOUNCEMENTS:

1. Next Regular Meeting:

The next meeting of the Water Board is scheduled for April 25, 2017, at the Department of Water Supply, Operations Center Conference Room; 889 Leilani Street, Hilo, Hawai'i

2. Following Meeting:

The following meeting of the Water Board is scheduled for May 23, 2017, at the West Hawai'i Civic Center, Community Center (Building G); 74-5044 Ane Keohokalole Highway, Kailua-Kona, Hawai'i

ADJOURNMENT

ACTION: Mr. Arikawa moved to adjourn the meeting; seconded by Ms. Wilson and carried unanimously by voice vote. Meeting adjourned at 11:35 a.m.

Recording Secretary