FILE CLOSED
11/24/98

SEE 2201-03,04,07
FOLDER #2
Mr. Alvin Au
City and County of Honolulu
Department of Enterprise Services
777 Ward Avenue
Honolulu, HI 96814

Dear Mr. Au:

Notice of Action
Request for Extension of Water Use Permit
EP 2, Well Nos. 2201-03, 04, 07 (WUP No. 420), TMK 9-1-17:60
Waipahu-Waiawa Ground-Water Management Area, Oahu

This letter serves as your official notice of action by the Commission on Water Resource Management (Commission) on your request for extension of WUP No. 420. The following was approved by a unanimous vote of the Commission at its meeting of November 19, 1998:

1. Find Department of Environmental Services in violation of the Commission’s August 31, 1998 deadline to fully resolve outstanding permit conditions.

2. Levy no fines for the violation in 1 (above).

3. Approve an extension of WUP No. 420, subject to the Standard Conditions of a Water Use Permit (Attachment A) and the following Special Conditions (which replace the former special conditions):

   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

   b. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

   c. The duration of the interim permit shall be
      a) to July, 2001, or
      b) until treated wastewater is available and acceptable for use, or
      c) until such time that a significant change in permitted, actual, or projected uses or water supply occurs.
d. This permit is extended under the assumption that wastewater will become available for reuse as an alternative supply source.

e. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

f. If the permittee pumps in excess of 1.124 mgd, a fine of $500 per day shall be imposed.

4. The permittee shall be notified by letter of the Commission action and extended permit duration. Re-issuance of a new interim water use permit for this extended permit is unnecessary.

If you have any questions, please contact Lenore Nakama at [redacted]

Sincerely,

[Signature]

TIMOTHY E. JOHNS
Deputy Director

LN:ss
c. Submittal of a completed Well Completion Report part II for Well No. 2002-15. (Note: This requirement was done on November 17, 1998.)

d. Submittal of a written documentation substantiating the emergency pump installation and water use for Well No. 2002-19.

4. Require Coral Creek Golf, Inc. to submit the documents and information requested in Recommendation 3 within thirty (30) days from this submittal's date or be subject to fines of up to one thousand dollars ($1,000) per day for each day and each source beyond the thirty-day period to submit the documents and information.

5. Recognize that greater water usage is required during the turf grow-in period (to December 31, 1998), and stay enforcement of the permitted use quantity through the grow-in period (to December 31, 1999).

6. Re-notify Coral Creek Golf, Inc. of the 1,000 mg/l chloride cap on all irrigation wells in the Puuloa Aquifer System. Pumping shall cease immediately if the chloride reports show that the brackish water developed in a well exceeds 1,000 mg/l of chloride cap. Pumpage may resume to levels which do not exceed the 1,000 mg/l cap at any time on any given day.

7. Direct the staff to incorporate selected Coral Creek Golf, Inc. water sources in the Commission’s monitoring network.

TESTIMONY BY APPLICANT:

Mr. Joe Livingood, representing the management company for Coral Creek Golf, Inc., testified that he has gathered the data that they have collected from August 1st for the pumpage and chloride reports and has submitted the report to the CWRM staff. He stated that they have produced an overall master plan of the total golf course irrigation ideas as well as the water features and the lake acreages. He further stated that their long-term goal is to use effluent water for irrigation purposes. He stated that there have been some high turnovers which led to various confusion and problems, but he would like to straighten things out. He submitted a map as well as an information sheet.

MOTION: (RICHARDS/COX)
To approve the recommendation as amended.
UNANIMOUSLY APPROVED AS AMENDED.

7. Department of Enterprise Services. REQUEST FOR EXTENSION OF WATER USE PERMIT, EP 2, Well Nos. 2201-03, 04, 07 (WUP No. 420), TMK 9-1-17:60, Waipahu-Waiawa Ground Water Management Area, Oahu

PRESENTATION OF SUBMITTAL: Ms. Lenore Nakama
STAFF RECOMMENDATION:

That the Commission:

1. Find Department of Environmental Services in violation of the Commission's August 31, 1998 deadline to fully resolve outstanding permit conditions.

2. Levy no fines for the violation in Recommendation 1.

3. Approve an extension of WUP No. 420, subject to the Standard Conditions of a Water Use Permit (Attachment A) and the following Special Conditions (which replace the former special conditions):
   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.
   b. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.
   c. The duration of the interim permit shall be
      a) to July, 2001, or
      b) until treated wastewater is available and acceptable for use, or
      c) until such time that a significant change in permitted, actual, or projected uses or water supply occurs.
   d. This permit is extended under the assumption that wastewater will become available for reuse as an alternative supply source.
   e. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.
   f. If the permittee pumps in excess of 1.124 mgd, a fine of $500 per day shall be imposed.

4. The permittee shall be notified by letter of the Commission action and extended permit duration. Re-issuance of a new interim water use permit for this extended permit is unnecessary.
TESTIMONY BY APPLICANT:

Mr. Alvin Au, Director of the Department of Enterprise Services, testified that the city is actively working to provide reclaimed water and the Department of Enterprise Services will be a participant of reclaimed water. He testified that he came before the Commission in July, 1998 to request for an extension of the permit to allow the Department of Enterprise Services to comply with the conditions that were imposed on them and was thus granted an extension until August 31, 1998. However, he stated that despite their full efforts, they were unable to meet the deadline. He therefore requested that the Commission extend the permit once again and he assured the Commission that he will follow the required conditions.

MOTION: (NOBRIGA/RICHARDS)
To approve the recommendation.
UNANIMOUSLY APPROVED.

8. Other Business
None

ADJOURNMENT: Chairperson Wilson adjourned the meeting at 9:55 a.m.

Respectfully submitted,

JANIS F. UWAIN
Secretary

APPROVED AS SUBMITTED:

TIMOTHY E. JOHNS
Deputy Director
APPLICANT(S): City and County of Honolulu
Department of Enterprise Services
777 Ward Avenue
Honolulu, HI 96814

LANDOWNER(S): Same

LOCATION MAP: See Exhibit 1

BACKGROUND:

On March 18, 1996, a completed application for a water use permit was jointly made by the City Department of Housing and Community Development (DHCD) and Chaney, Brooks and Company. The application is to modify the water use permit to increase the permitted use quantity from 0.5 mgd to 1.6 mgd to accommodate the increased demand at the DHCD's West Loch development.

On June 5, 1996, due to time constraints, the Commission deferred action on the application to the next Oahu meeting.

By a unanimous vote, the Commission at its July 17, 1996 meeting:

1. Found DHCD in violation of WUP No. 177 for exceeding the water use permit's allocation limit.
2. Imposed a fine of $500 per day for the period of the violation (730 days * $500/day = $365,000). As an alternative to paying the fine, DHCD may enter into a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation (730 days * $150/day = $109,500).

3. Issued a two-year interim water use permit to DHCD for the reasonable and beneficial use of 1.124 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 3 for EP 2 (Well Nos. 2201-03, 04, 07), subject to the standard water use permit conditions and the following special conditions:

   A. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

   B. The permittee shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [contact information] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The permittee shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

   C. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

   D. If the permittee pumps in excess of 1.124 mgd, a fine of $500 per day shall be imposed.

In a letter dated October 1, 1996, DHCD informed the Commission that the Department of Wastewater Management and the Board of Water Supply (BWS) had initiated measures to develop an Integrated Resource Plan (IRP) for Oahu and would be forwarding an information letter soon (Exhibit 2).

On October 22, 1996, the Commission staff acknowledged DHCD's intentions to take the alternative to payment of a fine and advised DHCD that the 100-day period for entering into a joint agreement with the Commission to retain a consultant for preparation of the plan would lapse on October 25, 1996 (Exhibit 3).

In a letter dated October 24, 1996, DHCD requested a 180-day extension to enter into a joint agreement with the Commission to provide additional time to obtain City Council approval of the proposed agreement (Exhibit 4).

In May, 1998, the Commission staff contacted DHCD to inform them that WUP No. 420 was due to expire on July 17, 1998.
On May 22, 1998, the Commission was forwarded a copy of a letter from the Director of DHCD to the Director of the Department of Auditoriums (DOA), informing DOA of the pending permit expiration and that a new application should be made to continue use of the wells (Exhibit 5). (With the abolition of DHCD, DOA has assumed the responsibility for water for City golf courses.)

On June 25, 1998, the Commission staff met with DOA staff to discuss issues relating to the permit renewal.

On July 9, 1998, DOA transmitted a letter requesting extension of the permit for another two (2) years or until such time as reclaimed water is available to supply the City-related golf courses and/or projects (Exhibit 6). DOA also notified the Commission to transfer the water use permit from DHCD to the Department of Enterprise Services (DES), which will supersede DOA.

By a unanimous vote at their meeting of July 15, 1998 meeting, the Commission approved an extension of WUP No. 420 to August 31, 1998, to provide additional time for the permittee to satisfy all permit conditions and the penalty for overpumpage. Specific outstanding conditions were:

a. Documentation of compliance with Special Condition B (requiring compliance with DOH's 12 conditions for new golf courses).

b. Documentation of compliance with Special Condition C (requiring separate metering and reporting of the golf course water usage).

c. Concurrence letter from Honolulu Board of Water Supply that their contribution to the IRP (Integrated Resource Plan for Oahu) is made, in part, on behalf of Department of Housing and Community Development to satisfy the alternative to a fine.

As part of their action, the Commission also decided that if the above issues were fully resolved by August 31, 1998, then WUP No. 420 would be automatically extended to October, 1998 or until such time that a significant change in permitted, actual, or projected use or water supply occurs. However, if the above issues were not fully resolved by August 31, 1998, then a new water use permit application would be required, pursuant to Administrative Rule 13-171-12, to reactivate the use. If a new application is required, the Commission notified DES that pumpage from EP 2 (Well Nos. 2201-03,04,07) after August 31, 1998 would be subject to fines of up to $1000 per day.

In a letter dated October 1, 1998, DES established compliance with all outstanding conditions of WUP No. 420 (Exhibit 7).

ANALYSIS & ISSUES:

An issue is that the permittee did not fully resolve the outstanding permit conditions by the August 31, 1998 deadline established by the Commission. However, DES made good faith efforts towards meeting the deadline and provided the staff with regular updates as to its progress. The only condition for extension that was not met by the August 31, 1998 deadline was the requirement for...
a separate meter and reporting of golf course water usage. DES was relying on the technical expertise of the Honolulu Board of Water Supply (BWS) to aid in the repair of the meter. BWS was unable to complete the necessary repairs, which were significant, until October, 1998.

The staff understands that DES still requires use of the wells for irrigation needs at the West Loch golf course and subdivision. Denial of this extension request may result in the need to use potable water from the BWS municipal system, which is less desirable from a water resource management perspective. Exhibit 8 shows the current pumpage from the well.

The West Loch development is located on lands overlying the Ewa Caprock and is therefore an ideal candidate for reclaimed water. The City has indicated that use of the basal well water will be substituted with reclaimed water from the Honouliuli Wastewater Treatment Plant by July, 2001, possibly earlier. There does not appear to be another feasible alternative water supply source available to the City at this time.

RECOMMENDATIONS:

That the Commission:

1. Find Department of Environmental Services in violation of the Commission’s August 31, 1998 deadline to fully resolve outstanding permit conditions.

2. Levy no fines for the violation in Recommendation 1.

3. Approve an extension of WUP No. 420, subject to the Standard Conditions of a Water Use Permit (Attachment A) and the following Special Conditions (which replace the former special conditions):

   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

   b. In the event that the tax map key at the location of the water use is changed, the permittee shall notify the Commission in writing of the tax map key change within thirty (30) days after the permittee receives notice of the tax map key change.

   c. The duration of the interim permit shall be
      a) to July, 2001, or
      b) until treated wastewater is available and acceptable for use, or
      c) until such time that a significant change in permitted, actual, or projected uses or water supply occurs.

   d. This permit is extended under the assumption that wastewater will become available for reuse as an alternative supply source.
e. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

f. If the permittee pumps in excess of 1.124 mgd, a fine of $500 per day shall be imposed.

4. The permittee shall be notified by letter of the Commission action and extended permit duration. Re-issuance of a new interim water use permit for this extended permit is unnecessary.

Respectfully submitted,

[Signature]
TIMOTHY E. JOHNS
Deputy Director

Attachment(s):
A (Standard Water Use Permit Conditions)

Exhibit(s):
1 (Location Map for Well Nos. 2201-03,04,07)
2 (October 1, 1996 Letter from Roland D. Libby, Jr. to Michael D. Wilson)
3 (October 22, 1996 Letter from Rae M. Loui to Roland D. Libby, Jr.)
4 (October 24, 1996 Letter from Roland D. Libby, Jr. to Rae M. Loui)
5 (May 15, 1998 Memorandum from Robert Agres, Jr. to Alvin Au)
6 (July 9, 1998 Letter from Alvin K.C. Au to Timothy E. Johns)
7 (October 1, 1998 Letter from Alvin K.C. Au to Timothy E. Johns)
8 (Graph of Pumpage for Well Nos. 2201-03,04,07)
STANDARD WATER USE PERMIT CONDITIONS

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground water use here must not interfere with surface or other ground water rights or reservations.

5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its November 18, 1998 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. protect the water sources (quantity or quality);
   b. meet other legal obligations including other correlative rights;
   c. insure adequate conservation measures;
   d. require efficiency of water uses;
   e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. carry out such other necessary and proper exercise of the State’s and the Commission’s police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

ATTACHMENT A
10. If the ground water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

11. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

12. This permit shall be subject to the Commission's periodic review of the Waipahu-Waiawa Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Waipahu-Waiawa Aquifer System, or relevant modified aquifer(s), is reduced.

13. A permit may be transferred, in whole or in part, from the permittee to another, if:

   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and

   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

14. The use(s) authorized by law and by this permit do not constitute ownership rights.

15. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.

16. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

17. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee’s water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Waipahu-Waiawa Ground Water Management Area.

18. The water use permit granted shall be an interim water use permit, pursuant to HAR § 13-167-3(6). The final determination of the water use quantity shall be made within five years.

19. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

20. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.
STATE OF HAWAII
COMMISSION ON WATER RESOURCE MANAGEMENT
DEPARTMENT OF LAND AND NATURAL RESOURCES

MONTHLY GROUND WATER USE REPORT

Department of Enterprise Services
777 Ward Avenue
Honolulu, Hawaii 96814

Month of __________, 19__

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808) ___ or ___.

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Measurement End Date (mm/dd/yy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)***</th>
<th>Temp (°F)</th>
<th>Lowest Pumping Water Level (ft. above msl)***</th>
<th>Highest Non-Pumping Water Level (ft. above msl)***</th>
</tr>
</thead>
<tbody>
<tr>
<td>2201-03,04,07</td>
<td>EP 2 (Total Pumpage)</td>
<td>West Loch Golf Course Meter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - flow meter, electrical consumption, weir of flume, not metered (estimated).
** - indicate how long pump was on or off when chloride sample was taken.
*** - minimum time between pump/well turned off and water level measurement must be at least 24 hours; if pumping schedule did not allow for at least 24 hours rest during the month, please indicate amount of time pump was off before measurement.

Other comments or additional information (e.g. - date and method of chloride measurement; how pumpage amounts are estimated; etc...):

Submitted by (print) _______________________________ Title _______________________________
Signature ________________________________________ Date ________________________________ Telephone No. ________________________________
## MONTHLY GROUND WATER DELIVERY REPORT

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use and other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call (808)...

### Form Information
- **Department of Enterprise Services**
- **777 Ward Avenue**
- **Honolulu, HI 96814**

Month of _____, 19__

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Delivery Begin Date (mm/dd/yy)</th>
<th>Delivery End Date (mm/dd/yy)</th>
<th>Quantity Delivered (gallons)</th>
<th>Type of Use*</th>
<th>Field No(s)</th>
<th>Acres Irrigated</th>
<th>Crop Type</th>
<th>Method of Measurement**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2201-03,04,07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Use of water code:
- A: Agriculture non-irrigation use (livestock, cane wash, etc.)
- C: Commercial
- D: Domestic
- H: Hydroelectric power generation - indicate KWH of power generated
- I: Industrial-manufacturing, construction, etc.
- F: Fuel power generation - cooling

** For estimated values use code:
- P: Power consumption
- T: Total time of operation
- D: Comparison with past data
- X: Other means (indicate method)

Other comments or additional information:

Submitted by (print) ____________________________  Title ____________________________
Signature _____________________________________  Date ____________________________

Form mgwdrf.frm (11/96)
October 1, 1996

Mr. Michael D. Wilson
Chairperson
Commission on Water Resource Management
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Ground Water Use Permit for EP2
WUP No. 420

Attached is an executed copy of the Ground Water Use Permit for EP2 (Wells No. 2201-03, 04 and 07).

In your letter dated August 6, 1996, which transmitted the permit, you referenced the Water Commission's decision regarding the imposition of a fine for the overpumpage. As an alternative to payment of the fine, the City may enter into an agreement with the Commission to prepare an Integrated Resource Plan for Oahu. This is to inform you that the Department of Wastewater Management and the Board of Water Supply have initiated measures to develop such a plan and will be forwarding an informational letter to you soon.

If there are any questions, please call Avis Kamimura at

Sincerely,

ROLAND D. LIBBY, JR.
Director

Attachment

cc: Department of Wastewater Management
Board of Water Supply
Department of Parks and Recreation
Mr. Roland D. Libby, Jr.
City and County of Honolulu
Department of Housing and
Community Development
650 South King Street, 5th Floor
Honolulu, HI 96813

Dear Mr. Libby:

Water Use Permit for Well Nos. 2201-03,04,07
Waipahu-Waiawa Ground Water Management Area, Oahu

Thank you for your letter of October 1, 1996, informing us of your intentions to develop an Integrated Resource Plan for Oahu as an alternative to payment of a fine.

Please be advised that the 100-day period for entering into a joint agreement with the Commission to retain a consultant for preparation of the plan lapses on October 25, 1996. As such, we will look forward to hearing from you on or about that date. However, if you find that you are unable to meet the 100-day deadline, please apprise us of your extended timeframe for negotiating an agreement by October 25, 1996.

Thank you also for returning the signed water use permit for Well Nos. 2201-03,04,07. We are returning one executed copy; this should be retained for your record. We will retain the other executed copy for our record.

If you have any questions, please contact Lenore Nakama at 587-0218.

Sincerely,

RAE M. LOUI
Deputy Director

LN:fc
Attachment

EXHIBIT 3
October 24, 1996

Ms. Rae M. Loui, Deputy Director
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resources Management
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Loui:

Subject: Water Use Permit for Well Nos. 2201-03, 04, 07
Waipahu-Waiawa Ground Water Management Area, Oahu

In response to your letter of October 22, 1996, the City intends to undertake the Integrated Resource Plan (IRP) under the leadership of the Board of Water Supply and the Department of Wastewater Management. The Department of Housing and Community Development will participate in this effort.

We therefore respectfully request a 180-day extension to enter into a joint agreement for retaining a consultant to prepare the IRP.

The 180-day extension would allow us to obtain City Council approval of the proposed agreement. All intergovernmental agreements are subject to approval of the City Council.

We believe that during the 180-day extension period, the City will, in fact, undertake development of the framework and scope of the IRP. We will keep you advised of the status of this effort.

If you have any questions, please feel free to call me or Randy Wong at

Sincerely,

Roland D. Libby, Jr.
Director

cc: Managing Director

EXHIBIT 4
MEMORANDUM

TO: ALVIN AU, DIRECTOR
DEPARTMENT OF AUDITORIUMS

FROM: ROBERT AGRES, JR., DIRECTOR
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: NONPOTABLE WATER
EWA VILLAGES GOLF COURSE

This is to apprise you of the current status and need for follow up regarding the water use permit for Ewa Pump 2 which is a source of nonpotable water for the irrigation of the golf course in West Loch.

We have been notified by the State Department of Land and Natural Resources (DLNR) Commission on Water Resource Management that the permit will expire in July. A new application for renewal of the permit on a month to month basis is recommended since the City’s plans for effluent reuse for the irrigation systems of both the Ewa Villages and West Loch golf courses is underway. The application needs to be filed with the State DLNR.

For your information, the source of irrigation water for the Ewa Villages golf course is Ewa Pumps 7 and 8. The allocation for water use is covered under a water use permit currently held by Campbell Estate. Use of the nonpotable water for golf course irrigation has been recognized by the Commission to be on an emergency basis and conversion to effluent reuse water must be effected as soon as it becomes available.

The contact person on the staff at the Commission is Lenore Nakama and she can be reached at [redacted].

With the abolition of the Department of Housing and Community Development, it has been determined that this area of responsibility relating to the water for the golf courses will come under the jurisdiction of the Department of Auditoriums.
TO: ALVIN AU, DIRECTOR
Page 2
May 15, 1998

If you have any questions or need to discuss this matter further, please call Avis Kamimura at extension 4437.

ROBERT AGRES, JR.

cc: Lenore Nakama, DLNR

EXHIBIT 5
Mr. Timothy B. Johns, Deputy Director  
Commission on Water Resource Management  
Post Office Box 621  
Honolulu, Hawaii 96809

Dear Mr. Johns:

Thank you for advising the Department of Enterprise Services (DES) of the pending expiration of the Interim Water Use Permit (WUP No. 420) issued to the Department of Housing and Community Development (HCD).

In accordance with your notification, HCD/DES hereby requests an extension of the subject permit for EP 2 that is set to expire on July 17, 1998. In light of the planned development of a water reclamation facility at Honolulu, we would like to request that the interim water use permit be extended for another two years, or until such time as reclaimed water is available to supply the City-related golf courses and/or projects.

As to the pending items, we will forward under separate cover a copy of the requested documentation from the Department of Health (DOH) pertaining to Special Condition B which satisfies the requirement for compliance with DOH's golf course-related conditions.

With regard to the penalty levied against HCD for exceeding the allocation limits of WUP No. 177, it is our understanding that the Commission on Water Resource Management (CWRM) proposed that

"as an alternative to paying the fine, (HCD) may enter in a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation..."

EXHIBIT 6
Mr. Timothy E. Johns, Deputy Director
Page 2
July 8, 1998

We now understand that the City's Board of Water Supply has become the lead agency for the IRP for Oahu. The City's Board of Water Supply will finance the IRP and will include the City's Planning Department and Department of Environmental Services (formerly known as the Department of Wastewater Management) as participants. As such, we believe that the original intent of the alternative, the City's participation in the IRP, has been satisfied.

We would welcome the opportunity to meet with you and your staff on the City's efforts to resolve the outstanding penalty. However, we request that these discussions do not delay the extension of WUP 420.

This letter will also notify you of the transfer of the water use permit for Well Nos. 2201-03, 04, 07 from HCD to DES, effective June 30, 1998. All conditions of use of the permit remain the same.

Should you have any questions or require further information, please contact me at 527-5415. We look forward to the Commission's affirmative response to our request for permit extension. Thank you for your continued cooperation and assistance.

Sincerely,

[Signature]

ALVIN K.C. AU
Director

AKCA:ey
0169A

cc: Department of Environmental Services
Board of Water Supply

EXHIBIT 6
October 1, 1998

Mr. Timothy E. Johns  
Deputy Director  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Johns:

Subject: Request to Extend Water Use Permit (WUP No. 420)  
Waipahu-Waiawa Ground Water Management Area, Oahu

Since late June of this year, when the Department of Enterprise Services was first advised of the pending expiration of the Interim Water Use Permit (WUP No. 420) for the West Loch Golf Course, the staff members of the Commission on Water Resource Management and the Departments of Enterprise Services and Corporation Counsel have been working actively towards the extension of the existing permit. This letter will update you on the status of the WUP No. 420 outstanding permit conditions and the penalty for overpumpage.

- We are in compliance with Special Condition B (see Attachment 1 -- compliance letter from the Department of Health dated July 16, 1998);

- We are in compliance with Special Condition C, and are currently monitoring the West Loch Golf Course water usage. Specific identification of golf course water use will be reflected on the October, 1998 water use report to be submitted on or before November 11, 1998.  
   As communicated to you earlier, the meters measuring the golf course water usage required significant repairs which were completed by the Board of Water Supply this month.

- We have obtained a concurrence letter signed by the Manager and Chief Engineer of the Board of Water Supply, the Director of the Department of Environmental Services and the Director of the Department of Design and Construction which states that the county-funded Integrated Resource Plan for Oahu has been initiated and satisfies the alternative penalty levied against the Department of Housing and Community Development (see Attachment 2 -- letter from the Department of Enterprise Services dated August 19, 1998).
Given the Department of Enterprise Services' diligent and good faith efforts to satisfy all permit conditions and the alternative penalty, and based on initial feedback from the CWRM staff that an extension of the current WUP No. 420 would be possible, we again request that the interim water use permit be extended for another two years, or until such time as reclaimed water is available to supply the City-related golf courses and/or other projects.

Please contact me at [REDACTED] at your earliest convenience to schedule a meeting to discuss the permit extension. Thank you for your assistance with this matter.

Sincerely,

ALVIN K.C. AU
Director

cc: Mark Morita, Deputy Corporation Counsel
Department of the Corporation Counsel
July 16, 1998

Mr. Alvin K.C. Au, Director
Golf Course Division
Department of Enterprise Services
City and County of Honolulu
777 Ward Avenue
Honolulu, Hawaii 96814-2166

ATTENTION: Mr. Dave Mills

Dear Mr. Au:

SUBJECT: WEST LOCH GOLF COURSE
GUIDELINES APPLICABLE TO GOLF COURSES IN HAWAII
STATE DEPARTMENT OF HEALTH

This letter serves to inform the Commission on Water Resource Management (Commission) of the State Department of Land and Natural Resources that West Loch Golf Course has committed to implement the recommendations of the State Department of Health (DOH) regarding the Guidelines Applicable to Golf Courses in Hawaii, currently proposed in Version 5, August 1994. Recommendations of the guidelines cover important issues in order to prevent soil and groundwater pollution, to achieve environmental health and worker safety, and to promote reuse of wastewater, where applicable, and waste minimization and reuse of greenwastes. Thus, West Loch Golf Course, for the purpose of obtaining the Commission's Water Use Permit, hereby satisfies the DOH's guidelines for golf courses in Hawaii.

The DOH will now work with West Loch Golf Course to refine management and monitoring approaches for the golf course pursuant to the guidelines. If a golf course situation arises that would be of interest to or have any effect on the Commission's decision to grant a water use permit to West Loch Golf Course, the DOH will transmit the information to the Commission accordingly.

If you have any questions about this subject, please call Chauncey Hew of the Safe Drinking Water Branch at [redacted].

Sincerely,

THOMAS E. ARIZUMI, P.E., Chief
Environmental Management Division

CH:chl
August 19, 1998

Mr. Timothy E. Johns
Deputy Director
Commission of Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Johns:

Re: Interim Water Use Permit (WUP No. 420)
Waipahu-Waiawa Ground Water Management Area, Oahu

The City and County of Honolulu and its Board of Water Supply ("City") continue to fulfill their legal obligation to plan for Oahu's potable and non-potable water needs. As you may recall, the concept of the Integrated Resource Plan for water ("IRP") as the vehicle to achieve comprehensive planning of all water sources and uses was developed by the City's former Director of the Department of Wastewater Management Felix Limtiaco and former Chief Planning Officer Cheryl Soon. The City adopted the IRP concept and has committed to undertake studies to inventory the potable and non-potable sources and uses. Currently, the lead agency for the IRP is the Board of Water Supply, and the City's Department of Design and Construction will fill a supplemental role by conducting the environmental impact study ("EIS") for the non-potable water master plan and the public outreach program for reclaimed water. This will be coordinated with the City's Department of Environmental Services.

The City's Department of Housing and Community Development ("DHCD") was assessed a penalty in August 1996 for exceeding the pumping limits of its water use permit no. 177. The Commission on Water Resource Management ("Commission") offered an alternative to a
monetary penalty, that the City's DHCD join efforts with the Commission to retain an IRP consultant for Oahu.

During the intervening two years, the City moved the IRP from a concept to reality. The Board of Water Supply engaged a contractor for the IRP for Oahu. It is anticipated that the IRP will require the participation of the City's Planning Department, the Department of Design and Construction and the Department of Environmental Services, as well as the Commission. The IRP for Oahu will be financed with county funds, primarily by the Board of Water Supply and with other related and supplemental studies (i.e., the Department of Design and Construction's EIS and the public outreach program mentioned above) financed by the Department of Environmental Services. As such, the county is not seeking a monetary contribution from the Commission for Oahu's IRP.

We believe that the goal of the Commission's alternative proposal was to encourage the City's undertaking of Mr. Limitiaco's and Ms. Soon's IRP concept. The City and its Board of Water Supply believes that the intent of the Commission's alternative proposal to DHCD has been satisfied with the Board of Water Supply's and the Department of Environmental Service's initiative to complete an IRP. Therefore, the Board of Water Supply and the Department of Environmental Services request that the Commission consider DHCD's alternative penalty satisfied and that some form of acknowledgement be issued by the Commission confirming satisfaction of the penalty.

Should you have any questions or require additional information, please contact Alvin Au at [REDACTED] Thank you for your continued cooperation and assistance.

Sincerely,

ALVIN K.C. AU
Director, Department of Enterprise Services

EXHIBIT 7
Mr. Timothy E. Johns
August 19, 1998
Page 3

CLIFFORD JAMILE
Manager and Chief Engineer
Board of Water Supply

KENNETH E. SPRAGUE
Director, Department of
Environmental Services

RANDALL K. FUJIKI
Director, Department of
Design and Construction

EXHIBIT 7
West Loch Golf Course Pumpage
EP 2 (Well Nos. 2201-03,04,07)
October 1, 1998

Mr. Timothy E. Johns
Deputy Director
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Johns:

Subject: Request to Extend Water Use Permit (WUP No. 420)
Waipahu-Waiawa Ground Water Management Area, Oahu

Since late June of this year, when the Department of Enterprise Services was first advised of the pending expiration of the Interim Water Use Permit (WUP No. 420) for the West Loch Golf Course, the staff members of the Commission on Water Resource Management and the Departments of Enterprise Services and Corporation Counsel have been working actively towards the extension of the existing permit. This letter will update you on the status of the WUP No. 420 outstanding permit conditions and the penalty for overpumpage.

- We are in compliance with Special Condition B (see Attachment 1 -- compliance letter from the Department of Health dated July 16, 1998);

- We are in compliance with Special Condition C, and are currently monitoring the West Loch Golf Course water usage. Specific identification of golf course water use will be reflected on the October, 1998 water use report to be submitted on or before November 11, 1998.

As communicated to you earlier, the meters measuring the golf course water usage required significant repairs which were completed by the Board of Water Supply this month.

- We have obtained a concurrence letter signed by the Manager and Chief Engineer of the Board of Water Supply, the Director of the Department of Environmental Services and the Director of the Department of Design and Construction which states that the county-funded Integrated Resource Plan for Oahu has been initiated and satisfies the alternative penalty levied against the Department of Housing and Community Development (see Attachment 2 -- letter from the Department of Enterprise Services dated August 19, 1998).
Given the Department of Enterprise Services’ diligent and good faith efforts to satisfy all permit conditions and the alternative penalty, and based on initial feedback from the CWRM staff that an extension of the current WUP No. 420 would be possible, we again request that the interim water use permit be extended for another two years, or until such time as reclaimed water is available to supply the City-related golf courses and/or other projects.

Please contact me at [redacted] at your earliest convenience to schedule a meeting to discuss the permit extension. Thank you for your assistance with this matter.

Sincerely,

ALVIN K.C. AU
Director

MKMJ:ey
0256a

Attachments

cc: Mark Morita, Deputy Corporation Counsel
Department of the Corporation Counsel
July 16, 1998

Mr. Alvin K.C. Au, Director
Golf Course Division
Department of Enterprise Services
City and County of Honolulu
777 Ward Avenue
Honolulu, Hawaii 96814-2166

ATTENTION: Mr. Dave Mills

Dear Mr. Au:

SUBJECT: WEST LOCH GOLF COURSE
GUIDELINES APPLICABLE TO GOLF COURSES IN HAWAII
STATE DEPARTMENT OF HEALTH

This letter serves to inform the Commission on Water Resource Management (Commission) of the State Department of Land and Natural Resources that West Loch Golf Course has committed to implement the recommendations of the State Department of Health (DOH) regarding the Guidelines Applicable to Golf Courses in Hawaii, currently proposed in Version 5, August 1994. Recommendations of the guidelines cover important issues in order to prevent soil and groundwater pollution, to achieve environmental health and worker safety, and to promote reuse of wastewater, where applicable, and waste minimization and reuse of greenwastes. Thus, West Loch Golf Course, for the purpose of obtaining the Commission's Water Use Permit, hereby satisfies the DOH's guidelines for golf courses in Hawaii.

The DOH will now work with West Loch Golf Course to refine management and monitoring approaches for the golf course pursuant to the guidelines. If a golf course situation arises that would be of interest to or have any effect on the Commission's decision to grant a water use permit to West Loch Golf Course, the DOH will transmit the information to the Commission accordingly.

If you have any questions about this subject, please call Chauncey Hew of the Safe Drinking Water Branch at [blank]

Sincerely,

THOMAS E. ARIZUMI, P.E., Chief
Environmental Management Division

CH:chl
August 19, 1998

Mr. Timothy E. Johns  
Deputy Director  
Commission of Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Johns:

Re: Interim Water Use Permit (WUP No. 420)  
Waipahu-Waiawa Ground Water Management Area, Oahu

The City and County of Honolulu and its Board of Water Supply ("City") continue to fulfill their legal obligation to plan for Oahu's potable and non-potable water needs. As you may recall, the concept of the Integrated Resource Plan for water ("IRP") as the vehicle to achieve comprehensive planning of all water sources and uses was developed by the City's former Director of the Department of Wastewater Management Felix Limitiaco and former Chief Planning Officer Cheryl Soon. The City adopted the IRP concept and has committed to undertake studies to inventory the potable and non-potable sources and uses. Currently, the lead agency for the IRP is the Board of Water Supply, and the City's Department of Design and Construction will fill a supplemental role by conducting the environmental impact study ("EIS") for the non-potable water master plan and the public outreach program for reclaimed water. This will be coordinated with the City's Department of Environmental Services.

The City's Department of Housing and Community Development ("DHCD") was assessed a penalty in August 1996 for exceeding the pumping limits of its water use permit no. 177. The Commission on Water Resource Management ("Commission") offered an alternative to a
monetary penalty, that the City's DHCD join efforts with the Commission to retain an IRP consultant for Oahu.

During the intervening two years, the City moved the IRP from a concept to reality. The Board of Water Supply engaged a contractor for the IRP for Oahu. It is anticipated that the IRP will require the participation of the City's Planning Department, the Department of Design and Construction and the Department of Environmental Services, as well as the Commission. The IRP for Oahu will be financed with county funds, primarily by the Board of Water Supply and with other related and supplemental studies (i.e., the Department of Design and Construction's EIS and the public outreach program mentioned above) financed by the Department of Environmental Services. As such, the county is not seeking a monetary contribution from the Commission for Oahu's IRP.

We believe that the goal of the Commission's alternative proposal was to encourage the City's undertaking of Mr. Limitiaco's and Ms. Soon's IRP concept. The City and its Board of Water Supply believes that the intent of the Commission's alternative proposal to DHCD has been satisfied with the Board of Water Supply's and the Department of Environmental Service's initiative to complete an IRP. Therefore, the Board of Water Supply and the Department of Environmental Services request that the Commission consider DHCD's alternative penalty satisfied and that some form of acknowledgement be issued by the Commission confirming satisfaction of the penalty.

Should you have any questions or require additional information, please contact Alvin Au at

Thank you for your continued cooperation and assistance.

Sincerely,

ALVIN K.C. AU
Director, Department of Enterprise Services
Mr. Timothy E. Johns  
August 19, 1998  
Page 3

CLIFFORD JAMILE  
Manager and Chief Engineer  
Board of Water Supply

KENNETH E. SPRAGUE  
Director, Department of  
Environmental Services

RANDALL K. FUJIKI  
Director, Department of  
Design and Construction

AKCA:ey
August 19, 1998

Mr. Timothy E. Johns  
Deputy Director  
Commission of Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Johns:

Re: Interim Water Use Permit (WUP No. 420)  
Waipahu-Waiawa Ground Water Management Area  
Oahu

The City and County of Honolulu and its Board of Water Supply ("City") continue to fulfill their legal obligation to plan for Oahu's potable and non-potable water needs. As you may recall, the concept of the Integrated Resource Plan for water ("IRP") as the vehicle to achieve comprehensive planning of all water sources and uses was developed by the City's former Director of the Department of Wastewater Management, Felix Limitiaco and former Chief Planning Officer, Cheryl Soon. The City adopted the IRP concept and committed to undertake studies to inventory the potable and non-potable sources and uses. Currently, the agency for the IRP is the Board of Water Supply, and the City's Department of Design and Construction will fill a supplemental role by conducting the environmental impact study ("EIS") for the non-potable water master plan and the public outreach program for reclaimed water. This will be coordinated with the City's Department of Environmental Services.

The City's Department of Housing and Community Development ("DHCD") was assessed a penalty in August 1996 for exceeding the pumping limits of its water use permit no. 177. The Commission on Water Resource Management ("Commission") offered an alternative to a
monetary penalty, that the City's DHCD join efforts with the Commission to retain an IRP consultant for Oahu.

During the intervening two years, the City moved the IRP from a concept to reality. The Board of Water Supply engaged a contractor for the IRP for Oahu. It is anticipated that the IRP will require the participation of the City's Planning Department, the Department of Design and Construction and the Department of Environmental Services, as well as the Commission. The IRP for Oahu will be financed with county funds, primarily by the Board of Water Supply and with other related and supplemental studies (i.e., the Department of Design and Construction's EIS and the public outreach program mentioned above) financed by the Department of Environmental Services. As such, the county is not seeking a monetary contribution from the Commission for Oahu's IRP.

We believe that the goal of the Commission's alternative proposal was to encourage the City's undertaking of Mr. Limitiaco's and Ms. Soon's IRP concept. The City and its Board of Water Supply believes that the intent of the Commission's alternative proposal to DHCD has been satisfied with the Board of Water Supply's and the Department of Environmental Service's initiative to complete an IRP. Therefore, the Board of Water Supply and the Department of Environmental Services request that the Commission consider DHCD's alternative penalty satisfied and that some form of acknowledgement be issued by the Commission confirming satisfaction of the penalty.

Should you have any questions or require additional information, please contact Alvin Au at [redacted]. Thank you for your continued cooperation and assistance.

Sincerely,

[Signature]

ALVIN K.C. AU
Director, Department of Enterprise Services
Mr. Timothy E. Johns  
August 19, 1998  
Page 3

Clifford Jamile  
Manager and Chief Engineer  
Board of Water Supply

Kenneth E. Sprague  
Director, Department of  
Environmental Services

Randall K. Fujiki  
Director, Department of  
Design and Construction

AKCA:ey
Mr. Alvin Au  
Department of Enterprise Services  
777 Ward Avenue  
Honolulu, HI 96814  

Dear Mr. Au:

Notice of Action  
Request to Extend WUP No. 420  
Waipahu-Waiawa Groundwater Management Area, Oahu

This letter serves as your official notice of action by the Commission on Water Resource Management (Commission) on your request to extend WUP No. 420 for EP 2 (Well Nos. 2201-03, 04, 07).

By a unanimous vote at their meeting of July 15, 1998, the Commission approved an extension of WUP No. 420 to August 31, 1998, to provide additional time for the permittee to satisfy all permit conditions and the penalty for overpumpage, specifically:

a. Documentation of compliance with Special Condition B.

b. Documentation of compliance with Special Condition C.

c. Concurrence letter from Honolulu Board of Water Supply that their contribution to the IRP (Integrated Resource Plan for Oahu) is made, in part, on behalf of Department of Housing and Community Development to satisfy the alternative to a fine.

If the above issues are fully resolved by August 31, 1998, then WUP No. 420 will be automatically extended to October, 1998 or until such time that a significant change in permitted, actual, or projected use or water supply occurs. If the above issues are not fully resolved by August 31, 1998, then a new water use permit application is required, pursuant to Administrative Rule 13-171-12, to reactivate the use. If a new application is required, we are hereby notifying you that pumpage from EP 2 (Well Nos. 2201-03, 04, 07) after August 31, 1998 is subject to fines of up to $1000 per day.

If you have any questions, please contact Lenore Nakama at

Sincerely,

TIMOTHY E. JOHNS
Deputy Director

LN:ss
Department of Enterprise Services
REQUEST FOR EXTENSION OF WATER USE PERMIT
EP 2, Well Nos. 2201-03, 04, 07 (WUP No. 420), TMK 9-1-17:60
Waipahu-Waiawa Ground Water Management Area, Oahu

APPLICANT(S): Department of Enterprise Services
777 Ward Avenue
Honolulu, HI 96814

LANDOWNER(S): Same

LOCATION MAP: See Exhibit 1

BACKGROUND:

On March 18, 1996, a completed application for a water use permit was jointly made by the City Department of Housing and Community Development (DHCD) and Chaney, Brooks and Company. The application is to modify the water use permit to increase the permitted use quantity from 0.5 mgd to 1.6 mgd to accommodate the increased demand at the DHCD’s West Loch development.

On June 5, 1996, due to time constraints, the Commission deferred action on the application to the next Oahu meeting.

By a unanimous vote, the Commission at its July 17, 1996 meeting:

1. Found DHCD in violation of WUP No. 177 for exceeding the water use permit’s allocation limit.

2. Imposed a fine of $500 per day for the period of the violation (730 days * $500/day = $365,000). As an alternative to paying the fine, DHCD may enter in a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation (730 days * $150/day = $109,500).

Item 8
3. Issued a two-year interim water use permit to DHCD for the reasonable and beneficial use of 1.124 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 3 for EP 2 (Well Nos. 2201-03, 04, 07), subject to the standard water use permit conditions and the following special conditions:

A. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

B. The permittee shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [redacted] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The permittee shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

C. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

D. If the permittee pumps in excess of 1.124 mgd, a fine of $500 per day shall be imposed.

In a letter dated October 1, 1996, DHCD informed the Commission that the Department of Wastewater Management and the Board of Water Supply (BWS) had initiated measures to develop an Integrated Resource Plan (IRP) for Oahu and would be forwarding an information letter soon (Exhibit 2).

On October 22, 1996, the Commission staff acknowledged OHCO's intentions to take the alternative to payment of a fine and advised DHCD that the 100-day period for entering into a joint agreement with the Commission to retain a consultant for preparation of the plan would lapse on October 25, 1996 (Exhibit 3).

In a letter dated October 24, 1996, DHCD requested a 180-day extension to enter into a joint agreement with the Commission to provide additional time to obtain City Council approval of the proposed agreement (Exhibit 4).

In May, 1998, the Commission staff contacted DHCD to inform them that WUP No. 420 was due to expire on July 17, 1998.

On May 22, 1998, the Commission was forwarded a copy of a letter from the Director of DHCD to the Director of the Department of Auditoriums (DOA), informing DOA of the pending permit expiration and that a new application should be made to continue use of the wells (Exhibit 5). (With the abolition of DHCD, DOA has assumed the responsibility for water for City golf courses.)

On June 25, 1998, the Commission staff met with DOA staff to discuss issues relating to the permit renewal.
On July 9, 1998, DOA transmitted a letter requesting extension of the permit for another two (2) years or until such time as reclaimed water is available to supply the City-related golf courses and/or projects (Exhibit 6). DOA also notified the Commission to transfer the water use permit from DHCD to the Department of Enterprise Services (DES), which will supersede DOA.

ANALYSIS & ISSUES:

The first issue is the administrative procedure for re-establishing the permitted use of EP 2. Previously, where the Commission has specified expiration dates for interim water use permits, the permits have been considered expired as of that date and new applications, subject to the provisions of §13-171-12 to 22 HAR, have been required (i.e., Ewa Caprock interim permits). In this case, the applicant is requesting that the permit be extended beyond its expiration date.

The second issue is that the permittee has not complied with all its permit conditions. First, Special Condition B of the water use permit, which requires that the permittee obtain and forward to the Commission a written statement from the Department of Health (DOH) indicating that DOH's "TWELVE CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5) have been satisfied, has not been received to date. Second, Special Condition C of the water use permit, which requires a separate meter and reporting of golf course usage, has not been met.

The third issue is that the penalty levied upon DHCD for a prior overpumpage violation has not been satisfied. DOA's letter of July 9, 1998, indicates their belief that the intent of the alternative to the fine is satisfied by BWS's financing of the IRP. The staff believes that BWS should be given the opportunity to concur with this position.

The staff understands that DOA still requires use of the wells for irrigation needs at West Loch. DOA staff have indicated that, since they have only recently been informed of their new area of responsibility, they are working towards satisfying the permit conditions and the violation. Denial of this extension request would render pumpage from EP2 for West Loch irrigation needs illegal and may result in using potable water from the BWS municipal system for nonpotable needs, which is less desirable from a water resource management perspective. Ultimately, this irrigation use over the Ewa caprock should consider the alternative of wastewater reuse and be included with the review of other interim caprock water permittees whose permits expire on October, 1998. Given the time and costs associated with having the permittee reapply and the current cooperative nature between agencies for the Oahu IRP, an extension now would allow the timely inclusion of this permittee with the rest of the interim permittees who have been asked to commit to wastewater reuse.

RECOMMENDATIONS:

The staff recommends that the Commission approve an extension of WUP No. 420 to August 31, 1998, to provide additional time for the permittee to satisfy all permit conditions and the penalty for overpumpage, specifically:

1. Documentation of compliance with Special Condition B.

2. Documentation of compliance with Special Condition C.
3. Concurrence letter from BWS that their contribution to the IRP is made, in part, on behalf of DHCD to satisfy the alternative to a fine.

If these issues are fully resolved by August 31, 1998, then the staff recommends that the Commission approve an extension of WUP No. 420 to October, 1998 or until such time that a significant change in permitted, actual, or projected use or water supply occurs. If these issues are not fully resolved by August 31, 1998, then the staff recommends that the Commission require Department of Enterprise Services to file a new application for a water use permit, pursuant to §13-171-12 HAR and to put DES on notice that pumpage from EP 2 after August 31, 1998 is subject to fines of up to $1000 per day.

Respectfully submitted,

TIMOTHY E. JOHNS
Deputy Director

Exhibit(s):
1 (Location Map for Well Nos. 2201-03,04,07)
2 (October 1, 1996 Letter from Roland D. Libby, Jr. to Michael D. Wilson)
3 (October 22, 1996 Letter from Rae M. Loui to Roland D. Libby, Jr.)
4 (October 24, 1996 Letter from Roland D. Libby, Jr. to Rae M. Loui)
5 (May 15, 1998 Memorandum from Robert Agres, Jr. to Alvin Au)
6 (July 9, 1998 Letter from Alvin K.C. Au to Timothy E. Johns)
October 1, 1996

Mr. Michael D. Wilson
Chairperson
Commission on Water Resource Management
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Ground Water Use Permit for EP2
WUP No. 420

Attached is an executed copy of the Ground Water Use Permit for EP2 (Wells No. 2201-03, 04 and 07).

In your letter dated August 6, 1996, which transmitted the permit, you referenced the Water Commission's decision regarding the imposition of a fine for the overpumpage. As an alternative to payment of the fine, the City may enter into an agreement with the Commission to prepare an Integrated Resource Plan for Oahu. This is to inform you that the Department of Wastewater Management and the Board of Water Supply have initiated measures to develop such a plan and will be forwarding an informational letter to you soon.

If there are any questions, please call Avis Kamimura at

Sincerely,

[Signature]
ROLAND D. LIBBY, JR.
Director

Attachment

cc: Department of Wastewater Management
    Board of Water Supply
    Department of Parks and Recreation
Mr. Roland D. Libby, Jr.
City and County of Honolulu
Department of Housing and
Community Development
650 South King Street, 5th Floor
Honolulu, HI 96813

Dear Mr. Libby:

Water Use Permit for Well Nos. 2201-03,04,07
Waipahu-Waiawa Ground Water Management Area, Oahu

Thank you for your letter of October 1, 1996, informing us of your intentions to develop an Integrated Resource Plan for Oahu as an alternative to payment of a fine.

Please be advised that the 100-day period for entering into a joint agreement with the Commission to retain a consultant for preparation of the plan lapses on October 25, 1996. As such, we will look forward to hearing from you on or about that date. However, if you find that you are unable to meet the 100-day deadline, please apprise us of your extended timeframe for negotiating an agreement by October 25, 1996.

Thank you also for returning the signed water use permit for Well Nos. 2201-03,04,07. We are returning one executed copy; this should be retained for your record. We will retain the other executed copy for our record.

If you have any questions, please contact Lenore Nakama at 587-0218.

Sincerely,

RAE M. LOUI
Deputy Director

LN:fc
Attachment

EXHIBIT 3
Ms. Rae M. Loui, Deputy Director  
State of Hawaii  
Department of Land and Natural Resources  
Commission on Water Resources Management  
P. O. Box 621  
Honolulu, Hawaii 96809  

Dear Ms. Loui:  

Subject: Water Use Permit for Well Nos. 2201-03, 04, 07  
Waipahu-Waiawa Ground Water Management Area, Oahu  

In response to your letter of October 22, 1996, the City intends to undertake the Integrated Resource Plan (IRP) under the leadership of the Board of Water Supply and the Department of Wastewater Management. The Department of Housing and Community Development will participate in this effort.  

We therefore respectfully request a 180-day extension to enter into a joint agreement for retaining a consultant to prepare the IRP.  

The 180-day extension would allow us to obtain City Council approval of the proposed agreement. All intergovernmental agreements are subject to approval of the City Council.  

We believe that during the 180-day extension period, the City will, in fact, undertake development of the framework and scope of the IRP. We will keep you advised of the status of this effort.  

If you have any questions, please feel free to call me or Randy Wong at [redacted].  

Sincerely,  

ROLAND D. LIBBY, JR.  
Director  

cc: Managing Director

EXHIBIT 4
MEMORANDUM

TO: ALVIN AU, DIRECTOR
DEPARTMENT OF AUDITORIUMS

FROM: ROBERT AGRES, JR., DIRECTOR
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: NONPOTABLE WATER
EWA VILLAGES GOLF COURSE

This is to apprise you of the current status and need for follow up regarding the water use permit for Ewa Pump 2 which is a source of nonpotable water for the irrigation of the golf course in West Loch.

We have been notified by the State Department of Land and Natural Resources (DLNR) Commission on Water Resource Management that the permit will expire in July. A new application for renewal of the permit on a month to month basis is recommended since the City's plans for effluent reuse for the irrigation systems of both the Ewa Villages and West Loch golf courses is underway. The application needs to be filed with the State DLNR.

For your information, the source of irrigation water for the Ewa Villages golf course is Ewa Pumps 7 and 8. The allocation for water use is covered under a water use permit currently held by Campbell Estate. Use of the nonpotable water for golf course irrigation has been recognized by the Commission to be on an emergency basis and conversion to effluent reuse water must be effected as soon as it becomes available.

The contact person on the staff at the Commission is Lenore Nakama and she can be reached at [redacted].

With the abolition of the Department of Housing and Community Development, it has been determined that this area of responsibility relating to the water for the golf courses will come under the jurisdiction of the Department of Auditoriums.

EXHIBIT 5
TO: ALVIN AU, DIRECTOR

Page 2
May 15, 1998

If you have any questions or need to discuss this matter further, please call Avis Kamimura at extension 4437.

ROBERT AGREST, JR.

cc: Lenore Nakama, DLNR

EXHIBIT 5
Mr. Timothy B. Johns, Deputy Director
Commission on Water Resource Management
Post Office Box 621
Honolulu, Hawaii 96809

Dear Mr. Johns:

Thank you for advising the Department of Enterprise Services (DES) of the pending expiration of the Interim Water Use Permit (WUP No. 420) issued to the Department of Housing and Community Development (HCD).

In accordance with your notification, HCD/DES hereby requests an extension of the subject permit for EP 2 that is set to expire on July 17, 1998. In light of the planned development of a water reclamation facility at Honolulu, we would like to request that the interim water use permit be extended for another two years, or until such time as reclaimed water is available to supply the City-related golf courses and/or projects.

As to the pending items, we will forward under separate cover a copy of the requested documentation from the Department of Health (DOH) pertaining to Special Condition B which satisfies the requirement for compliance with DOH’s golf course-related conditions.

With regard to the penalty levied against HCD for exceeding the allocation limits of WUP No. 177, it is our understanding that the Commission on Water Resource Management (CWRM) proposed that

“as an alternative to paying the fine, (HCD) may enter into a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation...”
We now understand that the City's Board of Water Supply has become the lead agency for the IRP for Oahu. The City's Board of Water Supply will finance the IRP and will include the City's Planning Department and Department of Environmental Services (formerly known as the Department of Wastewater Management) as participants. As such, we believe that the original intent of the alternative, the City's participation in the IRP, has been satisfied.

We would welcome the opportunity to meet with you and your staff on the City's efforts to resolve the outstanding penalty. However, we request that these discussions do not delay the extension of WUP 420.

This letter will also notify you of the transfer of the water use permit for Well Nos. 2201-03, 04, 07 from HCD to DES, effective June 30, 1998. All conditions of use of the permit remain the same.

Should you have any questions or require further information, please contact me at

We look forward to the Commission's affirmative response to our request for permit extension. Thank you for your continued cooperation and assistance.

Sincerely,

ALVIN K.C. AU
Director

cc: Department of Environmental Services
    Board of Water Supply
Mr. Timothy E. Johns, Deputy Director
Commission on Water Resource Management
Post Office Box 621
Honolulu, Hawaii 96809

Dear Mr. Johns:

Thank you for advising the Department of Enterprise Services (DES) of the pending expiration of the Interim Water Use Permit (WUP No. 420) issued to the Department of Housing and Community Development (HCD).

In accordance with your notification, HCD/DES hereby requests an extension of the subject permit for EP 2 that is set to expire on July 17, 1998. In light of the planned development of a water reclamation facility at Honouliuli, we would like to request that the interim water use permit be extended for another two years, or until such time as reclaimed water is available to supply the City-related golf courses and/or projects.

As to the pending items, we will forward under separate cover a copy of the requested documentation from the Department of Health (DOH) pertaining to Special Condition B which satisfies the requirement for compliance with DOH’s golf course-related conditions.

With regard to the penalty levied against HCD for exceeding the allocation limits of WUP No. 177, it is our understanding that the Commission on Water Resource Management (CWRM) proposed that

“as an alternative to paying the fine, (HCD) may enter in a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation...”
We now understand that the City’s Board of Water Supply has become the lead agency for the IRP for Oahu. The City’s Board of Water Supply will finance the IRP and will include the City’s Planning Department and Department of Environmental Services (formerly known as the Department of Wastewater Management) as participants. As such, we believe that the original intent of the alternative, the City’s participation in the IRP, has been satisfied.

We would welcome the opportunity to meet with you and your staff on the City’s efforts to resolve the outstanding penalty. However, we request that these discussions do not delay the extension of WUP 420.

This letter will also notify you of the transfer of the water use permit for Well Nos. 2201-03, 04, 07 from HCD to DES, effective June 30, 1998. All conditions of use of the permit remain the same.

Should you have any questions or require further information, please contact me at

We look forward to the Commission’s affirmative response to our request for permit extension. Thank you for your continued cooperation and assistance.

Sincerely,

ALVIN K.C. AU
Director

cc: Department of Environmental Services
    Board of Water Supply
Mr. Timothy E. Johns, Deputy Director
Commission on Water Resource Management
Post Office Box 621
Honolulu, Hawaii 96809

Dear Mr. Johns:

Thank you for advising the Department of Enterprise Services (DES) of the pending expiration of the Interim Water Use Permit (WUP No. 420) issued to the Department of Housing and Community Development (HCD).

In accordance with your notification, HCD/DES hereby requests an extension of the subject permit for EP 2 that is set to expire on July 17, 1998. In light of the planned development of a water reclamation facility at Honolulu, we would like to request that the interim water use permit be extended for another two years, or until such time as reclaimed water is available to supply the City-related golf courses and/or projects.

As to the pending items, we will forward under separate cover a copy of the requested documentation from the Department of Health (DOH) pertaining to Special Condition B which satisfies the requirement for compliance with DOH’s golf course-related conditions.

With regard to the penalty levied against HCD for exceeding the allocation limits of WUP No. 177, it is our understanding that the Commission on Water Resource Management (CWRM) proposed that

"as an alternative to paying the fine, (HCD) may enter in a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation..."
We now understand that the City’s Board of Water Supply has become the lead agency for the IRP for Oahu. The City’s Board of Water Supply will finance the IRP and will include the City’s Planning Department and Department of Environmental Services (formerly known as the Department of Wastewater Management) as participants. As such, we believe that the original intent of the alternative, the City’s participation in the IRP, has been satisfied.

We would welcome the opportunity to meet with you and your staff on the City’s efforts to resolve the outstanding penalty. However, we request that these discussions do not delay the extension of WUP 420.

This letter will also notify you of the transfer of the water use permit for Well Nos. 2201-03, 04, 07 from HCD to DES, effective June 30, 1998. All conditions of use of the permit remain the same.

Should you have any questions or require further information, please contact me at [Redacted]. We look forward to the Commission’s affirmative response to our request for permit extension. Thank you for your continued cooperation and assistance.

Sincerely,

[Signature]

ALVIN K. C. AU
Director

cc: Department of Environmental Services
    Board of Water Supply
Suggested language to request water use permit transfer:

"We are notifying you of the transfer of the water use permit for Well Nos. 2201-03,04,07 from DHCD to DOA, effective June __, 1998. All conditions of use of the permit remain the same. We have obtained the signature from an authorized representative of DHCD below, agreeing to the permit transfer."

Please note that if obtaining a signature from DHCD proves problematic, you may bifurcate the process by deferring the notice of water use permit transfer to a later letter. It is very important that you submit the permit extension request ASAP and no later than July 6, 1998. It appears you have ample time (almost 3 months) to effectuate the permit transfer. Please feel free to call if you have any questions. Thank you again for meeting with us.
MEMORANDUM FOR THE RECORD

SUBJECT: Pending expiration of WUP No. 420

FROM: Lenore Nakama

Tim Johns, Ed Sakoda, Dean Nakano, and Lenore Nakama met with David Mills (Dept. of Auditoriums Golf Course System Administrator), Wayne Lee (DOA Golf Course System Assistant Administrator), and Catherine Maki (DOA Administrative Services Officer) on 6/25/98 to discuss the attached draft letter from Tim Johns to Alvin Au (DOA Administrator).

The purpose of the meeting was to give DOA a heads-up on the pending July 17, 1998 expiration date and our suggestions on how the renewal process may be facilitated (see attached letter from Alvin Au to Tim Johns), as well as potential issues associated with a renewal request (outstanding fine; DOH compliance letter). (NOTE: per a discussion with Linnel Nishioka of AG's office, CWRM may vote to extend a WUP provided that the request is submitted prior to the actual expiration date, else a new application should be made.)

We also discussed the need to transfer the WUP from DHCD to DOA.
June 24, 1998

Mr. Alvin Au  
City and County of Honolulu  
Department of Auditoriums  
Honolulu, Hawaii 96813

Dear Mr. Au:

Notice of Expiration  
Interim Water Use Permit (WUP No. 420)  
Waipahu-Waiawa Ground Water Management Area, Oahu

The Commission on Water Resource Management (Commission) would like to advise you of the pending expiration of the Interim Water Use Permit (WUP No. 420) issued to the Department of Housing and Community Development (DHCD). This notice is provided as a follow-up to our earlier communication to DHCD in May 1998. It is our understanding that responsibility related to golf course water needs has now been transferred from DHCD to the Department of Auditoriums (DOA). Accordingly, we have attached as additional background information, a copy of a letter from the Commission dated August 6, 1996, which notified DHCD of the Commission’s action and water use permit issuance.

As you may be aware, the two-year interim water use permit issued by the Commission on July 17, 1996 for the use of 1.124 million gallons per day of ground water from NP 2 (Well Nos. 2201-03, 04, 01) is due to expire on July 17, 1998. Unless appropriate action is taken to extend the term of the subject permit, the continued use of NP 2 for irrigation of various developments at West Loch may need to be terminated on the effective expiration date.

If DHCD/DOA wishes to carry on with the present use of this well after July 17, 1998, a formal request to continue such use must be made to the Commission by July 7, 1998. Please note, however, that any action on such a request shall be subject to the resolution of the following pending items:

1. Prior to, or in conjunction with the extension request, documentation of compliance with Special Condition B, requiring a written statement from the Department of Health concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" must be provided to the Commission.

2. Satisfaction of the penalty levied upon DHCD for the prior overpumpage violation. DHCD's letter of October 24, 1996 stated that a 180-day extension would be needed to enter into a joint agreement with the Board of Water Supply (BWS) and the Department of Wastewater Management for retaining a consultant to prepare the IRP (attached). Please advise the Commission as to the status of this funding agreement and provide appropriate confirmation that the use of such funds is intended to satisfy the specified alternative to the DHCD cash fine of $365,000.
We would be happy to meet with you and your staff to discuss this matter further. Should you have any questions or require further assistance, please contact Lenore Nakama at

Sincerely,

Timothy B. Johns
Deputy Director

LN: ss
Attachments

c: Mr. Brooks Yuen, Acting Manager and Chief Engineer
Honolulu Board of Water Supply

Mr. Ken Sprague, Director
Department of Wastewater Management
Mr. Timothy E. Johns, Deputy Director  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809  

Dear Mr. Johns:  

Thank you for your letter of June 24, 1998 advising the Department of Auditoriums (DOA) of the pending expiration of the Interim Water Use Permit (WUP No. 420) issued to the Department of Housing and Community Development (DHCD). In accordance with your notification, DHCD/DOA hereby requests an extension of the subject permit for EP 2 that is set to expire on July 17, 1998.  

In light of the planned development of a water reclamation facility at Honouliuli, we would like to request that the interim water use permit be extended for another year or until such time as reclaimed water is available to supply City-related golf courses and/or projects.  

As to the pending items, we have enclosed a copy of the requested documentation from the Department of Health (DOH) pertaining to Special Condition B which satisfies the requirement for compliance with DOH's golf course-related conditions.  

With regard to the penalty levied against DHCD, funding on the order of $500,000 has been allocated by the Department of Wastewater Management (DWM) for the purpose of developing a Non-Potable Water Master Plan for Oahu. These funds will be used in part to prepare an Environmental Impact Statement (EIS) and public information/participation process related to the Non-Potable Water Master Plan.  

Development of the master plan by DWM will be closely coordinated with the ongoing efforts of the Honolulu Board of Water Supply (BWS) to implement integrated resource planning in updating the Oahu Water Management Plan. The specified funding commitment and collaborative planning efforts between DWM and BWS, we believe, adequately satisfies the alternative penalty set forth by the Commission.  

Should you have any questions or require further information, please contact _______ at _______. We look forward to the Commission's affirmative response to our request for permit extension. Thank you for your continued cooperation and assistance.  

Sincerely,  

Alvin Au  
DIRECTOR
MEMORANDUM

TO: ALVIN AU, DIRECTOR
DEPARTMENT OF AUDITORIUMS

FROM: ROBERT AGRES, JR., DIRECTOR
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SUBJECT: NONPOTABLE WATER
EWVA VILLAGES GOLF COURSE

This is to apprise you of the current status and need for follow up regarding the water use permit for Ewa Pump 2 which is a source of nonpotable water for the irrigation of the golf course in West Loch.

We have been notified by the State Department of Land and Natural Resources (DLNR) Commission on Water Resource Management that the permit will expire in July. A new application for renewal of the permit on a month to month basis is recommended since the City's plans for effluent reuse for the irrigation systems of both the Ewa Villages and West Loch golf courses is underway. The application needs to be filed with the State DLNR.

For your information, the source of irrigation water for the Ewa Villages golf course is Ewa Pumps 7 and 8. The allocation for water use is covered under a water use permit currently held by Campbell Estate. Use of the nonpotable water for golf course irrigation has been recognized by the Commission to be on an emergency basis and conversion to effluent reuse water must be effected as soon as it becomes available.

The contact person on the staff at the Commission is Lenore Nakama and she can be reached at [redacted].

With the abolition of the Department of Housing and Community Development, it has been determined that this area of responsibility relating to the water for the golf courses will come under the jurisdiction of the Department of Auditoriums.
TO: ALVIN AU, DIRECTOR
Page 2
May 15, 1998

If you have any questions or need to discuss this matter further, please call Avis Kamimura at extension 4437.

ROBERT AGRES, JR.

cc: Lenore Nakama, DLNR
October 24, 1996

Ms. Rae M. Loui, Deputy Director
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resources Management
P. O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Loui:

Subject: Water Use Permit for Well Nos. 2201-03, 04, 07
Waipahu-Waiawa Ground Water Management Area, Oahu

In response to your letter of October 22, 1996, the City intends to undertake the Integrated Resource Plan (IRP) under the leadership of the Board of Water Supply and the Department of Wastewater Management. The Department of Housing and Community Development will participate in this effort.

We therefore respectfully request a 180-day extension to enter into a joint agreement for retaining a consultant to prepare the IRP.

The 180-day extension would allow us to obtain City Council approval of the proposed agreement. All intergovernmental agreements are subject to approval of the City Council.

We believe that during the 180-day extension period, the City will, in fact, undertake development of the framework and scope of the IRP. We will keep you advised of the status of this effort.

If you have any questions, please feel free to call me or Randy Wong at [Redacted]

Sincerely,

[Signature]

ROLAND D. LIBBY, JR.
Director

cc: Managing Director
Mr. Roland D. Libby, Jr.
City and County of Honolulu
Department of Housing and
Community Development
650 South King Street, 5th Floor
Honolulu, HI 96813

Dear Mr. Libby:

Water Use Permit for Well Nos. 2201-03,04,07
Waipahu-Waiawa Ground Water Management Area, Oahu

Thank you for your letter of October 1, 1996, informing us of your intentions to develop an Integrated Resource Plan for Oahu as an alternative to payment of a fine.

Please be advised that the 100-day period for entering into a joint agreement with the Commission to retain a consultant for preparation of the plan lapses on October 25, 1996. As such, we will look forward to hearing from you on or about that date. However, if you find that you are unable to meet the 100-day deadline, please apprise us of your extended timeframe for negotiating an agreement by October 25, 1996.

Thank you also for returning the signed water use permit for Well Nos. 2201-03,04,07. We are returning one executed copy; this should be retained for your record. We will retain the other executed copy for our record.

If you have any questions, please contact Lenore Nakama at [redacted]

Sincerely,

RAE M. LOUI
Deputy Director

LN:fc
Attachment
October 1, 1996

Mr. Michael D. Wilson  
Chairperson  
Commission on Water Resource Management  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Ground Water Use Permit for EP2  
WUP No. 420

Attached is an executed copy of the Ground Water Use Permit for EP2 (Wells No. 2201-03, 04 and 07).

In your letter dated August 6, 1996, which transmitted the permit, you referenced the Water Commission’s decision regarding the imposition of a fine for the overpumpage. As an alternative to payment of the fine, the City may enter into an agreement with the Commission to prepare an Integrated Resource Plan for Oahu. This is to inform you that the Department of Wastewater Management and the Board of Water Supply have initiated measures to develop such a plan and will be forwarding an informational letter to you soon.

If there are any questions, please call Avis Kamimura at

Sincerely,

[Signature]

ROLAND D. LIBBY, JR.  
Director

Attachment

cc: Department of Wastewater Management  
Board of Water Supply  
Department of Parks and Recreation

waterper.mit/k6
# GROUND WATER USE PERMIT

**WUP NO. 420**

## PERMITTEE

<table>
<thead>
<tr>
<th>Applicant/Water User</th>
<th>Landowner of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT</td>
<td>DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT</td>
</tr>
<tr>
<td>650 S. KING ST., 5TH FL.</td>
<td>650 S. KING ST., 5TH FL.</td>
</tr>
<tr>
<td>HONOLULU, HI 96813</td>
<td>HONOLULU, HI 96813</td>
</tr>
</tbody>
</table>

## PERMITTED SOURCE INFORMATION

<table>
<thead>
<tr>
<th>Island</th>
<th>OAHU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Management Area</td>
<td>WAIPAHU-WAIAWA</td>
</tr>
<tr>
<td>Aquifer Sector</td>
<td>PEARL HARBOR</td>
</tr>
<tr>
<td>Aquifer System</td>
<td>WAIPAHU-WAIAWA</td>
</tr>
<tr>
<td>System Sustainable Yield</td>
<td>119 mgd</td>
</tr>
<tr>
<td>Well Name</td>
<td>EP 2</td>
</tr>
<tr>
<td>State Well No.</td>
<td>2201-03.04.07</td>
</tr>
</tbody>
</table>

## PERMITTED USE INFORMATION

<table>
<thead>
<tr>
<th>Reasonable beneficial use</th>
<th>MUNICIPAL (FOR WEST LOCH DEVELOPMENTS IN EXHIBIT 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal (12 month moving ave.)</td>
<td>1.124 mgd</td>
</tr>
<tr>
<td>Location of water use</td>
<td>9-1-17, por. 6, 6, 14, 60, 64, 65, 66; por. 9-1-62 to 66; 9-1-various</td>
</tr>
<tr>
<td>TMK #</td>
<td>WEST LOCH</td>
</tr>
<tr>
<td>Address</td>
<td>VARIOUS</td>
</tr>
<tr>
<td>State land use classification</td>
<td>URBAN</td>
</tr>
<tr>
<td>County zoning classification</td>
<td></td>
</tr>
</tbody>
</table>

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the applicant is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground water use here must not interfere with surface or other ground water rights or reservations.

5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its July 17, 1996 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect the water sources (quantity or quality);
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June 1, 1987 shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. Carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. If the ground water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

11. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

12. This permit shall be subject to the Commission's periodic review of the WAIPAHU-WAIWA Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the WAIPAHU-WAIWA Aquifer System, or relevant modified aquifer(s), is reduced.
13. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

14. The use(s) authorized by law and by this permit do not constitute ownership rights.

15. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.

16. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

17. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the WAIPAHU-WAIJAWA Ground Water Management Area.

18. The water use permit granted shall be an interim water use permit, pursuant to HAR § 13-167-3(6). The final determination of the water use quantity shall be made within five years of the filing of the application.

19. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

20. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

21. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

Date of Approval: July 17, 1996
Expiration Date: July 17, 1998

MICHAEL D. WILSON, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ____________________________  Date: ____________
Printed Name: ROLAND D. WEBB, JR.  Firm or Title: DIRECTOR OF HOUSING

Please sign both copies of this permit, return one to the Commission, and retain the other for your records.

Attachments
August 13, 1996

Mr. Michael D. Wilson  
Chairperson  
State Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 821  
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Water Use Permit No. 420  
Water Shortage Plan for EP2

This is in response to your request to provide a water shortage plan as contained in the issuance of the water use permit for EP2 to meet the increased demand for non-potable water at West Loch.

We have consulted with the Department of Parks and Recreation, who administers the operations of the golf course and agrees to reduce pumpage by five percent (5%) in the event of a water shortage. In order to accommodate this plan, the rough areas of the golf course will not be watered.

If you have any questions, please call Avis Kamimura at [Redacted]

Sincerely,

[Signature]

ROLAND D. LIBBY, JR.  
Director

cc: Golf Course Division, DPR  
Greg Hiyakumoto, RMTC
Mr. Randall Wong  
City and County of Honolulu  
Department of Housing and Community Development  
650 S. King St., 5th Floor  
Honolulu, HI 96813  

Dear Mr. Wong:

Notice of Action  
Water Use Permit Application for Well Nos. 2201-03, 04, 07  
Waipahu-Waiawa Ground Water Management Area, Oahu  

On July 17, 1996, the Commission on Water Resource Management (Commission) acted on your after-the-fact application for a water use permit for EP 2 (Well Nos. 2201-03, 04, 07) to allow additional ground water to be pumped to meet the increased demand for non-potable water at new developments (golf course and common area irrigation) at West Loch, Waipio, Oahu.

Earlier, on May 26, 1988, the Board of Land and Natural Resources pursuant to Hawaii Revised Statutes Chapter 177 (repealed July 1, 1988) (Act 45, SCH 1987) had issued a water use permit (WUP No. 177) to the City and County of Honolulu, Department of Parks and Recreation for EP 2 (Well Nos. 2201-03, 04, 07) for 0.5 mgd for municipal-irrigation uses (see Exhibit 1).

According to the pumping records provided by the City, Department of Housing and Community Development (DHCD) has been pumping ground water from EP 2 in excess of the permitted amount (based upon a 365-day moving average) for over three (3) years and in increasing amounts for the past two (2) years (see Exhibit 2). By July 17, 1996, DHCD was pumping EP 2 at more than twice the amount authorized under WUP No. 177 (1.0+ mgd pumped v. 0.5 mgd authorized).

A representative from DHCD attended the July 17, 1996 Commission meeting. The Commission asked the DHCD representative to explain the basis for the long-term overpumping. After reviewing the record of pumping in this matter and after providing DHCD the opportunity to be heard, the Commission found that DHCD had violated the terms of Water Use Permit No. 177 by constantly pumping 20% to 100% above the authorized 365-day moving average for more than two (2) years.

First, pursuant to §174C-15 HRS, the Commission imposed a fine of $500 per day for the period of the violation. The Commission established that the period of the violation is approximately two (2) years, although Exhibit 2 shows that DHCD was overpumping for about a year and a half prior to that date. As an alternative to paying the fine, DHCD may enter in a joint agreement with the Commission within 100 days by which DHCD would retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation.

Second, the Commission approved an interim increase of DHCD’s permit, from 0.5 mgd to 1.124 mgd. However, the Commission also ordered that if DHCD pumps these wells in excess of the 1.124 mgd permitted amount, a $500/day fine will be imposed. This permit is valid for two (2) years at which time the City will convert from potable water to the use of treated effluent for the irrigation needs.
By a unanimous vote, the Commission at its July 17, 1996 meeting:

1. Found DHCD in violation of WUP No. 177 for exceeding the water use permit's allocation limit.

2. Imposed a fine of $500 per day for the period of the violation (730 days * $500/day = $365,000). As an alternative to paying the fine, DHCD may enter into a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to $150 per day for the period of the violation (730 days * $150/day = $109,500).

3. Issued a two-year interim water use permit to DHCD for the reasonable and beneficial use of 1.124 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 3 for EP 2 (Well Nos. 2201-03, 04, 07), subject to the standard water use permit conditions and the following special conditions (which were added and are part of your permit under Standard Condition 20):

   **Special Conditions**

   A. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

   B. The permittee shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [phone number] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The permittee shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

   C. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

   D. If the permittee pumps in excess of 1.124 mgd, a fine of $500 per day shall be imposed.

Enclosed is your official water use permit. Please be sure to read the conditions of your approved permit. If you accept these terms, please sign and return one copy of this permit to the Commission and retain a copy for your record.

We draw your attention to two key conditions that require your response. First, you are required to keep a record of your monthly total pumpage, water level, salinity, and water temperature. This information must be submitted to the Commission on a regular monthly basis using the enclosed water use report form. You should make copies of the enclosed report form as needed.

Second, you are required to submit a water shortage plan to the Commission within thirty (30) days of the issuance date of this permit. Your water shortage plan simply identifies what you are willing to do should the Commission declare a water shortage situation in the WAIPAHU-WAIWA Ground Water Management Area. It may be brief. In a water shortage situation, the Commission may require temporary reductions in pumpage from all sources. The Commission is required, by law, to formulate a plan to implement such area-wide reductions, which should accommodate, include, and be consistent with your plans. Therefore, your water shortage plan is necessary for the Commission to prepare its overall Water Shortage Plan.

If you have any questions, please call Rae M. Loui, Deputy Director, at [phone number].

Aloha,

Michael D. Wilson
Chairperson

Attachments
GROUND WATER USE PERMIT
WUP NO. 420

PERMITTEE

Applicant/Water User
Address

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
650 S. KING ST., 5TH FL.
HONOLULU, HI 96813

Landowner of Source
Address

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
650 S. KING ST., 5TH FL.
HONOLULU, HI 96813

PERMITTED SOURCE INFORMATION

Island
OAHU
Water Management Area
WAIPAHU-WAIWA
Aquifer Sector
PEARL HARBOR
Aquifer System
WAIPAHU-WAIWA
System Sustainable Yield
119 mgd
Well Name
EP 2
State Well No.
2201-03.04.07

PERMITTED USE INFORMATION

Reasonable beneficial use
MUNICIPAL (FOR WEST LOCH DEVELOPMENTS IN EXHIBIT 3)
Withdrawal (12 month moving ave.)
1.124 mgd
Location of water use
TMK #
9-1-17:7, Por. 6.6, 14, 60, 64, 65, 66; Por. 9-1-62 to 66; 9-1-various
Address
WEST LOCH
State land use classification
URBAN
County zoning classification
VARIOUS

Pursuant to Hawaii's State Constitution, Article XI, Section 7, Hawaii Revised Statutes, Chapter 174C; Hawaii Administrative Rules, Chapters 13-167 through 13-171; and Hawaii decisional law and custom, the applicant is hereby authorized to use ground water from the sources and in the amount and from and upon the locations described above; subject however, to the requirements of law including but not limited to the following conditions:
1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground water use here must not interfere with surface or other ground water rights or reservations.

5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its July 17, 1996 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. protect the water sources (quantity or quality);
   b. meet other legal obligations including other correlative rights;
   c. insure adequate conservation measures;
   d. require efficiency of water uses;
   e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
   f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
   g. carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

   Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. If the ground water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

11. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

12. This permit shall be subject to the Commission's periodic review of the WAIPAHU-WAIWAIWAI Aquifer System's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the WAIPAHU-WAIWAIWAI Aquifer System, or relevant modified aquifer(s), is reduced.
13. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

14. The use(s) authorized by law and by this permit do not constitute ownership rights.

15. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee's water use.

16. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

17. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the WAIPAHU-WAIAWA Ground Water Management Area.

18. The water use permit granted shall be an interim water use permit, pursuant to HAR § 13-167-3(6). The final determination of the water use quantity shall be made within five years of the filing of the application.

19. The water use permit shall be subject to the Commission's establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

20. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

21. The permittee understands that any willful violation of any of the above conditions or any provisions of HRS § 174C or HAR § 13-171 may result in the suspension or revocation of this permit.

[Signature]
Michael D. Wilson, Chairperson
Commission on Water Resource Management

I have read the conditions and terms of this permit and understand them. I accept and agree to meet these conditions as a prerequisite and underlying condition of my ability to proceed.

Applicant's Signature: ________________________ Date: ______________

Printed Name: ______________________________ Firm or Title: ______________________________

Please sign both copies of this permit, return one to the Commission, and retain the other for your records.

Attachments
**STATE OF HAWAII**
**COMMISSION ON WATER RESOURCE MANAGEMENT**
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

**MONTHLY GROUND WATER USE REPORT FOR**

**DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT**
650 S. KING ST., 5TH FLOOR
HONOLULU, HI 96813

**Month of __________, 19__**

**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 821, Honolulu HI 96809. For assistance, please call 587-0265 (Oahu only) or 1-800-488-4844 (neighbor islands).

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Measurement End Date (mm/dd/yyyy)</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Lowest Pumping Water Level (ft. above msl)</th>
<th>Highest Non-pumping Water Level (ft. above msl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2201-03, 04, 07</td>
<td>EP 2 (TOTAL PUMPAGE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WEST LOCH GOLF COURSE METER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - flow meter, electrical consumption, weir of flume, not metered (estimated)
** - indicate how long pump was on or off when chloride sample taken
*** - minimum time between pump/well turned off and water level measurement must be at least 24 hours; if pumping schedule did not allow for at least 24 hour rest during the month please indicate amount of hours pump was off before this measurement

Other comments or additional information (e.g. - date and method of chloride measurement; how pumpage amounts are estimated; etc...):

Submitted by (print) ____________________________ Title ____________________________
Signature ____________________________ Date ____________________________
West Loch Golf Course Pumpage
EP 2 (Well Nos. 2201-03,04,07)

EXHIBIT 1
P R E M I T
TO WITHDRAW AND USE GROUND WATER

Applicant: C&C Dept of Parks & Rec. Application Date: 2/26/88
Address: 650 S. King St., Hon., HI 96813

Ground Water Control Area: Pearl Harbor Subarea: Koolau
Well(s) Name: EP2 State Well No.(s): 2201-03, 04, 07

Amount of Withdrawal: (Average Annual) 0.5 mgd
Beneficial Purpose of Withdrawal: Municipal-Irrigation
Area or Projects Served: West Loch Estates

The applicant is hereby granted a permit to withdraw and use ground water from the source identified above, in accordance with Chapter 177, HRS, Administrative Rule, Chapter 166 of Title 13; and the following:

General Conditions. (1) the water use authorized by this permit must be for the beneficial purpose described in this permit; (2) the use must not interfere substantially and materially with existing individual household uses, existing preserved uses, or existing permitted uses; (3) the use is subject to the shortage and emergency powers of the Board of Land and Natural Resources; (4) this permit may be suspended or revoked in accordance with Chapter 166 of Title 13; (5) the permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13; (5) an approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809, on a monthly basis.

Additional Conditions.

This permit is subject to the requirements of other applicable laws, rules, and ordinances.

The term of this permit shall be twenty years from the date of issuance, subject to review and adjustment every five years.

The development of the ground water source shall be completed within 24 months from the date of permit issuance.

The issuance of this permit was approved by the Board of Land and Natural Resources at its meeting on April 22, 1988

Chairperson of the Board
Date of Issuance: MAY 26 1988

EXHIBIT 2
TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER
Revised 11/22/93

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>Acres</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,300</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td>4,475</td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td>6,429</td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td>6,390</td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td>6,439</td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td>4,928</td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1</td>
<td>160.00</td>
<td>7,500</td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>3.40</td>
<td>6,412</td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td>6,391</td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
TO: Honorable Benjamin J. Cayetano, Governor
State of Hawaii

ATTN: Mr. Charles Toguchi, Chief of Staff

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Imposition of a Fine for the City and County of Honolulu, Department of Housing and Community Development, for Violation of Water Use Permit

The Commission on Water Resource Management (Commission) acted today on a water use permit application by the City and County of Honolulu, Department of Housing and Community Development (DHCD). DHCD's request was for an after-the-fact approval to allow more ground water to be pumped to meet the increased water demand at DHCD's new developments at West Loch (golf course and houses). Most of the pumpage is used for the City's golf course.

Since April 1994, the City has been gradually increasing the pumpage from their well and are currently pumping about twice as much ground water than the original 0.5 mgd permitted under the existing water use permit.

The Commission found DHCD in violation of the permit and imposed a fine of $500 per day for the period of the violation. Alternatively, DHCD may enter in a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to a $150 per day fine for the period of the violation. (The period of the violation is about two (2) years, so the total cost to DHCD will be either $350,000 or $110,000 toward a plan.)

The Commission also approved an interim increase of DHCD's permit, from 0.5 mgd to 1.124 mgd, but ordered a $500/day fine for future exceedance of the 1.124 mgd permit. This permit is valid for two (2) years at which time the City will convert from potable water to the use of treated effluent for the course.

We feel that this action will send a very important message to all water users that the Commission is concerned about the water situation on Oahu and, at the same time, provide a mechanism for getting the City to formulate a comprehensive water management plan for the island, as they are mandated to do under the Water Code. The water use and development plans that have been prepared by the City to date do not provide the Commission with the direction it needs.
TESTIMONY BY APPLICANT:

Mr. Bert Hatton of Oahu Sugar Co., was available for questions. He stated that the terms in the staff submittal are acceptable.

TESTIMONIES:

Mr. Moses Haia of the Native Hawaiian Advisory Counsel, testified against the approval of the permit.

MOTION: (NOBRIGA/GIRALD)

To approve staff's recommendation with the following amendment:

1. The applicant must have a separate meter installed for the golf course within 60 days.

2. The Commission will review this permit within two years instead of the five years that was recommended by staff.

UNANIMOUSLY APPROVED AS AMENDED.

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT/THE ESTATE OF JAMES CAMPBELL, APPLICATION FOR WATER USE PERMIT, EP 2 (WELL NOS. 2201-03, 04, 07), TMK 9-1-1760, MODIFICATION OF WATER USE PERMIT FOR URBAN IRRIGATION USE FOR 1.6 MGD, WAIPAHU-WAIAWA GROUND WATER MANAGEMENT AREA, OAHU

PRESENTATION OF SUBMITAL: Ms. Lenore Nakama

Staff noted that the following correction should be made:

The joint applicants should be Department of Housing and Community Development/Chaney Brooks and Co.

STAFF RECOMMENDATION:

Staff recommends that the Commission:

1. Find Department of Housing and Community Development in violation of WUP No. 177 for exceeding their allocation limit.

2. Impose a fine of $500 for the violation in Recommendation 1.

3. Approve the issuance of an two-year interim water use permit to the Department of Housing and Community Development for the reasonable and beneficial use of 1.124 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 6 for EP 2 (Well Nos. 2201-03,04,07), subject to the standard water use permit conditions in Attachment B and the following special conditions:
a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

b. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [redacted] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

c. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

TESTIMONY BY APPLICANT:

Mr. Randy Wong, representing the Department of Housing and Community Development was available for questions.

Commissioner Richards informed the Commission that Kahua Ranch once leased land from Waikele Golf Club. Although there was no financial interest involved, Commissioner Richards recused himself from voting on this item.

MOTION: (MIIKE/NOBRIAGA)

To approve staff's recommendation.

After further discussion, this motion was withdrawn.

MOTION: (NOBRIGA/MIIKE)

To charge the applicant $500 per day from July 17, 1996.

Motion did not carry.

Deputy Attorney General William Tam, in responding to CWRM questions regarding "due notice" for purposes of establishing the period of violation, stated that the applicant had signed and acknowledged the water use permit with the limit in it. The permit established notice. A fine may be imposed for violations after that date.

Roy Hardy indicated that staff is not accepting new water use permit applications if applicant is overpumping any existing WUP's they may have in the water management area.
MOTION: MIIKE/GIRALD

To amend the staff recommendation as follows:

1. Find Department of Housing and Community Development in violation of WUP No. 177 for exceeding their allocation limit.

2. To find DHCD in violation of the permit and impose a fine of $500 per day for the period of the violation, or in the alternate,

DHCD may enter in a joint agreement with the Commission within 100 days to retain a consultant to prepare an Integrated Resource Plan for Oahu to be funded by an amount equivalent to a $150 per day fine for the period of the violation.

3. Approve the issuance of an two-year interim water use permit to the Department of Housing and Community Development for the reasonable and beneficial use of 1.124 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 6 for EP 2 (Well Nos. 2201-03,04,07), subject to the standard water use permit conditions in Attachment B and the following special conditions:

   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

   b. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [ ] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

   c. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

   d. If the permittee pumps in excess of 1.124 mgd, a fine of $500/day shall be imposed.

APPROVED.

5. HONOLULU BOARD OF WATER SUPPLY, DEFERRAL—WATER USE PERMIT APPLICATION, PAUA WELL (WELL NO. 2049-01), TMK 2-2-41:03, EXISTING IRRIGATION USE FOR 0.050 MGd, NUUANU GROUND WATER MANAGEMENT AREA, OAHU

PRESENTATION OF SUBMITTAL: Ms. Lenore Nakama
APPLICATION FOR WATER USE PERMIT
EP 2 (Well Nos. 2201-03, 04, 07), TMK 9-1-17:60
Modification of Water Use Permit for Urban Irrigation Use for 1.6 mgd
Waipahu-Waiawa Ground Water Management Area, Oahu

APPLICANT(S):
Department of Housing and Community Development
650 S. King St., 5th Floor
Honolulu, HI 96813
Chaney, Brooks & Company
94-1024 Waipio Uka St., #201
Waipahu, HI 96797

LANDOWNER(S): Same

LOCATION MAP: See Exhibit 1

BACKGROUND:
On March 18, 1996, a completed application for a water use permit was jointly made by the City Department of Housing and Community Development (DHCD) and Chaney, Brooks and Company. The application is to modify the water use permit to increase the permitted use quantity from 0.5 mgd to 1.6 mgd to accommodate the increased demand at the DHCD's West Loch development.

On June 5, 1996, due to time constraints, the Commission deferred action on the application to the next Oahu meeting.

Additional information regarding the source, use, notification, objections, and field investigation is provided in Attachment A.

ANALYSIS & ISSUES:
Section 174C-49(a) of the State Water Code establishes seven (7) criteria that must be met to obtain a water use permit. An analysis of the proposed permit in relation to these criteria follows:

AGENDA 1
Item 4
Water availability

The Commission adopted 119 mgd for the sustainable yield of the Waipahu-Waiawa Aquifer System. At present, permitted water uses total 108.910 mgd (shown in Exhibit 2). An additional 1.581 mgd of ground water is reserved for future uses on lands administered by DHHL. This leaves 8.509 mgd of ground water available for allocation to new uses.

Pending applications for water use permits in the aquifer show a total request for 8.031 mgd; however, of these, only 4.460 mgd of the total request for Waipahu-Waiawa ground water will actually increase demand on the available sustainable yield. The remainder of pending requests are for changes in already permitted uses without quantity increases.

In addition, BWS has requested a reservation of 15 mgd from Pearl Harbor. This request is incomplete; additional information, including justification for the reserved water, is needed.

A summary of the current ground water conditions in the aquifer is provided in Table 1:

<table>
<thead>
<tr>
<th>Item</th>
<th>Waipahu-Waiawa Aquifer System (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Yield</td>
<td>119</td>
</tr>
<tr>
<td>Less: Other Existing Permits (shown in Exhibit 2)</td>
<td>-108.883</td>
</tr>
<tr>
<td>Reservation to DHHL</td>
<td>-1.581</td>
</tr>
<tr>
<td>Subtotal (Current Available Allocation)</td>
<td>8.536</td>
</tr>
<tr>
<td>Less: Pending Completed Applications*</td>
<td></td>
</tr>
<tr>
<td>EPWDC/Campbell Estate (2302-07 to 09)</td>
<td>3.360 mgd</td>
</tr>
<tr>
<td>DHCD (2201-03,04,07)</td>
<td>1.100 mgd</td>
</tr>
<tr>
<td>Subtotal (Excess Available Allocation)</td>
<td>4.076</td>
</tr>
</tbody>
</table>

* Does not include applications, or portions thereof, that are already covered under existing permits or will not affect the available sustainable yield:
  - Waikiki Golf Club/Oahu Sugar Co. - request to modify permitted use of WP 1 (2301-01 to 10) to include golf course irrigation; no increase in quantity is requested.
  - Dole Food Co. - request to continue existing use of Uwau Development Tunnel Extension (2953-03).
  - Kamehameha Schools/Bernice Pauahi Bishop Estate - request to continue existing use of Waiawa Tunnel (2657-05).
  - DHCD - request to modify the permitted use quantity for EP 2 (2201-03,04,07) for additional 1.1 mgd; current permitted use is for 0.5 mgd.

An issue is the cessation of Oahu Sugar Company (OSCo) irrigation practices on lands overlying the aquifer and the associated decrease in return irrigation recharge (40% to 60% of applied irrigation water) that is expected to result in a lower sustainable yield.
The staff's preliminary analysis of Pearl Harbor sustainable yields under various irrigation scenarios is shown in Exhibit 3 (prepared for the Waiahole Ditch Public Information Meeting, June 22, 1994). Exhibit 3 shows a potential decrease in the sustainable yield for Waipahu-Waiawa of 17 mgd (14%) without basal return irrigation and an additional 10 mgd (8%) without Waiahole Ditch return irrigation. In the event that both basal and Waiahole Ditch return irrigation ceases, then the sustainable yield may decrease by 27 mgd (23%).

The determination of the use of Windward aquifer ground water transported by Waiahole Ditch will be made in the ongoing contested case hearing. With regard to basal return irrigation, the landowners at former OSCo sources have transferred the water use permits, indicating short-term plans for continued diversified agriculture use. However, such direction is not clear in the 1992 draft of the Hawaii Water Plan, Oahu Water Management Plan (Plan), and return irrigation is as yet unquantified for diversified agriculture. In general, return irrigation would be less than for sugarcane agriculture (40% to 60% of applied water).

The 1992 Plan contains a general discussion of the conversion of sugarcane lands to diversified agriculture and urban uses. The Plan does not provide clear direction or specific geographic information regarding future land uses. Because sustainable yield is tied to land uses overlying the aquifer, i.e. for the return irrigation recharge component of the water budget equation, it is difficult to determine the future sustainable yield in Waipahu-Waiawa at this time.

Although the current allocated pumpage in Waipahu-Waiawa is 108.910 mgd (shown in Exhibit 2), about 47 mgd is allocated for agricultural uses. A reduction in sustainable yield from 119 mgd to 92 mgd assumes, most conservatively, that there is no agricultural return irrigation recharge. If it is assumed that all agricultural activities cease in Waipahu-Waiawa (thus the reduction in sustainable yield due to the lack of return irrigation recharge), then permitted agricultural uses would also be reduced accordingly by about 47 mgd. Table 2 illustrates this scenario (Scenario 1) and other possible scenarios for the Commission's consideration and information:

<table>
<thead>
<tr>
<th>Table 2. Potential Waipahu-Waiawa Ground Water Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITEM</strong></td>
</tr>
<tr>
<td>Conservative Sustainable Yield</td>
</tr>
<tr>
<td>Less: Other Existing Permits*</td>
</tr>
<tr>
<td>Reservation to DHHL</td>
</tr>
<tr>
<td>Subtotal (Potential Available Allocation)</td>
</tr>
</tbody>
</table>

* Scenario 1 - Assumes revocation of 47 mgd permitted agricultural uses at former OSCo wells.
Scenario 2 - Assumes revocation of 23.5 mgd permitted agricultural uses at former OSCo wells.
Scenario 3 - Assumes no revocation of permitted agricultural uses at former OSCo wells.
Informal discussions with Central and Ewa area landowners indicate that some diversified agriculture on the caprock may use brackish basal wells (i.e. former OScO wells) for irrigation supply because of high chloride concentrations in caprock wells. Scenario 2 in Table 2 assumes that half of the current permitted use for agriculture (23.5 mgd) is revoked, and the remaining permitted use is applied outside of the Waipahu-Waiawa Aquifer System on the Ewa Caprock region. Under this scenario, 5.009 mgd of ground water would be available for allocation.

Scenario 3 in Table 2 assumes that existing agricultural use permits are not revoked, but are utilized for diversified agriculture entirely over the Waipahu-Waiawa Aquifer System. Again, return irrigation recharge for diversified agriculture is unknown. Table 2 shows that, to offset the potential deficit of 18.491 mgd in Waipahu-Waiawa under this scenario, return irrigation from diversified agriculture must be at least 39% (18.491 mgd / 47 mgd). In comparison, sugarcane agriculture is estimated to return 40% to 60% of applied irrigation water. However, this scenario is unlikely since existing water use permits need to be modified to accommodate the change in use location since some of the water was formerly used outside the Waipahu-Waiawa Aquifer System.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" as:

"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest."

A major reasonable-beneficial use issue is whether potable quality water should be used for irrigation. This application is for the use of basal ground water for golf course irrigation. Although chloride data have not been reported since 1987, the past data show that chlorides were less than 200 ppm with pumpage at 3 mgd. It is possible that the quality of the water has approached potable limits with decreased pumpage at the source. In this case, staff believes that use of potentially potable quality water for irrigation is a beneficial use at this time. The Commission has approved water use permits for the use of potable quality water for irrigation of crops and golf courses in the past. Staff believes that the determination of beneficial use is site-specific; for example, where it is (over a potable water aquifer?), whether it is a separate irrigation system, and what alternatives are available. Staff also believes that if an aquifer is fully allocated, the determination of beneficial use may change and uses previously deemed beneficial may have to be revisited to decide among competing interests.

The City’s policy is that nonpotable water should be used for irrigation. The applicant has indicated that they are pursuing the use of nonpotable water from wells as an interim measure until wastewater reuse becomes feasible for irrigation. As this golf course is located in the Ewa Caprock, which has been declared by the Commission to be a nonpotable aquifer, the Commission should require that wastewater be reused for irrigation when it becomes available in about two (2) years.

There is an existing water use permit for the source for 0.5 mgd. The graph of twelve-month moving average withdrawals (Exhibit 4) shows average withdrawals at the source have exceeded the permitted use quantity since mid-1994. As such, this application for
an increased allocation to accommodate new developments is being made after-the-fact. Currently, withdrawals over the past year have averaged 1.048 mgd. (The installed pump capacity is approximately 3 mgd.)

The staff's recommendation in the June 5, 1996 submittal was to impose a fine for the overpumpage violation. Commission action on the application was deferred due to time constraints.

In a letter dated July 2, 1996 (Exhibit 5), DHCD has explained that, over the past two years, numerous attempts to develop a source of nonpotable water to service the golf course and community were initiated, but were not successful. These include:

1. Investigation into the use of the pond water originating from Honouliuli Stream.
2. Exploratory drilling and testing of three (3) caprock sources.
3. Discussions with Oahu Sugar Company to develop a plan to utilize former sugarcane irrigation wells and subsequent discussions with The Estate of James Campbell (Campbell Estate), which now controls the source. These discussions are presently ongoing.

The record supports the DHCD's attempt to use caprock sources and their consideration of EP 3,4 as an alternate source. The record also shows previous applications were made and withdrawn for additional water from EP 2. Although it appears that good faith efforts were made on the part of DHCD to pursue alternate sources, such efforts are incumbent on the part of any developer and do not dissolve a permittee's responsibility to comply with the terms of a permit. In the past, the Commission levied a $500 fine for failure to comply with permit conditions (Honolulu Board of Water Supply, July 13, 1994).

The water will be used to irrigate the West Loch municipal golf course, Asing District Park, the West Loch Shoreline Park and common landscaping in the West Loch area. The application indicates a need for 1.509 mgd over the next four years. A breakdown of the demand by project is shown in Exhibit 6.

However, reported monthly usage at completed projects indicate that the DHCD's projected needs are overstated by about 25% and appear to be more in line with the county guideline for domestic consumption (Exhibit 7). As such, the staff recommends that the Commission use the actual usage data for completed projects and apply the guideline for incomplete projects to determine reasonable water use. By this method, an allocation of 1.124 mgd should be awarded to DHCD.

(3) Interference with other existing legal uses

The proposed use is not anticipated to interfere with other existing legal uses. No concerns or objections have been raised.
Public interest

This project is being done by the DHCD for the purpose of providing affordable housing and beneficial amenities to the community.

State & county general plans and land use designations

These proposed uses are consistent with the state and county general plans and land use designations.

County land use plans and policies

The county's policy of non-potable use on golf courses was described under the reasonable and beneficial portion of this submittal.

Interference with Hawaiian home lands rights

All permits are subject to the prior rights of Hawaiian home lands. DHHL and OHA have reviewed these applications. At present, there is 1.581 mgd of ground water reserved from the Waipahu-Waiawa Aquifer for future homestead needs.

As a final issue, although the Commission is requiring landowners at both source and use locations to be co-applicants for the water use permit, the staff is recommending that the water use permit be issued only to the operator of the source. This clearly identifies who will be responsible for measuring and reporting data at the source and compliance with the other terms of the permit. Protecting the resource through permits and operator information is manageable for staff. Staff does not require end-users to report water use on multiple user systems and, instead, relies on the operator to manage their own distribution system within the limits of their permits. However, the current public interest in golf course usage warrants the separate metering of usage at this site and will provide ready information for future proposed golf course uses.

RECOMMENDATION:

Staff recommends that the Commission:

1. Find Department of Housing and Community Development in violation of WUP No. 177 for exceeding their allocation limit.

2. Impose a fine of $500 for the violation in Recommendation 1.

3. Approve the issuance of an two-year interim water use permit to the Department of Housing and Community Development for the reasonable and beneficial use of 1.124 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 6 for EP 2 (Well Nos. 2201-03,04,07), subject to the standard water use permit conditions in Attachment B and the following special conditions:

   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.
b. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [redacted] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

c. A separate meter for the West Loch Golf Course shall be installed and water use recorded and reported to the Commission on a regular monthly basis on the attached water use report form.

Respectfully submitted,

W. Roy Handy
RAE M. LOUI
Deputy Director

Attachment(s):
A (Water Use Permit Detailed Information)
B (Water Use Permit Standard Conditions)

Exhibit(s):
1 (Location Map for Well Nos. 2201-03,04,07)
2 (Other Permitted Uses in Waipahu-Waiawa Aquifer System)
3 (Preliminary Staff Analysis of Pearl Harbor Sustainable Yields)
4 (Graph of Reported Monthly Water Use at Well Nos. 2201-03,04,07)
5 (7/2/96 Letter from the City Dept. of Housing & Community Development)
6 (DHCD Supply Requirements)
7 (County Guidelines for Domestic Consumption)

APPROVED FOR SUBMITTAL:

MICHAEL D. WILSON, Chairperson
WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER: WAIPAHU-WAIAWA System, PEARL HARBOR Sector, OAHU
Sustainable Yield: 119 mgd
Existing Water Use Permits:* 110.464 mgd
Available Allocation: 9.136 mgd
Total of pending applications:** 4.460 mgd

* Includes water reservation to DHHL.
** Does not include incomplete water use permit applications and water reservation requests and applications for water use permits, or portions thereof, that will not affect sustainable yield.

Use Information

(Well Nos. 2201-03,04,07)
Quantity Requested: 1,600,000 gallons per day
Proposed Type of Water Use: Municipal
Place of Water Use: West Loch Municipal Golf Course, Asing District Park, West Loch Shoreline Park and common landscaping in the West Loch Area
Reported Water Usage: 1.048 mgd

WAIPAHU-WAIAWA Aquifer System
Current 12-Month Moving Average Withdrawal: 59.921 mgd (50% of SY)

ATTACHMENT A
STANDARD WATER USE PERMIT CONDITIONS

1. The water described in this water use permit may only be taken from the location described and used for the reasonable beneficial use described at the location described above. Reasonable beneficial uses means "the use of water in such a quantity as is necessary for economic and efficient utilization which is both reasonable and consistent with State and County land use plans and the public interest." (HRS § 174C-3)

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HRS § 174C-49(a), which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in HRS § 174C-3;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with State and County general plans and land use designations;
   f. Is consistent with County land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and HRS § 174C-101(a).

4. The ground water use here must not interfere with surface or other ground water rights or reservations.

5. The ground water use here must not interfere with interim or permanent instream flow standards. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and submittal, as amended, approved by the Commission at its July 17, 1996 meeting are incorporated into this permit by reference.

8. Any modification of the permit terms, conditions, or uses may only be made with the express written consent of the Commission.

9. This permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. protect the water sources (quantity or quality);
   b. meet other legal obligations including other correlative rights;
   c. insure adequate conservation measures;

ATTACHMENT B
d. require efficiency of water uses;
e. reserve water for future uses, provided that all legal existing uses of water as of June, 1987 shall be protected;
f. meet legal obligations to the Department of Hawaiian Home Lands, if applicable; or
g. carry out such other necessary and proper exercise of the State’s and the Commission’s police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. If the ground water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.

11. An approved flowmeter(s) must be installed to measure monthly withdrawals and a monthly record of withdrawals, salinity, temperature, and pumping times must be kept and reported to the Commission on Water Resource Management on forms provided by the Commission on a monthly basis (attached).

12. This permit shall be subject to the Commission’s periodic review of the Waipahu-Waiawa Aquifer System’s sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Waipahu-Waiawa Aquifer System, or relevant modified aquifer(s), is reduced.

13. A permit may be transferred, in whole or in part, from the permittee to another, if:
   a. The conditions of use of the permit, including, but not limited to, place, quantity, and purpose of the use, remain the same; and
   b. The Commission is informed of the transfer within ninety days.

Failure to inform the department of the transfer invalidates the transfer and constitutes a ground for revocation of the permit. A transfer which involves a change in any condition of the permit, including a change in use covered in HRS § 174C-57, is also invalid and constitutes a ground for revocation.

14. The use(s) authorized by law and by this permit do not constitute ownership rights.

15. The permittee shall request modification of the permit as necessary to comply with all applicable laws, rules, and ordinances which will affect the permittee’s water use.

16. The permittee understands that under HRS § 174C-58(4), that partial or total nonuse, for reasons other than conservation, of the water allowed by this permit for a period of four (4) continuous years or more may result in a permanent revocation as to the amount of water not in use. The Commission and the permittee may enter into a written agreement that, for reasons satisfactory to the Commission, any period of nonuse may not apply towards the four-year period. Any period of nonuse which is caused by a declaration of water shortage pursuant to section HRS § 174C-62 shall not apply towards the four-year period of forfeiture.

ATTACHMENT B
17. The permittee shall prepare and submit a water shortage plan within 30 days of the issuance of this permit as required by HAR § 13-171-42(c). The permittee’s water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the Waipahu-Waiau Ground Water Management Area.

18. The water use permit granted shall be an interim water use permit, pursuant to HAR § 13-167-3(6). The final determination of the water use quantity shall be made within five years of the filing of the application.

19. The water use permit shall be subject to the Commission’s establishment of instream standards and policies relating to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.

ATTACHMENT B
<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Aquifer Code</th>
<th>Owner/User</th>
<th>Year Drilled</th>
<th>Ground Elev. (ft.)</th>
<th>Bottom of Hole</th>
<th>Initial Chloride</th>
<th>Initial Pump Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>2201-03</td>
<td>EP 2</td>
<td>30203</td>
<td>C&amp;C HONOLULU</td>
<td>1891</td>
<td>40</td>
<td>-190</td>
<td>16.6</td>
<td></td>
</tr>
<tr>
<td>2201-04</td>
<td>EP 2</td>
<td>30203</td>
<td>C&amp;C HONOLULU</td>
<td>1891</td>
<td>40</td>
<td>-186</td>
<td>16.6</td>
<td></td>
</tr>
<tr>
<td>2201-07</td>
<td>EP 2</td>
<td>30203</td>
<td>C&amp;C HONOLULU</td>
<td>1921</td>
<td>40</td>
<td>-242</td>
<td>16.6</td>
<td>304</td>
</tr>
<tr>
<td>State Well No.</td>
<td>Well Name</td>
<td>Measurement End Date (mm/dd/yyyy)</td>
<td>Quantity Pumped (gallons)</td>
<td>Method of Measurement*</td>
<td>Chloride (mg/l) **</td>
<td>Temp. (°F)</td>
<td>Lowest Pumping Water Level (ft. above msl)</td>
<td>Highest Non-pumping *** Water Level (ft. above msl)</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>------------</td>
<td>-------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>2201-03, 04, 07</td>
<td>EP 2 (TOTAL PUMPAGE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WEST LOCH GOLF COURSE METER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - flow meter, electrical consumption, weir of flume, not metered (estimated)
** - indicate how long pump was on or off when chloride sample taken
*** - minimum time between pump/well turned off and water level measurement must be at least 24 hours; if pumping schedule did not allow for at least 24 hour rest during the month please indicate amount of hours pump was off before this measurement

Other comments or additional information (e.g. date and method of chloride measurement; how pumpage amounts are estimated; etc...):
Aquifer System: WAIPAHU-WAIAWA

<table>
<thead>
<tr>
<th>WUP NO</th>
<th>APPLICANT</th>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>APPROVAL</th>
<th>WUP mgd</th>
</tr>
</thead>
<tbody>
<tr>
<td>212</td>
<td>HONOLULU BNS</td>
<td>2101-01</td>
<td>RESERVATION</td>
<td>02/18/1994</td>
<td>1.581</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-10</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-14</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-17</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-19</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-20</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-21</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-22</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>77</td>
<td>C &amp; C HONOLULU</td>
<td>2201-03</td>
<td>EP 2</td>
<td>02/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>77</td>
<td>C &amp; C HONOLULU</td>
<td>2201-07</td>
<td>EP 2</td>
<td>02/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>84</td>
<td>HARRIS RUG CL</td>
<td>2201-14</td>
<td>HARRIS RUG</td>
<td>05/17/1989</td>
<td>0.003</td>
</tr>
<tr>
<td>212</td>
<td>C&amp;C DHCD</td>
<td>2201-15</td>
<td>EP 2 BACKUP</td>
<td>01/01/1911</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-01</td>
<td>EP 5, 6</td>
<td>12/06/1995</td>
<td>5.208</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-05</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-06</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-07</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-08</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-09</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-10</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-11</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-12</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-13</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-14</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-15</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>6.113</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-16</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-17</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-18</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-19</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-20</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>125</td>
<td>CAMPBELL ESTATE</td>
<td>2203-01</td>
<td>EP 15, 16</td>
<td>02/16/1992</td>
<td>12.154</td>
</tr>
<tr>
<td>90</td>
<td>WATANABE, A.</td>
<td>2300-12</td>
<td>WATANABE, A.</td>
<td>05/17/1989</td>
<td>0.680</td>
</tr>
<tr>
<td>91</td>
<td>WATANABE, A.</td>
<td>2300-20</td>
<td>WATANABE, A.</td>
<td>05/17/1989</td>
<td>0.400</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2300-21</td>
<td>WP 7A, 7B, 7C</td>
<td>01/16/1992</td>
<td>9.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2300-22</td>
<td>WP 7A, 7B, 7C</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2300-23</td>
<td>WP 7A, 7B, 7C</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-01</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>1.151</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-02</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-03</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-04</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-05</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-06</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-07</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-08</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-09</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-10</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>128</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-11</td>
<td>WP 4A, 4B</td>
<td>12/06/1995</td>
<td>3.305</td>
</tr>
</tbody>
</table>
o
.I
WOP
NO

WOP

66

439

434
439
434

439
434

351
351
351
435
151
151
156
103
103

WELL NO.

NAZARENE CHRCH

APPROVAL

mgd

WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP
WP

01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
01/16/1992
12/14/1995
12/14/1995
01/16/1992
12/14/1995
01/16/1992
12/14/1995
01/16/1992
12/14/1995
01/16/1992
12/14/1995
01/16/199Z
12/14/1995
05/17/1989
05/17/1989
05/17/1989
05/17/1989
05/17/1989
05/17/1989
05/17/1989
05/17/1.989
05/17/1989
05/17/1989
07/11/1985
07/11/1.985
07/11/1985
07/11/1985
07/11/1985
08/22/1986
08/22/1986

0.000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
5.594
0.000
0.000
0.000
0.000
0.000
1.862
.0.750
0.000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
6.610
0.000
0.000
0.000
0.000
0.000
4.357
0.000
0.000
0.000
0.003
6.000
0.000
0.000
0.000
2.100
0.000
2.657
0.027
0.000
0.000
0.000
0.000
0.000
0.000
0.000
0.000
1.088
0.000
0.000
0.600
1.260
0.000
1.450
2.190
0.000

WAIPAHU-WAIAWA

OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
OAHU SUGAR CO., LTD.
ROYAL OAHU RESORT, INC.
OAHU SUGAR CO., LTD.
ROYAL OAHU RESORT, INC.
OAHU SUGAR CO., LTD.
ROYAL OAHU RESORT. INC.
OAHU SUGAR CO., LTD.
ROYAL OAHU RESORT. INC.
. OAHU SUGAR CO., LTD.
ROYAL OAHU RESORT. INC.
OAHU SUGAR CO.. LTD.
ROYAL OAHU RESORT. INC.
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
STATE DHHL
HONOLULU BWS
STATE DHHL
HONOLULU BWS
STATE DHHL
HONOLULU BWS
STATE DHRL
HONOLULU BWS
STATE DHHL
C&C DHCO
C&C DHCO
C&C DHCO
HOWARD H. HAMAMOTO
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS
HONOLULU BWS

WELL NAME

II

ISLAND OF OAHU
Aquifer System:

439
434
439
434

.

07/08/1996

WATER USE PERMIT INDEX REPORT

APPLICANT

I
129
129
129
129
129
129
129
129
129
130
130
130
130
130
130
131
419
131
419
131
419
131
419
131
419
131
419
92
92
92
92
92
92
93
93
93
93
57
58
58
58
58
66

o

2301-12
2301-13
2301-14
2301-15
2301-16
2301-17
2301-18
2301-19
2301-20
2301-21
2301-22
2301-23
2301-24
2301-25
2301-26
2301-27
2301-27
2301-28
2301-28
2301-29
2301-29
2301-30
2301-30
2301-31
2301-31
2301-32
2301-32
2301-34
2301-35
2301-36
2301-37
2301-38
2301-39
2302-01
2302-02
2302-03
2302-04
2358-49
2400-01
2400-02
2400-03
2400-04
2400-05
2400-06
2400-09
2400-09
2400-10
2400-10
2400-11
2400-11
2400-12
2400-12
2400-13
2400-13
2401-04
2401-05
2401-06
2401-07
2402-01
2402-02
2402-03
2457-01
2457-02

41.,
41..
41..
41..
41..
41.,
41..
41.,
41.,
21..
21..
21..
21..
2A,
21..
2C.
2C.
2C.
2C,
2C,
2C,
2C.
2C,
2C,
2C.
2C.
2C.

4B
4B
4B
4B
4B
4B
4B
4B
4B
2B
2B
2B
2B
2B
2B
20
20
20
20
20
20
20
20
20
20
20
20

BOABAB WELLS 1
BOABAB WELLS 2

HOABAB WELLS 3
BOAEAB WELLS 4

BOABAB NO.5
BOABAB NO.6
mNlA I WELLS
mNIA I WELLS
mNlA I WELLS
KUNIA I WELLS
PEARL CITY
WAIPAHU I
WAIPAHU I
WAIPAHU I
WAIPAHU I
WAIPAHU II
WAIPAHU II
WAI PAHU II I
WAIPAHU III
WAI PAHU I II
WAIPAHU III
WAIPAHU III
WAIPAHU III
WAIPAHU III
WAIPAHU III
WAIPAHU III
WAIPAHU III
mNIA III
mNIA III
mNIA III
ROYAL OAHU
mNIA II, 3
mNIA II, 3
mNIA II. 3
PEARL CITY I I
PEARL CITY I I

EXHIBIT 2

/

/

06/05/1996

/

/

06/05/1996

/

/

06/05/1996

/

/

06/05/1996

/

/

06/05/1996
10/19/1994
10/19/1994
10/19/1994
06/05/1996
07/19/1989
07/19/1989
07/19/1989
05/17/1989
05/17/l989

Page No.

2


<table>
<thead>
<tr>
<th>WUP NO</th>
<th>APPLICANT</th>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>APPROVAL</th>
<th>mgd</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISLAND OF OAHU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aquifer System: WAIPAHU-WAIJAVA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>HONOLULU BWS</td>
<td>2457-03</td>
<td>PEARL CITY II</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>105</td>
<td>HONOLULU BWS</td>
<td>2458-01</td>
<td>PEARL CITY SHAFT</td>
<td>05/17/1989</td>
<td>1.32</td>
</tr>
<tr>
<td>106</td>
<td>HONOLULU BWS</td>
<td>2458-03</td>
<td>PEARL CITY I</td>
<td>05/17/1989</td>
<td>0.31</td>
</tr>
<tr>
<td>106</td>
<td>HONOLULU BWS</td>
<td>2458-04</td>
<td>PEARL CITY I</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-01</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-02</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-03</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-04</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-05</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-06</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-07</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-08</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-09</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-10</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-11</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-12</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-13</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-14</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>107</td>
<td>HONOLULU BWS</td>
<td>2459-19</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.63</td>
</tr>
<tr>
<td>108</td>
<td>HONOLULU BWS</td>
<td>2459-20</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>109</td>
<td>HONOLULU BWS</td>
<td>2459-21</td>
<td>WAIPAHU</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>109</td>
<td>HONOLULU BWS</td>
<td>2459-22</td>
<td>WAIPIO HTS I</td>
<td>10/18/1995</td>
<td>0.50</td>
</tr>
<tr>
<td>109</td>
<td>HONOLULU BWS</td>
<td>2459-24</td>
<td>WAIPIO HTS I</td>
<td>10/18/1995</td>
<td>0.00</td>
</tr>
<tr>
<td>59</td>
<td>HONOLULU BWS</td>
<td>2500-01</td>
<td>WAIPIO HTS II</td>
<td>07/11/1985</td>
<td>2.00</td>
</tr>
<tr>
<td>59</td>
<td>HONOLULU BWS</td>
<td>2500-02</td>
<td>WAIPIO HTS II</td>
<td>07/11/1985</td>
<td>0.00</td>
</tr>
<tr>
<td>73</td>
<td>HONOLULU BWS</td>
<td>2557-03</td>
<td>PEARL CITY III</td>
<td>03/27/1987</td>
<td>0.50</td>
</tr>
<tr>
<td>111</td>
<td>U.S. NAVY</td>
<td>2558-10</td>
<td>WAIANA SHAFT</td>
<td>05/17/1989</td>
<td>14.977</td>
</tr>
<tr>
<td>154</td>
<td>IGE Y</td>
<td>2600-02</td>
<td>DAIRY COMPANY</td>
<td>07/19/1989</td>
<td>0.10</td>
</tr>
<tr>
<td>139</td>
<td>HONOLULU BWS</td>
<td>2600-03</td>
<td>MILLILANI III</td>
<td>07/19/1989</td>
<td>1.55</td>
</tr>
<tr>
<td>112</td>
<td>HAWAII COUNTRY CLUB</td>
<td>2603-01</td>
<td>HAM COUNTRY CLUB</td>
<td>05/17/1989</td>
<td>0.22</td>
</tr>
<tr>
<td>133</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2658-01</td>
<td>WP 17A, 17B</td>
<td>01/16/1992</td>
<td>0.00</td>
</tr>
<tr>
<td>67</td>
<td>HONOLULU BWS</td>
<td>2659-02</td>
<td>WAIPIO HTS III</td>
<td>08/22/1986</td>
<td>0.850</td>
</tr>
<tr>
<td>67</td>
<td>HONOLULU BWS</td>
<td>2659-03</td>
<td>WAIPIO HTS III</td>
<td>08/22/1986</td>
<td>0.00</td>
</tr>
<tr>
<td>113</td>
<td>DEL MONTE CORP.</td>
<td>2703-01</td>
<td>DEL MONTE CORP.</td>
<td>05/17/1989</td>
<td>0.154</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-01</td>
<td>MILLILANI I</td>
<td>05/17/1989</td>
<td>2.980</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-02</td>
<td>MILLILANI I</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-03</td>
<td>MILLILANI I</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-04</td>
<td>MILLILANI I</td>
<td>05/17/1989</td>
<td>0.00</td>
</tr>
<tr>
<td>74</td>
<td>HONOLULU BWS</td>
<td>2859-01</td>
<td>MILLILANI II</td>
<td>03/27/1987</td>
<td>1.900</td>
</tr>
<tr>
<td>74</td>
<td>HONOLULU BWS</td>
<td>2859-02</td>
<td>MILLILANI II</td>
<td>03/27/1987</td>
<td>0.00</td>
</tr>
</tbody>
</table>

167 Permits Totaling 110.491
Preliminary Staff Analysis

SUSTAINABLE YIELD (SY) ESTIMATES
PEARL HARBOR SECTOR
(Million gallons per day)

<table>
<thead>
<tr>
<th></th>
<th>Waipahu-Waiauwa</th>
<th>Ewa-Kunia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated SY</td>
<td>119</td>
<td>20</td>
</tr>
<tr>
<td>Estimated SY without basal return irrigation</td>
<td>102</td>
<td>11</td>
</tr>
<tr>
<td>Estimated SY without Waiahole Ditch return irrigation</td>
<td>109</td>
<td>20</td>
</tr>
<tr>
<td>Estimated SY without basal and Waiahole Ditch return irrigation</td>
<td>92</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Current allocated pumpage</th>
<th>Allocated pumpage without OsCo.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>116.33</td>
<td>18.75</td>
</tr>
<tr>
<td></td>
<td>60.72</td>
<td>13.74</td>
</tr>
</tbody>
</table>

Assumptions

1. Assumes 40% of applied irrigation contributes to sustainable yield estimates.

2. Current application of OsCo water:
   a. All 25 mgd of Waiahole Ditch flows presently irrigate the Waipahu-Waiauwa Aquifer Sector.
   b. Although 60.61 mgd is allocated, actual pumpage from the basal lens is about 52 mgd. Of the 52 mgd of basal (pumped) water, 34 mgd irrigates the Waipahu-Waiauwa Aquifer Sector and 18 mgd irrigates the caprock.

3. This is a preliminary staff analysis and is an extrapolation from existing information.

EXHIBIT 3
West Loch Golf Course Pumpage
EP 2 (Well Nos. 2201-03,04,07)

- Monthly values
- 12-MAV
- Allocated amount
Mr. Michael D. Wilson  
Chairperson  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96808

Dear Mr. Wilson:

Subject: Application for Water Use Permit for EP 2  
Well Nos. 2201-03, 04, 07, TMK: 9-1-17:60

At the June 5, 1996, meeting of the Commission on Water Resource Management, our application for a water use permit for Ewa Pump 2 was deferred. The application was submitted to modify the current permitted use of 0.5 mgd to 1.6 mgd in order to accommodate an increased demand for nonpotable water at the City's West Loch golf course and community. These areas include:

a. The West Loch golf course which serves as both a public recreational facility as well as a major flood control improvement for the Honolulu drainage basin. The course diverts flooding from the residences of West Loch and Honolulu, the St. Francis Medical Center and the Federal wildlife refuge and retains sedimentation before depositing any runoff into West Loch.

b. A 39-acre shoreline park which is open to the public and provides access to fishing, picnicking and other passive recreational activities for the immediate and neighboring communities.

c. Landscaped common areas in the West Loch community including the landscaped buffers along Fort Weaver Road.

d. A 16-1/2 acre community park called Asing Community Park which is under construction and anticipated to be completed for public use by the end of the year.

We regret our failure to reconcile the increased withdrawals from EP 2 which exceeded the permitted use quantity during the past year.
two years. At the same time, the City initiated numerous attempts to develop a source of nonpotable water to service the golf course and community but was not successful. We want to take this opportunity to iterate those efforts.

The pond water originating from Honouliuli Stream was tested in hopes that a pump could be installed in the golf course ponds for transmission to the irrigation lake. Unfortunately, the water quality in these ponds failed to meet minimum standards for bacterial content probably due to its close proximity to the Kahua Meat Company's slaughterhouse.

The City drilled three test wells in Ewa Villages in an attempt to develop a caprock source of nonpotable water for transmission to West Loch. However, the water was found to contain unacceptable levels of chloride for irrigation and thus, the test wells were abandoned.

Discussions were initiated with Oahu Sugar Company (OSCo) to develop a plan to utilize their wells since sugar cane production was gradually being phased out. These efforts were abruptly terminated with OSCo's closure in 1995. Subsequently, negotiations were begun with Campbell Estate who assumed ownership of OSCo's assets. Discussions are presently ongoing as the City pursues the use of nonpotable water from the wells in an interim measure until wastewater reuse becomes feasible for irrigation.

Due to the immediate need to service the public and community areas of the West Loch project and our inability to secure another source of nonpotable water, the result was an increased irrigation demand and an overpumpage of 1.0 mgd at EP 2.

Although our previous attempts to develop alternate sources of nonpotable water have not been successful, the City is committed to continue its efforts with Campbell Estate as well as long range plans for reuse with the Department of Wastewater Management.

We appreciate this opportunity to provide additional information to our application for water use permit for EP 2. Please call Randy Wong at 523-4264 if you have any further questions or require more information.

Sincerely,

ROLAND D. LIBBY, JR.
Director

EXHIBIT 5
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6.268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.58</td>
<td>6.460</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6.400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6.392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6.429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>none</td>
<td>4.10</td>
<td>6.390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6.409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>AO-1*</td>
<td>0.60</td>
<td>6.500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>none</td>
<td>9.50</td>
<td>6.389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>R-5*</td>
<td>0.50</td>
<td>6.600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>AO-1*</td>
<td>206.00</td>
<td>7.500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AO-1*</td>
<td>2.20</td>
<td>6.318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6.000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6.389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 46</td>
<td>B-1</td>
<td>4.00</td>
<td>4.475</td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td>6.400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td>6.429</td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td>6.390</td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-1-56</td>
<td>A-1</td>
<td>4.10</td>
<td>6.439</td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5*</td>
<td>18.00</td>
<td>4.928</td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AO-1*</td>
<td>160.00</td>
<td>7.500</td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-</td>
<td>R-5</td>
<td>3.40</td>
<td>6.412</td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 6, 14</td>
<td>R-5</td>
<td>4.60</td>
<td>6.391</td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,506,900</td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
# TABLE 15

**DOMESTIC CONSUMPTION GUIDELINE**

**AVERAGE DAILY DEMAND***

<table>
<thead>
<tr>
<th>ZONE</th>
<th>HAWAII</th>
<th>KAUAI</th>
<th>MAUI</th>
<th>OAHU</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESIDENTIAL:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Family or Duplex</td>
<td>400gals/unit</td>
<td>500gals/unit</td>
<td>600gals/unit</td>
<td>500gals/unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Multi-Family Low Rise</td>
<td>400gals/unit</td>
<td>350gals/unit</td>
<td>560gals/unit</td>
<td>400gals/unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Multi-Family High Rise</td>
<td>400gals/unit</td>
<td>350gals/unit</td>
<td>560gals/unit</td>
<td>300gals/unit</td>
</tr>
<tr>
<td><strong>COMMERCIAL:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial/Industry Mix</td>
<td>3000gals/acre</td>
<td>3000gals/acre</td>
<td>6000gals/acre</td>
<td>3000gals/acre</td>
</tr>
<tr>
<td>Commercial/Residential Mix</td>
<td>--</td>
<td>500gals/acre</td>
<td>140gals/1000 sq. ft.</td>
<td>100gals/1000 sq. ft.</td>
</tr>
<tr>
<td>Resort (To include hotel for Maui only):</td>
<td>400gals/unit</td>
<td>350gals/unit</td>
<td>350gals/unit</td>
<td>350gals/unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>LIGHT INDUSTRY:</td>
<td>4000gals/acre</td>
<td>4000gals/acre</td>
<td>6000gals/acre</td>
<td>4000gals/acre</td>
</tr>
<tr>
<td>SCHOOLS, PARKS:</td>
<td>4000gals/acre</td>
<td>2500gals/acre</td>
<td>1700gals/acre</td>
<td>4000gals/acre</td>
</tr>
<tr>
<td></td>
<td>or</td>
<td>plus</td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>HOSPITAL</td>
<td></td>
<td>60gals/student</td>
<td>60gals/student</td>
<td>60gals/student</td>
</tr>
<tr>
<td>AGRICULTURAL</td>
<td></td>
<td></td>
<td>1800gals/acre</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5000gals/acre</td>
<td></td>
</tr>
</tbody>
</table>

* Where two or more figures are listed for the same zoning, the daily demand resulting in higher consumption use shall govern the design unless specified otherwise.
TESTIMONY OF THE NATIVE HAWAIIAN ADVISORY COUNCIL, INC. BEFORE THE STATE COMMISSION ON WATER RESOURCE MANAGEMENT ON DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT/THE ESTATE OF JAMES CAMPBELL'S WATER USE PERMIT APPLICATION

NHAC opposes approval of the above-captioned water use permit application primarily because of the rate at which water from the Waipahu-Waiawa sector of the Pearl Harbor aquifer has been and continues to be subject to allocation. This makes it critical to now address problems we see in the approach the Water Commission is taking to manage water resources in this area. NHAC asserts that sound water resource management practices and protection of Hawaiian water rights must begin at the planning level.

The sustainable yield of this sector of the Pearl Harbor aquifer has been established at 119 mgd. From the testimony the Water Commission received at the April 15, 1996 public hearing concerning water use permit applications of the Ewa Plains Water Development Corporation and Campbell Estate it is clear the cessation of O’ahu Sugar Company irrigation and the associated reduction in ground water recharge has caused great uncertainty about a safe sustainable yield for the Pearl Harbor aquifer. In view of the interconnected nature of all of O’ahu’s aquifers, NHAC asserts that a complete review and analysis of all O’ahu sustainable yields must be conducted and an update of the Hawai‘i Water Plan must be completed and approved by the Water Commission before you move forward with any further allocation of water from Pearl Harbor aquifer sectors.

NHAC has serious concerns about the advisability of the Water Commission allocating essentially 100% of the very uncertain sustainable yield. As a result of the Water Commission’s failure to establish reasonable priorities to guide water allocation decisions, this current first come, first served allocation scenario is inconsistent with the Water Code’s resource protection intent. It is unacceptable that the Commission would consider allocating the full sustainable yield of the Waipahu-Waiawa portion of the Pearl Harbor aquifer without due consideration of
the consequences on the legitimate, senior rights of others to water from the same aquifer.

Native Hawaiians who reside on kuleana lands which were historically in taro cultivation and other crops and/or who relied on water from this sector of the aquifer for water for irrigation, traditional and customary practices, and domestic purposes have priority over other uses of this water. Their rights are and have been continuously and systematically violated by a first come/first serve system of allocation. Hawaiians with kuleana lands with appurtenant rights which lay within the Waipahu-Waiawa sector of the Pearl Harbor aquifer have been prevented from cultivation of traditional crops by the cessation of the natural flow of a spring or stream due to groundwater pumpage. Their rights are being abridged and denied in derogation of the Water Code, common law, and the Constitution and statutes of this State. The Water Commission must address these concerns.

NHAC has attempted to address these concerns in other ways. We have participated in the development of Hawaiian rights administrative rules, we have participated in the Stream Protection and Management (SPAM) process and we have spent countless hours working on the review of the Water Code. Although this work has been important, there have not yet been any real concrete results. The rules have not yet been promulgated. No meaningful long term water planning has occurred. The Hawai‘i Water Plan has not been developed to serve as a meaningful guide to implement the Water Commission’s dual role of resource protection and resource allocation. Thus, the Commission should defer action on all Pearl Harbor water use applications until a sound planning basis for future action is established including a more meaningful process for the consideration and protection of Hawaiian rights and interests.

Hawaiians simply cannot accede to an allocation process that fully allocates water resources and then forces us to fight to get it back. Unfortunately at this time, we see no simple mechanisms or rules that will avoid this.

Constitutional and common law protections of Hawaiian’s traditional and customary and other rights must be respected. A first come, first serve allocation approach does not respect those rights. If the Commission’s system of allocation is to be guided by the parameter known as “sustainable yield,” NHAC asserts no water should be allocated once the allocated water amount comes within 90% of the sustainable yield unless and until the Commission has reserved water necessary for the protection of Hawaiians’ appurtenant rights to water and uses related to traditional and customary practices both now and in the future. Such a buffer is essential for the Commission to perform its duties under the public trust doctrine applicable to water resource management under Hawai‘i common-law and the Water Code.
In summary, to fulfill its statutory and constitutional obligations to the Native Hawaiian people, the Water Commission must take a more reasoned approach to water allocation than grabbing some water with the left hand and giving it away with the right, all the time perilously close to allocating the full sustainable yield of the aquifer. NHAC urges this Commission to defer all permit applications until a proper evaluation is made of the effect of recent developments such as the cessation of OSCo pumping and recharge on the Pearl Harbor aquifer. This includes protection of the rights of Native Hawaiians with respect to kuleana, appurtenant and traditional and customary rights such as those held by Mr. Charles Herring and other Native Hawaiians living on or holding an interest in kuleana lands particularly affected by lack of water availability in the Pearl Harbor aquifer.

Mahalo for your consideration of these matters.
July 2, 1996

Mr. Michael D. Wilson  
Chairperson  
Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96808

Dear Mr. Wilson:

Subject: Application for Water Use Permit for EP 2  
Well Nos. 2201-03, 04, 07, TMK: 9-1-17:60

At the June 5, 1996, meeting of the Commission on Water Resource Management, our application for a water use permit for Ewa Pump 2 was deferred. The application was submitted to modify the current permitted use of 0.5 mgd to 1.6 mgd in order to accommodate an increased demand for nonpotable water at the City's West Loch golf course and community. These areas include:

a. The West Loch golf course which serves as both a public recreational facility as well as a major flood control improvement for the Honouliuli drainage basin. The course diverts flooding from the residences of West Loch and Honouliuli, the St. Francis Medical Center and the Federal wildlife refuge and retains sedimentation before depositing any runoff into West Loch.

b. A 39-acre shoreline park which is open to the public and provides access to fishing, picnicking and other passive recreational activities for the immediate and neighboring communities.

c. Landscaped common areas in the West Loch community including the landscaped buffers along Fort Weaver Road.

d. A 16-1/2 acre community park called Asing Community Park which is under construction and anticipated to be completed for public use by the end of the year.

We regret our failure to reconcile the increased withdrawals from EP 2 which exceeded the permitted use quantity during the past
two years. At the same time, the City initiated numerous attempts to develop a source of nonpotable water to service the golf course and community but was not successful. We want to take this opportunity to iterate those efforts.

The pond water originating from Honouliuli Stream was tested in hopes that a pump could be installed in the golf course ponds for transmission to the irrigation lake. Unfortunately, the water quality in these ponds failed to meet minimum standards for bacterial content probably due to its close proximity to the Kahua Meat Company's slaughterhouse.

The City drilled three test wells in Ewa Villages in an attempt to develop a caprock source of nonpotable water for transmission to West Loch. However, the water was found to contain unacceptable levels of chloride for irrigation and thus, the test wells were abandoned.

Discussions were initiated with Oahu Sugar Company (OSCo) to develop a plan to utilize their wells since sugar cane production was gradually being phased out. These efforts were abruptly terminated with OSCo's closure in 1995. Subsequently, negotiations were begun with Campbell Estate who assumed ownership of OSCo's assets. Discussions are presently ongoing as the City pursues the use of nonpotable water from the wells in an interim measure until wastewater reuse becomes feasible for irrigation.

Due to the immediate need to service the public and community areas of the West Loch project and our inability to secure another source of nonpotable water, the result was an increased irrigation demand and an overpumpage of 1.0 mgd at EP 2.

Although our previous attempts to develop alternate sources of nonpotable water have not been successful, the City is committed to continue its efforts with Campbell Estate as well as long range plans for reuse with the Department of Wastewater Management.

We appreciate this opportunity to provide additional information to our application for water use permit for EP 2. Please call Randy Wong at [phone number] if you have any further questions or require more information.

Sincerely,

ROLAND D. LIBBY, JR.
Director
July 2, 1996

Mr. Michael D. Wilson
Chairperson
Department of Land and Natural Resources
Commission on Water Resource Management
P.O. Box 621
Honolulu, Hawaii 96808

Dear Mr. Wilson:

Subject: Application for Water Use Permit for EP 2
Well Nos. 2201-03, 04, 07, TMK: 9-1-17:60

At the June 5, 1996, meeting of the Commission on Water Resource Management, our application for a water use permit for Ewa Pump 2 was deferred. The application was submitted to modify the current permitted use of 0.5 mgd to 1.6 mgd in order to accommodate an increased demand for nonpotable water at the City's West Loch golf course and community. These areas include:

a. The West Loch golf course which serves as both a public recreational facility as well as a major flood control improvement for the Honolulu drainage basin. The course diverts flooding from the residences of West Loch and Honolulu, the St. Francis Medical Center and the Federal wildlife refuge and retains sedimentation before depositing any runoff into West Loch.

b. A 39-acre shoreline park which is open to the public and provides access to fishing, picnicking and other passive recreational activities for the immediate and neighboring communities.

c. Landscaped common areas in the West Loch community including the landscaped buffers along Fort Weaver Road.

d. A 16-1/2 acre community park called Asing Community Park which is under construction and anticipated to be completed for public use by the end of the year.

We regret our failure to reconcile the increased withdrawals from EP 2 which exceeded the permitted use quantity during the past
two years. At the same time, the City initiated numerous attempts to develop a source of nonpotable water to service the golf course and community but was not successful. We want to take this opportunity to iterate those efforts.

The pond water originating from Honouliuli Stream was tested in hopes that a pump could be installed in the golf course ponds for transmission to the irrigation lake. Unfortunately, the water quality in these ponds failed to meet minimum standards for bacterial content probably due to its close proximity to the Kahua Meat Company's slaughterhouse.

The City drilled three test wells in Ewa Villages in an attempt to develop a caprock source of nonpotable water for transmission to West Loch. However, the water was found to contain unacceptable levels of chloride for irrigation and thus, the test wells were abandoned.

Discussions were initiated with Oahu Sugar Company (OSCo) to develop a plan to utilize their wells since sugar cane production was gradually being phased out. These efforts were abruptly terminated with OSCo's closure in 1995. Subsequently, negotiations were begun with Campbell Estate who assumed ownership of OSCo's assets. Discussions are presently ongoing as the City pursues the use of nonpotable water from the wells in an interim measure until wastewater reuse becomes feasible for irrigation.

Due to the immediate need to service the public and community areas of the West Loch project and our inability to secure another source of nonpotable water, the result was an increased irrigation demand and an overpumpage of 1.0 mgd at EP 2.

Although our previous attempts to develop alternate sources of nonpotable water have not been successful, the City is committed to continue its efforts with Campbell Estate as well as long range plans for reuse with the Department of Wastewater Management.

We appreciate this opportunity to provide additional information to our application for water use permit for EP 2. Please call Randy Wong at [redacted] if you have any further questions or require more information.

Sincerely,

ROLAND D. LIBBY, JR.
Director

EXHIBIT 7
10. GASCO, INC. VOLUNTARY REVOCATION OF PERMITTED WATER USE. HONOLULU GASCO WELL (WELL NO. 1952-14), TMK 1-5-12:6, KALIHI GROUND WATER MANAGEMENT AREA, OAHU

PRESENTATION OF SUBMITTAL: Lenore Nakama

STAFF RECOMMENDATION:
Staff recommends that the Commission:

1. Revoke the water use permit for the Honolulu Gasco Well (Well No. 1952-14).

2. Require the owner or former operator of Well No. 1952-14 to properly secure the well, in accordance with the requirements of Chapter 13-168, Water Use, Wells, and Stream Diversion Works, Hawaii Administrative Rules.

MOTION: (NOBRIGA/GIRALD)

To approve staff’s recommendation.

UNANIMOUSLY APPROVED.

Vice Chairperson Cox called a recess at 12:00 p.m.

The meeting was reconvened at 12:47 p.m.

AGENDA #2

1. WAIKELE GOLF CLUB, INC./OAHU SUGAR CO., LTD., APPLICATION FOR WATER USE PERMIT. WP 1 (WELL NOS. 2301-01 TO 10), TMK 9-4-2:8, MODIFICATION OF WATER USE PERMIT FOR INDUSTRIAL AND GOLF COURSE IRRIGATION USE FOR 1,151 MGD

HOWARD H. HAMAMOTO, RECEIVER, APPLICATIONS FOR WATER USE, WELL CONSTRUCTION, AND PUMP INSTALLATION PERMITS, ROYAL OAHU RESORT WELL (WELL NO. 2401-07), TMK 9-4-2:46, WATER USE: FUTURE GOLF COURSE IRRIGATION USE FOR 0.75 MGD, WELL CONSTRUCTION: 14-INCH CASING DIAMETER, 543-FOOT DEEP, PUMP INSTALLATION: 1250-GPM CAPACITY PUMP

ROYAL OAHU RESORT, INC., REVOCATION OF WATER USE PERMIT. WP 2 (WELL NOS. 2301-27 TO 32), TMK 9-4-2:8

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT/THE ESTATE OF JAMES CAMPBELL, APPLICATION FOR WATER USE PERMIT, EP 2 (WELL NOS. 2201-03, 04, 07), TMK 9-1-17:60, MODIFICATION OF WATER USE PERMIT FOR URBAN IRRIGATION USE FOR 1.6 MGD

DEPARTMENT OF HAWAIIAN HOME LANDS/CASTLE & COOKE HOMES HAWAII, INC., APPLICATION FOR WATER USE PERMIT, WAIPAHU WELLS III (WELL NOS. 2400-09 TO 13), TMK 9-4-35:74, FUTURE MUNICIPAL USE
STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

June 5, 1996
Honolulu, Oahu

Waikele Golf Club, Inc./Oahu Sugar Co., Ltd.
APPLICATION FOR WATER USE PERMIT
WP 1 (Well Nos. 2301-01 to 10), TMK 9-4-2:8
Modification of Water Use Permit for Industrial and Golf Course Irrigation Use for 1.151 mgd

Howard H. Hamamoto, Receiver
APPLICATIONS FOR WATER USE, WELL CONSTRUCTION, and
PUMP INSTALLATION PERMITS
Royal Oahu Resort Well (Well No. 2401-07), TMK 9-4-2:46
Water Use: Future Golf Course Irrigation Use for 0.75 mgd
Well Construction: 14-inch Casing Diameter, 543-foot Deep
Pump Installation: 1250-gpm Capacity Pump

Royal Oahu Resort, Inc.
REVOCATION OF WATER USE PERMIT
WP 2 (Well Nos. 2301-27 to 32), TMK 9-4-2:8

Department of Housing and Community Development/The Estate of James Campbell
APPLICATION FOR WATER USE PERMIT
EP 2 (Well Nos. 2201-03, 04, 07), TMK 9-1-17:60
Modification of Water Use Permit for Urban Irrigation Use for 1.6 mgd

Department of Hawaiian Home Lands/Castle & Cooke Homes Hawaii, Inc.
APPLICATION FOR WATER USE PERMIT
Waipahu Wells III (Well Nos. 2400-09 to 13), TMK 9-4-05:74
Future Municipal Use for 0.027 mgd

Waipahu-Waiawa Ground Water Management Area, Oahu

APPLICANT(S):

1. (Well Nos. 2301-01 to 10)
Waikele Golf Club, Inc.
700 Bishop St., 21st Floor
Honolulu, HI 96813

LANDOWNER(S):

Oahu Sugar Co., Ltd.
700 Bishop St., 21st Floor
Honolulu, HI 96813

AGENDA 2
Item 1
2. (Well No. 2401-07)  
Howard Hamamoto, Receiver  
3100 Ualena St., Room 204  
Honolulu, HI 96819

3. (Well Nos. 2201-03,04,07)  
Department of Housing and  
Community Development  
650 S. King St., 5th Floor  
Honolulu, HI 96813

Chaney, Brooks & Company  
94-1024 Waipio Uka St., #201  
Waipahu, HI 96797

4. (Well Nos. 2400-09 to 13)  
Department of Hawaiian Home Lands  
P.O. Box 1879  
Honolulu, HI 96805

Castle & Cooke Homes Hawaii, Inc.  
P.O. Box 2780  
Honolulu, HI 96803

BACKGROUND:

1. (Well Nos. 2301-01 to 10) Waikele Golf Club, Inc.

On March 13, 1996, a completed application for a water use permit was jointly made by Waikele Golf Club, Inc. (WGC) and Oahu Sugar Company, Ltd. (OSCo), the landowner at the source TMK. The application is to modify the existing water use permit to allow 0.75 mgd for irrigation supply for the 139-acre existing Waikele Golf Course. The remainder of the total 1.151 mgd permitted use quantity (0.753 mgd) will continue to be used for various industrial uses at the Oahu Sugar Mill site. The location of the well is shown in Exhibit 1.

2. (Well No. 2401-07) Royal Oahu Resort, Inc.

On March 1, 1996, completed applications for water use, well construction, and pump installation permits were received from Howard Hamamoto, Court-Appointed Receiver for the Royal Oahu Resort Golf Course. The applications are to construct a new well at the golf course site for future irrigation supply. The location of the proposed well is shown in Exhibit 2. At present, irrigation water for the 151-acre golf course is supplied by the Waiahole Ditch.

3. (Well Nos. 2201-03,04,07) Dept. of Housing & Community Development

On March 18, 1996, a completed application for a water use permit was jointly made by the City Department of Housing and Community Development (DHCD) and Chaney, Brooks and
Company. The application is to modify the water use permit to increase the permitted use quantity from 0.5 mgd to 1.6 mgd to accommodate the increased demand at the City's West Loch development. The location of the well is shown in Exhibit 3.

4. (Well Nos. 2400-09 to 13) Dept. of Hawaiian Home Lands

On February 12, 1996, a completed application for a water use permit was received from the Department of Hawaiian Home Lands (DHHL). The application is to convert 26,500 gpd of potable water that has been reserved from the Waipahu-Waiawa Aquifer System (by Administrative Rule 13-171-61) to a water use permit for homestead lands in Waimanalo. The location of the well is shown in Exhibit 4.

At the May 3, 1996 meeting at Hilo, Hawaii, the Commission deferred action on this application to their next regular meeting on Oahu.

Additional detail regarding the proposed sources and uses is provided in Attachment A.

ANALYSIS & ISSUES:

Section 174C-49(a) of the State Water Code establishes seven (7) criteria that must be met to obtain a water use permit. An analysis of the proposed permit in relation to these criteria follows:

(1) **Water availability**

The Commission adopted 119 mgd for the sustainable yield of the Waipahu-Waiawa Aquifer System. At present, permitted water uses total 108.283 mgd. An additional 1.581 mgd of ground water is reserved for future uses on lands administered by DHHL. This leaves 9.136 mgd of ground water available for allocation to new uses.

Pending applications for water use permits in the aquifer show a total request for 9.588 mgd; however, of these, only 4.460 mgd of the total request for Waipahu-Waiawa ground water will affect the available sustainable yield.

In addition, BWS has requested a reservation of 15 mgd from Pearl Harbor. This request is incomplete; additional information, including justification for the reserved water, is needed.

A summary of the current ground water conditions in the aquifer is provided in Table 1:
Table 1. Current Waipahu-Waiawa Ground Water Conditions

<table>
<thead>
<tr>
<th>ITEM</th>
<th>WAIPAHU-WAIAWA AQUIFER SYSTEM (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Yield</td>
<td>119</td>
</tr>
<tr>
<td>Less: Other Existing Permits*</td>
<td>-108.283</td>
</tr>
<tr>
<td>Reservation to DHHL</td>
<td>-1.581</td>
</tr>
<tr>
<td>Subtotal (Current Available Allocation)</td>
<td>9.136</td>
</tr>
<tr>
<td>Less: Pending Completed Applications**</td>
<td></td>
</tr>
<tr>
<td>EPWDC/Campbell Estate (2302-07 to 09)</td>
<td>3.360 mgd</td>
</tr>
<tr>
<td>DHCD (2201-03,04,07)</td>
<td>1.100 mgd</td>
</tr>
<tr>
<td>Subtotal (Excess Available Allocation)</td>
<td>4.676</td>
</tr>
</tbody>
</table>

* Shown in Exhibit 5.

** Does not include applications, or portions thereof, that are already covered under existing permits or will not affect the available sustainable yield:
DHHL - request to convert 0.027 mgd of reserved water to a water use permit.
Royal Oahu Resort - request for 0.75 mgd for golf course irrigation conditioned on revocation of current permitted use of WP 2 (2301-27 to 32) for 0.75 mgd.
Waikele Golf Club/Oahu Sugar Co. - request to modify permitted use of WP 1 (2301-01 to 10) to include golf course irrigation; no increase in quantity is requested.
Dole Food Co. - request to continue existing use of Uwau Development Tunnel Extension (2953-03).
Kamehameha Schools/Bernice Pauahi Bishop Estate - request to continue existing use of Waiawa Tunnel (2657-05).
DHCD - request to modify the permitted use quantity for EP 2 (2201-03,04,07) for additional 1.1 mgd; current permitted use is for 0.5 mgd.

An issue is the cessation of Oahu Sugar Company (OSCo) irrigation practices on lands overlying the aquifer and the associated decrease in return irrigation recharge (40% to 60% of applied irrigation water) that is expected to result in a lower sustainable yield.

The staff's preliminary analysis of Pearl Harbor sustainable yields under various irrigation scenarios is shown in Exhibit 6 (prepared for the Waiahole Ditch Public Information Meeting, June 22, 1994). Exhibit 6 shows a potential decrease in the sustainable yield for Waipahu-Waiawa of 17 mgd (14%) without basal return irrigation and an additional 10 mgd (8%) without Waiahole Ditch return irrigation. In the event that both basal and Waiahole Ditch return irrigation ceases, then the sustainable yield may decrease by 27 mgd (23%).
The determination of the use of Windward aquifer ground water transported by Waiahole Ditch will be made in the ongoing contested case hearing. With regard to basal return irrigation, the landowners at former OSCo sources have transferred the water use permits, indicating short-term plans for continued diversified agriculture use. However, such direction is not clear in the 1992 draft of the Hawaii Water Plan, Oahu Water Management Plan (Plan), and return irrigation is as yet unquantified for diversified agriculture. In general, return irrigation would be less than for sugarcane agriculture (40% to 60% of applied water).

The 1992 Plan contains a general discussion of the conversion of sugarcane lands to diversified agriculture and urban uses. The Plan does not provide clear direction or specific geographic information regarding future land uses. Because sustainable yield is tied to land uses overlying the aquifer, i.e. for the return irrigation recharge component of the water budget equation, it is difficult to determine the future sustainable yield in Waipahu-Waiawa at this time.

Although the current allocated pumpage in Waipahu-Waiawa is 109.864 mgd (shown in Exhibit 7), 47.691 mgd is allocated for agricultural uses. A reduction in sustainable yield from 119 mgd to 92 mgd assumes, most conservatively, that there is no agricultural return irrigation recharge. If it is assumed that all agricultural activities cease in Waipahu-Waiawa (thus the reduction in sustainable yield due to the lack of return irrigation recharge), then permitted agricultural uses would also be reduced accordingly by 47.691 mgd. Table 2 illustrates this scenario (Scenario 1):

<table>
<thead>
<tr>
<th>Item</th>
<th>Scenario 1 (mgd)</th>
<th>Scenario 2 (mgd)</th>
<th>Scenario 3 (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative Sustainable Yield</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Less: Other Existing Permits*</td>
<td>-60.592</td>
<td>-84.437</td>
<td>-108.283</td>
</tr>
<tr>
<td>Reservation to DHHL</td>
<td>-1.581</td>
<td>-1.581</td>
<td>-1.581</td>
</tr>
<tr>
<td>Subtotal (Potential Available Allocation)</td>
<td>29.827</td>
<td>5.982</td>
<td>-17.864</td>
</tr>
</tbody>
</table>

* Scenario 1 - Assumes revocation of 47.691 mgd permitted agricultural uses at former OSCo wells.
Scenario 2 - Assumes revocation of 23.846 mgd permitted agricultural uses at former OSCo wells.
Scenario 3 - Assumes no revocation of permitted agricultural uses at former OSCo wells.

Informal discussions with Central and Ewa area landowners indicate that some diversified agriculture on the caprock may use brackish basal wells (i.e. former OSCo wells) for irrigation supply because of high chloride concentrations in caprock wells. Scenario 2 in Table 2 assumes that half of the current permitted use for agriculture (23.846 mgd) is
revoked, and the remaining permitted use is applied outside of the Waipahu-Waiawa Aquifer System on the Ewa Caprock region. Under this scenario, 5.981 mgd of ground water would be available for allocation.

Scenario 3 in Table 2 assumes that existing agricultural use permits are not revoked, but are utilized for diversified agriculture entirely over the Waipahu-Waiawa Aquifer System. Again, return irrigation recharge for diversified agriculture is unknown. Table 2 shows that, to offset the potential deficit of 17.685 mgd in Waipahu-Waiawa under this scenario, return irrigation from diversified agriculture must be at least 37% (17.685 mgd / 47.691 mgd). In comparison, sugarcane agriculture is estimated to return 40% to 60% of applied irrigation water. However, this scenario is unlikely in that existing water use permits would need to be modified to accommodate the change in use location since some of the water was formerly used outside the Waipahu-Waiawa Aquifer System. The actual return irrigation recharge to applied water ratio is uncertain.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" as:

"...the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is both reasonable and consistent with the state and county land use plans and the public interest."

1. (Well Nos. 2301-01 to 10) Waiekele Golf Club, Inc.

The proposed use of 750,000 gpd of water for irrigation falls within the typical irrigation water usage for 18-hole golf courses. The application states that the Board of Water Supply's (BWS) policy of requiring dual water systems for golf courses - potable water for domestic purposes and non-potable water for irrigation - would require the golf course to seek another non-potable water source, such as Waiahole Ditch water, pumping water from existing distant wells or drilling new wells, if the golf course were not allowed to utilize waters from WP 1 (Well Nos. 2301-01 to 10). The applicant therefore asserts that use of WP 1 is the more reasonable and economical course and is consistent with public policy.

Exhibit 11 shows the twelve-month moving average withdrawals are in excess of the allocation for the source, particularly in the last three (3) years. The applicant has not provided an explanation for the overpumpage. The staff recommends that the application be deferred until additional information regarding the pumpage at the well is provided.
An issue is whether potable quality water should be used for irrigation. The applications by Waikele Golf Club, Royal Oahu Resort, and DHCD are for the use of basal ground water for golf course irrigation. In these cases, staff believes that use of potable quality water for irrigation is a beneficial use. The Commission has approved water use permits for the use of potable quality water for irrigation of crops and golf courses in the past. Staff believes that the determination of beneficial use is site-specific; for example, where it is (over a potable water aquifer?), whether it is a separate irrigation system, and what alternatives are available. Staff also believes that if an aquifer is fully allocated, the determination of beneficial use may change and uses previously deemed beneficial may have to be revisited to decide among competing interests.

2. (Well No. 2401-07) Royal Oahu Resort, Inc.

The proposed use of 750,000 gpd of water for irrigation falls within the typical irrigation water usage for 18-hole golf courses. The golf course is fully developed and employs about 25 people.

A water use permit for the golf course irrigation supply was approved for WP 2 (Well Nos. 2301-27 to 32) for 0.75 mgd on December 6, 1995. A special condition of the permit provided for revocation in the event that an alternate permanent source of water is found.

3. (Well Nos. 2201-03,04,07) Dept. of Housing & Community Development

The City has an existing water use permit for 0.5 mgd. The graph of twelve-month moving average withdrawals (Exhibit 7) shows average withdrawals at the source have exceeded the permitted use quantity since mid-1994. As such, this application for an increased allocation to accommodate new developments is being made after-the-fact. Currently, withdrawals over the past year have averaged 1.048 mgd. (The installed pump capacity is approximately 3 mgd.) The Commission may consider imposing a fine of up to $1000 per violation for the overpumpage violation.

The water will be used to irrigate the West Loch municipal golf course, Asing District Park, the West Loch Shoreline Park and common landscaping in the West Loch area. The application indicates a need for 1.509 mgd over the next four years. A breakdown of the demand by project is shown in Exhibit 8.

4. (Well Nos. 2400-09 to 13) Dept. of Hawaiian Home Lands

Although 0.124 mgd of Waimanalo Aquifer ground water has been reserved for DHHL homestead lands in Waimanalo, DHHL has no plans at this time to participate in the development of a new source in Waimanalo. Currently, DHHL is developing
Waimanalo Residence Lots, Unit 9 subdivision, which will consist of 53 homes. DHHL calculates that the source requirements for the project amounts to a total of 26,500 gpd. DHHL has participated in the development of Waipahu III Wells (Well Nos. 2400-09 to 13) and BWS has agreed to provide the source component for the project, provided that adequate water source allocation is transferred to them.

(3) Interference with other existing legal uses

1. (Well Nos. 2301-01 to 10) Waikiki Golf Club, Inc.

The Native Hawaiian Advisory Council (NHAC) recommends that the Commission defer action on all permit applications for Pearl Harbor aquifers "until a sound planning basis for future action is established including a more meaningful process for the consideration and protection of Hawaiian rights and interests". NHAC's statement is not a formal objection (personal communication with David Martin, April 30, 1996), but rather an expression of general concerns regarding the Hawaii Water Plan and the protection of the rights of Native Hawaiians with respect to kuleana, appurtenant and traditional and customary rights of Native Hawaiians living on or holding an interest in kuleana lands particularly affected by lack of water availability in the Pearl Harbor Aquifer. NHAC's written statement is shown in Exhibit 9; the applicant's response to NHAC is shown in Exhibit 10.

2. (Well No. 2401-07) Royal Oahu Resort, Inc.

BWS recommends that the golf course should investigate the feasibility of developing Waikele Stream water to irrigate the golf course. BWS objects to the application because the location of the well can affect water quality of the Hoaeae, Kunia I, and Kunia III sources.

It is the staff's understanding that the use of surface waters at non-riparian parcels may not be permitted unless the area has been designated a surface water management area by the Commission. With regard to BWS' concern about withdrawals at the Hoaeae, Kunia I, and Kunia III sources, Standard Condition 3.c. provides for the revocation or reduction in permitted use should this use interfere with other existing legal uses of water. The applicant's brief in support of the application is shown in Exhibit 10.

3. (Well Nos. 2201-03,04,07) Dept. of Housing and Community Development

The proposed use is not anticipated to interfere with other existing legal uses. No concerns or objections have been raised.
4. (Well Nos. 2400-09 to 13) Dept. of Hawaiian Home Lands

The proposed use is not anticipated to interfere with other existing legal uses. No concerns or objections have been raised.

(4) Public interest

1. (Well Nos. 2301-01 to 10) Waikele Golf Club, Inc.

The Office of Hawaiian Affairs (OHA) has expressed serious concerns regarding transfers of water use permits. OHA views the existing water use permit as obsolete as the need for water for sugarcane no longer exists and urges the Commission to ask the applicants to amend the water use permit application to reflect these changes in water needs.

The application is to modify the permitted use of agriculture to allow for continued industrial uses at the Oahu Sugar Mill and for irrigation of Waikele Golf Course. The applicant is also transferring the water use permit to WGC/OSCo, as allowed under §174C-59 (provided that the conditions of use remain the same). A graph of the monthly pumpage and twelve-month moving average withdrawals at WP 1 is shown in Exhibit 11.

2. (Well No. 2401-07) Royal Oahu Resort, Inc.

The proposed use does not appear to violate any of the stated objectives declared to be in the public interest (§174C-2(c) HRS.

3. (Well Nos. 2201-03,04,07) Dept. of Housing and Community Development

This project is being done by the DHCD for the purpose of providing affordable housing and beneficial amenities to the community.

4. (Well Nos. 2400-09 to 13) Dept. of Hawaiian Home Lands

Development of Hawaiian homestead areas in the public interest, as evidenced by the approval of DHHL's petition for reservation and the creation of Rule 13-171-61 and 62.

(5) State & county general plans and land use designations

These proposed uses are consistent with the state and county general plans and land use designations.
(6) County land use plans and policies

1. (Well Nos. 2301-01 to 10) Waikele Golf Club, Inc.

The Planning Department, City and County of Honolulu, recommends that a water quality analysis be performed to determine the existing water quality and that, if the source is now of potable quality or could be used for municipal purposes, that available nonpotable water sources be developed for irrigation purposes. BWS recommends that Waikele Stream, the gravity flow tunnel, or springs near the cultural garden be used.

It is the staff's understanding that the use of surface waters at non-riparian parcels may not be permitted unless the area has been designated a surface water management area by the Commission. Use of the springs near the cultural gardens or the gravity flow tunnel, Pump 8, both of which feed directly into Waikele Stream, are possible alternatives. Both would require amendments to the interim instream flow standard for Waikele Stream.

2. (Well No. 2401-07) Royal Oahu Resort, Inc.

See discussion in (3) above.

3. (Well Nos. 2201-03,04,07) Dept. of Housing and Community Development

A copy of the application was sent to the Mayor's Office, the Planning Department, the Department of Land Utilization, and BWS for review. No concerns or objections have been raised.

4. (Well Nos. 2400-09 to 13) Dept. of Hawaiian Home Lands

DHHL is exempt from county zoning requirements. No objections or concerns have been raised.

(7) Interference with Hawaiian home lands rights - All permits are subject to the prior rights of Hawaiian home lands. DHHL and OHA have reviewed these applications. At present, there is 1.581 mgd of ground water reserved from the Waipahu-Waiawa Aquifer for future homestead needs.

WELL CONSTRUCTION/PUMP INSTALLATION PERMIT:

An application for a combined well construction/pump installation permit for Royal Oahu Well (Well No. 2401-07) was submitted in conjunction with the water use permit application.
The Division of Aquatic Resources (DAR) recommends that the applicant take precautions to prevent contaminants such as drill cuttings, cutting extraction medium, sediment, pollutants, petroleum products and debris from entering the aquatic environment. DAR further recommends that site work be scheduled for periods of minimal rainfall and lands denuded of vegetation be replanted or covered as quickly as possible to control erosion.

Standard well construction and pump installation permit conditions should address the above and other construction or data-related concerns. The proposed well section is shown in Exhibit 12. The applicant plans to install a 1250 gpm pump in the well. Approval for the final pump capacity should be granted in light of the drilling and pump testing results.

RECOMMENDATION:

Staff recommends that the Commission:

1. Defer action on the water use permit application for WP 1 (Well Nos. 2301-01 to 10) until additional information regarding the overpumpage at the source is provided.

2. Approve the issuance of an interim water use permit to Howard H. Hamamoto for the reasonable and beneficial use of 0.75 mgd of ground water from the Waipahu-Waiawa Aquifer System for irrigation supply for the 151-acre Royal Oahu Resort Golf Course for Royal Oahu Well (Well No. 2401-07), subject to the standard water use permit conditions in Attachment B and the following special conditions:

   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.

   b. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [Contact Information] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

   c. Revoke the water use permit for WP 2 (Well Nos. 2301-27 to 32) for 0.75 mgd (WUP No. 419).

3. Approve the issuance of a well construction permit for Royal Oahu Well (Well No. 2401-07) subject to the standard conditions in Attachment C.
4. Authorize the Chairperson to approve and issue a pump installation permit for Royal Oahu Well (Well No. 2401-07) upon acceptance of adequate aquifer pump test results, required under Condition 6.e. of the well construction permit, subject to the standard pump installation permit conditions in Attachment D.

5. Approve the issuance of an interim water use permit to the Department of Housing and Community Development/The Estate of James Campbell for the reasonable and beneficial use of 1.509 mgd of ground water from the Waipahu-Waiawa Aquifer System for the West Loch developments shown in Exhibit 8 for EP 2 (Well Nos. 2201-03,04,07), subject to the standard water use permit conditions in Attachment B and the following special conditions:
   a. Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.
   b. The applicant shall contact Mr. Thomas Arizumi, Chief, Environmental Management Division, State Department of Health, at [redacted] concerning "TWELVE (12) CONDITIONS APPLICABLE TO ALL NEW GOLF COURSE DEVELOPMENT" dated August, 1994 (version 5). The applicant shall obtain a written statement from the Department of Health indicating that their concerns have been addressed, and a copy of that statement shall be sent to the Commission.

6. Find Department of Housing and Community Development in violation of the water use permit for EP 2 (Well Nos. 2201-03,04,07).

7. Impose a fine of $1000 per violation of the water use permit for EP 2.

8. Approve the issuance of an interim water use permit to the Department of Hawaiian Home Lands/Castle & Cooke Homes Hawaii, Inc. for the reasonable and beneficial use of 26,500 gpd of ground water from the Waipahu-Waiawa Aquifer System for Waimanalo Residence Lots, Unit 9, for Waipahu III Wells (Well Nos. 2400-09 to 13), subject to the standard water use permit conditions in Attachment B and the following special conditions:
   a. The Chairperson shall approve the transfer and modification of the water use permit to Honolulu Board of Water Supply (BWS) when BWS assumes full responsibility for operation and control of the source.
b. The accounting of the water reserved by Rule 13-171-61 shall show that 26,500 gpd has been allocated to Waipahu Wells III (Well Nos. 2400-09 to 13).

Respectfully submitted,

[Signature]

RAE M. LOUI
Deputy Director

Attachment(s):
A (Water Use Permit Detailed Information)
B (Water Use Permit Standard Conditions)
C (Well Construction Permit Standard Conditions)
D (Pump Installation Permit Standard Conditions)

Exhibit(s):
1 (Location Map for Well Nos. 2301-01 to 10)
2 (Location Map for Well No. 2401-07)
3 (Location Map for Well Nos. 2201-03,04,07)
4 (Location Map for Well Nos. 2400-09 to 13)
5 (Other Permitted Uses in Waipahu-Waiawa Aquifer System)
6 (Preliminary Staff Analysis of Pearl Harbor Sustainable Yields)
7 (Graph of Reported Monthly Water Use at Well Nos. 2201-03,04,07)
8 (DHCD Supply Requirements)
9 (NHAC Comments on Application for Well Nos. 2301-01 to 10)
10 (Waikele Golf Club, Inc./Oahu Sugar Company, Ltd. Brief in Response)
11 (Graph of Reported Monthly Water Use at Well Nos. 2301-01 to 10)
12 (Proposed Well Section)

APPROVED FOR SUBMITTAL:

[Signature]

MICHAEL D. WILSON, Chairperson
WATER USE PERMIT DETAILED INFORMATION

Source Information

AQUIFER: WAIPAHU-WAIJAVA System, PEARL HARBOR Sector, OAHU

Sustainable Yield: 119 mgd
Existing Water Use Permits: 109.864 mgd
Available Allocation: 9.136 mgd
Total of pending applications: 4.460 mgd

* Includes water reservation to DHHL.
** Does not include incomplete water use permit applications and water reservation requests and applications for water use permits, or portions thereof, that will not affect sustainable yield.

ATTACHMENT A
<table>
<thead>
<tr>
<th>Well No.</th>
<th>Well Name</th>
<th>Aquifer Code</th>
<th>Owner/User</th>
<th>Year Drilled</th>
<th>Ground Elev. (ft)</th>
<th>Bottom of Hole</th>
<th>Initial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2201-03</td>
<td>EP 2</td>
<td>30203</td>
<td>C&amp;C HONOLULU</td>
<td>1891</td>
<td>40</td>
<td>-190</td>
<td>16.6</td>
</tr>
<tr>
<td>2201-04</td>
<td>EP 2</td>
<td>30203</td>
<td>C&amp;C HONOLULU</td>
<td>1891</td>
<td>40</td>
<td>-186</td>
<td>16.6</td>
</tr>
<tr>
<td>2201-07</td>
<td>EP 2</td>
<td>30203</td>
<td>C&amp;C HONOLULU</td>
<td>1921</td>
<td>40</td>
<td>-242</td>
<td>16.6</td>
</tr>
<tr>
<td>2301-01</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>21</td>
<td>-404</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-02</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-370</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-03</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-370</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-04</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-370</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-05</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-370</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-06</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-370</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-07</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-371</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-08</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>30</td>
<td>-382</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-09</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>31</td>
<td>-459</td>
<td>23.3</td>
</tr>
<tr>
<td>2301-10</td>
<td>WAIPAHU WP1</td>
<td>30203</td>
<td>AMFAC</td>
<td>0</td>
<td>31</td>
<td>-467</td>
<td>23.3</td>
</tr>
<tr>
<td>2400-09</td>
<td>WAIPAHU III #1</td>
<td>30203</td>
<td>HONOLULU BWS</td>
<td>1994</td>
<td>318</td>
<td>-140</td>
<td>18.8</td>
</tr>
<tr>
<td>2400-10</td>
<td>WAIPAHU III #2</td>
<td>30203</td>
<td>HONOLULU BWS</td>
<td>1994</td>
<td>317</td>
<td>-140</td>
<td>18.8</td>
</tr>
<tr>
<td>2400-11</td>
<td>WAIPAHU III #3</td>
<td>30203</td>
<td>HONOLULU BWS</td>
<td>1994</td>
<td>311</td>
<td>-144</td>
<td>18.8</td>
</tr>
<tr>
<td>2400-12</td>
<td>WAIPAHU III #5</td>
<td>30203</td>
<td>HONOLULU BWS</td>
<td>1994</td>
<td>314</td>
<td>-142</td>
<td>18.8</td>
</tr>
<tr>
<td>2400-13</td>
<td>WAIPAHU III #4</td>
<td>30203</td>
<td>HONOLULU BWS</td>
<td>1995</td>
<td>313</td>
<td>-140</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Well Count: 18

ATTACHMENT A
Use Information

1. (Well Nos. 2301-01 to 10)
   Quantity Requested: 1,151,000 gallons per day
   Proposed Type of Water Use: Industrial, Municipal
   Place of Water Use: Waikiki Golf Course and Oahu Sugar Mill, Ewa, Oahu
   Reported Water Usage: 1.834 mgd

2. (Well No. 2401-07)
   Quantity Requested: 750,000 gallons per day
   Proposed Type of Water Use: Municipal
   Place of Water Use: Royal Oahu Resort Golf Course, Ewa, Oahu
   Reported Water Usage: NA gpd

3. (Well Nos. 2201-03,04,07)
   Quantity Requested: 1,600,000 gallons per day
   Proposed Type of Water Use: Municipal
   Place of Water Use: West Loch Municipal Golf Course, Asing District Park,
   West Loch Shoreline Park and common landscaping in the West Loch Area
   Reported Water Usage: 1.048 mgd

4. (Well Nos. 2400-09 to 13)
   Quantity Requested: 26,500 gallons per day
   Proposed Type of Water Use: Municipal
   Place of Water Use: Waimanalo Residence Lots, Unit 9
   Reported Water Usage: NA mgd

WAIPAHU-WAIWA Aquifer System
Current 12-Month Moving Average Withdrawal: 59.921 mgd
(50% of SY)
STANDARD WATER USE PERMIT CONDITIONS

1. The ground water described in the water use permit may only be taken from the location described, used for the reasonable-beneficial use described, and at the location described above and in the attachments. Reasonable-beneficial use means "the use of water in such a quantity as is necessary for economic and efficient utilization, for a purpose, and in a manner which is not wasteful and is both reasonable and consistent with the state and county land use plans and the public interest." (HAR §13-171-2).

2. The right to use ground water is a shared use right.

3. The water use must at all times meet the requirements set forth in HAR §13-171-13 which means that it:
   a. Can be accommodated with the available water source;
   b. Is a reasonable-beneficial use as defined in section §13-171-2;
   c. Will not interfere with any existing legal use of water;
   d. Is consistent with the public interest;
   e. Is consistent with state and county general plans and land use designations;
   f. Is consistent with county land use plans and policies; and
   g. Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Act and 174C-101(a), HRS.

4. The ground water use approved must not interfere with surface or ground water rights or reservations.

5. The ground water use approved must not interfere with interim or permanent instream flow standards or policies as determined by the Commission. If it does, then:
   a. A separate water use permit for surface water must be obtained in the case an area is also designated as a surface water management area;
   b. The interim or permanent instream flow standard, as applicable, must be amended.

6. The water use permit is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable.

7. The water use permit application and staff submittal approved by the Commission at its June 5, 1996 meeting, are incorporated into the permit by reference.

8. Any modification of the permit terms, conditions, or uses can only be made with the express written consent of the Commission on Water Resource Management.

9. The water use permit may be modified by the Commission and the amount of water initially granted to the permittee may be reduced if the Commission determines it is necessary to:
   a. Protect water sources in quantity, quality, or both;
   b. Meet other legal obligations including other correlative rights;
   c. Insure adequate conservation measures;
   d. Require efficiency of water uses;
   e. Reserve water for future uses, provided that all legal existing uses of water as of June 1987, shall be protected;
   f. Meet legal obligations to the Department of Hawaiian Homes, if applicable; or
   g. Carry out such other necessary and proper exercise of the State's and the Commission's police powers under law as may be required.

Prior to any reduction, the Commission shall give notice of its proposed action to the permittee and provide the permittee an opportunity to be heard.

10. If the ground water source does not presently exist, the new well shall be completed, i.e. able to withdraw water for the proposed use on a regular basis, within twenty-four (24) months from the date the water use permit is approved.
11. An approved flowmeter(s) must be installed to measure withdrawals and a monthly record of withdrawals, water-levels, salinity, and temperature must be kept and reported to the Commission on a monthly basis in accordance the Commission's September 16, 1992 action on reporting requirements.

12. The water use permit shall be subject to the Commission's periodic review of the applicable aquifer's sustainable yield. The amount of ground water use authorized by the permit may be reduced by the Commission if the sustainable yield of the WAIPAHU-WAIWAWA Aquifer System, or relevant modified aquifer, is reduced.

13. The water use permit may not be transferred or the use rights granted by this permit sold or in any other way alienated. Pursuant to HAR §13-171-25 and the requirements of Chapter 174C, the Commission has the authority to allow the transfer of the permit and the use rights granted by the permit in a manner consistent with HAR §13-171-25. Any such transfer shall only occur with the Commission's prior express written approval. Any sale, assignment, lease, alienation, or other transfer of any interest in this permit shall be void.

14. The use(s) authorized by law and by the water use permit do not constitute ownership rights.

15. The permittee shall comply with all applicable laws, rules, ordinances, and other agencies’ permits and conditions pertaining to water use or the water resource.

16. The permittee shall prepare and submit a water shortage plan within 30 days of issuance of the permit to assist the Commission in fulfilling HAR §13-171-42(c). The permittee's water shortage plan shall identify what the permittee is willing to do should the Commission declare a water shortage in the WAIPAHU-WAIWAWA Ground Water Management Area.

17. The water use permit granted shall be an interim water use permit, pursuant to HAR §13-171-21. The final determination of the water use quantity shall be made within five years of the filing of the application.

18. The water use permit shall be subject to the Commission's establishment of instream standards and policies to the Stream Protection and Management (SPAM) program, as well as legislative mandates to protect stream resources.
STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

1. The Commission on Water Resource Management (Commission) shall be notified, in writing, at least two (2) weeks before any work by this permit commences.

2. The well construction permit shall be for construction and testing of the well only. A minimum one-inch diameter monitor tube shall be permanently installed, in a manner acceptable to the Commission, to accurately record water levels. The permittee shall coordinate with the Commission and conduct a pumping test in accordance with the attached Aquifer Pump Testing Procedure (attached). The permittee shall submit to the Commission the test results as a basis for supporting an application to install a permanent pump and withdraw water for use. No permanent pump may be installed until a pump installation permit is approved and issued by the Commission.

3. The permittee shall incorporate mitigation measures to prevent construction debris from entering the aquatic environment, to schedule work to avoid periods of high rainfall, and to revegetate any cleared areas as soon as possible.

4. In the event that subsurface cultural remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and contact the Department's Historic Preservation Division (587-0045) immediately.

5. The proposed well construction shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to construct the well shall not constitute a determination of correlative water rights.

6. The following shall be submitted to the Commission within thirty (30) days after completion of work:
   b. Elevation (referenced to mean sea level, msl) survey by a Hawaii-licensed surveyor.
   c. As-built sectional drawing of the well.
   d. Plot plan and map showing the exact location of the well.
   e. Complete pumping test records, including time, pumping rate, drawdown, chloride content, and other water quality data.

7. The permittee shall comply with all applicable laws, rules, and ordinances.

8. The well construction permit application and staff submittal approved by the Commission at its June 6, 1996 meeting are incorporated into the permit by reference.

9. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the well construction permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

10. If the well is not to be used it must be properly capped. If the well is to be abandoned then the applicant must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.

ATTACHMENT C
AQUIFER (PUMP) TEST PROCEDURES

The pump test procedure for new wells shall consist of a step-drawdown test followed by a long-term continuous aquifer test. Testing the well and aquifer in the prescribed manner should result in the hydrologic information needed to determine: 1) the well's performance with regard to yield and water quality (chloride concentration), and 2) the nearby hydraulic properties of the aquifer.

General Recording Requirements

The records required for analysis and the tolerance in measurement acceptable for the step-drawdown and long-term continuous aquifer test are as follows:

1. Discharge from the well shall not fluctuate beyond ± 10 percent.
2. Depth to water measurements in the pumped well shall be accurate to 0.01 feet.
3. Time shall be accurate within ± 1 percent.
4. Water discharged from the well during the step-drawdown and long-term test shall be carried away from the well to a distance sufficient to preclude circulation of the discharge water downward to the ground-water table.
5. Recording of data should be on a form similar to Table 1. All information shown in Table 1 shall be provided. In addition, data shall be plotted on Graph 1 and provided.

Step-Drawdown Test

The purpose of the step-drawdown test is to establish the efficiency of the well and to provide preliminary information on the yield of the well, both from a quantity and quality standpoint.

1. Measurement of water level in the pumped well shall be made every 12 hours for a period of no less than two days prior to the initiation of the step-drawdown test in order to obtain the pretest trend in water levels.
2. The step-drawdown test will consist of continuously pumping the well for four hours at four different rates.
   a. The change from one pumping rate to the next must be sufficient to induce an observable change in water level in the well from the previous pumpage rate.
   b. If desired, the four different rates should represent the full range of pump capacity (if the yield can sustain this), but this is not necessary.
AQUIFER (PUMP) TEST PROCEDURES

3. Each pumping rate should be continued for one hour, after which the new rate should be instituted as rapidly as possible.

4. Pumping should begin at the lowest rate and conclude with the highest rate.

5. Pumping should be continuous through the entire step-drawdown test.

6. Measurement of chloride concentration and temperature of the discharge water shall be measured at least five times:
   a. at the end of each pumping rate during the step-drawdown test, and
   b. at the very beginning of the test.

7. A sufficient number of water level measurements shall be made in the pumped well following the termination of the step-drawdown test to establish that the water level fully recovers from each test to pretest levels.

Long-Term Continuous Test

The purpose of the long-term continuous test is to determine the hydraulic properties of the aquifer to explore for and identify nearby aquifer boundaries such as streams or dikes, and to observe the trend in chloride concentration of the discharge water.

1. The long-term test should not commence until the water level in the pumped well has fully recovered from the step-drawdown test. Generally, the time required for this recovery will be slightly greater than four hours. The water level in the pumped well should be measured immediately before initiation of the long-term test.

2. The pump rate for the long-term test should be sufficient to create an observable drawdown.

3. The test should be run 24 hours per day for at least seven days. If during the test, the water level remains the same for a period of 24 hours, the test can be terminated.

4. Measurement of chloride concentration and temperature of the discharge water during the long-term test shall be made at the beginning of the test and every six hours thereafter.

5. Depth to water in all wells shall be measured with sufficient frequency that each logarithmic cycle in time on the data plots (Graph 1) contains at least 10 data points spread through the cycle. Thus, depth to water should be made at t=0 (immediately prior to start of the test), and as close as possible at t=1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, and 8 minutes for the first ten minutes and at all succeeding decimal multiples of these numbers to the end of the test (t=10, 15, 20, 25, 30, 40, 50, 60, 70, and 80 minutes for the log cycle 10 to 100 minutes, etc.)

6. A sufficient number of water level measurements shall be made in the pumped well following termination of the long-term continuous test to establish that the water level fully recovers from each test to pretest levels.
**LONG-TERM AQUIFER TEST DATA**

Pumped Well No. ___________________________ Observation well no. ___________________________

Pumped Well Name _________________________ Distance between Obs. & Pumped Well ______ ft.

Target Q __________________________ gpm Reference pt. for depth to water _________ ft. msl

Static Water Level @ start of test _________ ft. msl

Water level measurements by: □ steel tape □ pressure transducer □ airline

START TEST Date: ___________ Hour of day: ___________

Flow Meter Reading Start: __________________ gals

<table>
<thead>
<tr>
<th>Suggested elapsed time (min)</th>
<th>Actual elapsed time (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Drawdown (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate Q (gpm)</th>
<th>EC (mg/l)</th>
<th>C (mg/l)</th>
<th>Temp. °F or °C</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start test</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested elapsed time in (min)</td>
<td>Actual elapsed time in (min)</td>
<td>Depth to water (nearest 0.01 ft)</td>
<td>Drawdown s (unadjusted to nearest 0.01 ft)</td>
<td>Pumping rate Q (gpm)</td>
<td>EC (microhos)</td>
<td>Cl (mg/l)</td>
<td>Temp. °F or °C</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------</td>
<td>----------------------</td>
<td>--------------</td>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Use same ending drawdown figure as start for recovery*

Max possible duration, water level or quality did not stabilize for any 24 period.

Begin recovery data next page

Flow meter reading at end of pumped period:

---

Data in this table is for:
- [ ] Pumped Well
- [ ] Observation Well

**Remarks**
<table>
<thead>
<tr>
<th>Suggested elapsed time $t$ (min)</th>
<th>Actual elapsed time $t$ (min)</th>
<th>Depth to water (nearest 0.01 ft)</th>
<th>Recovery $s$ (unadjusted to nearest 0.01 ft)</th>
<th>Pumping rate $Q$ (gpm)</th>
<th>EC (umhos)</th>
<th>$\text{C}_I$ (mg/l)</th>
<th>Temp. ___°F ___°C</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>Start recovery</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>2.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>70</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>80</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>90</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>150</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>250</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

END TEST Date: __________ Hour of day: __________

ADDITIONAL REMARKS:

Person in charge of pump test (print): __________________________

Signature: __________________________

The signature above indicates that the data reported on this form is accurate and true to the best of the person's knowledge who operated this aquifer test.

CWRM LTAT Form 1/9/96
STANDARD PUMP INSTALLATION PERMIT CONDITIONS

1. The Commission on Water Resource Management (Commission) shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences.

2. The pump installation permit shall be for installation of a 2050 gpm capacity, or less, pump in the well.

3. The permittee shall provide and maintain an approved meter or other appropriate means for measuring and reporting withdrawals and water levels, and appropriate devices or means for measuring chlorides and temperature. These data shall be measured monthly and reported to the Commission on a monthly basis, on forms provided by the Commission (attached).

4. The proposed use shall not adversely affect existing or future legal uses of water in the area, including any surface water or established instream flow standards. This permit or the authorization to pump water from a well shall not constitute a determination of correlative water rights. The permittee is notified and by this provision understands that the quantity of water taken from the well could be reduced by the Commission in the future. This permit is not a commitment that the pump capacity permitted here or even some lesser amount is guaranteed in the future.

5. The applicant shall complete and submit as-built drawings and Part II - (Permanent) Pump Installation Report of the Well Completion Report (attached) to the Commission within thirty (30) days after completion of work.

6. The applicant shall comply with all applicable laws, rules, and ordinances.

7. The pump installation permit application and staff submittal approved by the Commission at its June 5, 1996 meeting are incorporated into the permit by reference.

8. The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The work proposed in the pump installation permit application shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

9. If the well is not to be used it must be properly capped. If the well is to be abandoned then the applicant must apply for a well abandonment permit in accordance with §13-168-12(f) prior to any well sealing or plugging work.
### WELL COMPLETION REPORT

**State of Hawaii**

**COMMISSION ON WATER RESOURCE MANAGEMENT**

**Department of Land and Natural Resources**

**WELL COMPLETION REPORT**

3/20/96 WCR Form

### Instructions:
- Please print or type and submit completed report within 30 days after well completion to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. An as-built drawing of the well and chemical analysis should also be submitted. For assistance call the Commission Regulation Branch at [number] or 1-800-468-6444 Extension 70225.

### PART I. WELL CONSTRUCTION REPORT

1. **State Well No.:**
   **Well Name:**
   **Island:**

   **Location/Address:**
   **Tax Map Key:**

### DEPT. OF LAND & NAT. RES.

#### Drilling Company:

#### Name of driller who performed work:

#### Type of rig/construction:

#### Date(s) Well Construction and pump tests (if any) completed:

#### GROUND ELEVATION (referenced to mean sea level, msl):

   **Well Bench Mark (description/location):**

   **Elevation (msl):**

#### DRILLER’S LOG:

   **Please attach geologic log (if available or if required by permit)**

   **Depths (ft.)**

   **Rock Description, Water Level, Dates, etc.:**

   **Depths (ft.)**

   **Rock Description, Water Level, Dates, etc.:**

   (If more space is needed, continue on back.)

#### Total depth of well below ground:

#### Hole size:

   **inch dia. from ft. to ft. below ground**

   **inch dia. from ft. to ft. below ground**

   **inch dia. from ft. to ft. below ground**

#### Casing installed:

   **in. I.D. x in. wall solid section to ft. below ground**

   **in. I.D. x in. wall perforated section to ft. below ground**

   **Casing Material/Slot Size:**

#### Annulus:

   **Grouted from ft. below ground to ft. below ground**

   **Gravel packed from ft. below ground to ft. below ground**

#### Initial water level: ft. below ground. Date and time of measurement:

#### Initial chloride: ppm Date and time of sampling:

#### Initial temperature: °F Date and time of measurement:

#### PUMPING TESTS:

   **Reference Point (R.P.) used:**

   **Step-Drawdown Test Date**

   **Start water level ft. below R.P.**

   **End water level ft. below R.P.**

   **Long-term Aquifer Test Date**

   **Start water level ft. below R.P.**

   **End water level ft. below R.P.**

#### Aquifer Pump Test Procedures data & graphs (1/9/96 LTAT Form) attached?

#### As-built drawings attached?

#### Other remarks/comments: (On back of this form)

---

**Well Drilling Contractor (print)**

**C-57 Lic. No.**

**Signature**

**Date**

**Surveyor (print)**

**Lic. No.**

**Signature**

**Date**

**Applicant (print)**

**Signature**

**Date**
PART II. (PERMANENT) PUMP INSTALLATION REPORT

20. Pump Installation Company: ____________________________
21. Name of person performing work: ______________________
22. Date Pump Installation Completed: ____________________

23. PUMP INSTALLATION:
   - Pump Type, Make, Serial No.: ____________________________
   - Capacity: __________ gpm
   - Motor type, H.P., Voltage, rpm: __________________________
   - Depth of Pump Intake Setting __________ ft. below ________, which elevation is __________ ft.
   - Depth to bottom of airline __________ ft. below __________, which elevation is __________ ft.
   - Pumping Head is __________ ft. Type of flow meter: __________ which measures in __________

24. As-built drawings attached?  Yes ___ No ___

25. Other remarks/comments: (See below)

Pump Installation Contractor (print) ____________________________ C-57 Lic. No. ____________________________
Signature ____________________________________________ Date ____________
Applicant (print) ________________________________________
Signature ____________________________________________ Date ____________

8.(cont'd) DRILLER’S LOG (cont’d):

<table>
<thead>
<tr>
<th>Water Level Dates (ft.)</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks,</th>
<th>Water Level Dates (ft.)</th>
<th>Depth (ft.)</th>
<th>Rock Description, Remarks,</th>
</tr>
</thead>
<tbody>
<tr>
<td>to ______</td>
<td></td>
<td></td>
<td>to ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to ______</td>
<td></td>
<td></td>
<td>to ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to ______</td>
<td></td>
<td></td>
<td>to ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to ______</td>
<td></td>
<td></td>
<td>to ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to ______</td>
<td></td>
<td></td>
<td>to ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to ______</td>
<td></td>
<td></td>
<td>to ______</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. & 25. Remarks:
__________________________
__________________________
__________________________
__________________________
__________________________
__________________________
MONTHLY GROUND WATER USE REPORT FOR

HOWARD H. HAMAMOTO
3100 UALENA ST., RM 204
HONOLULU, HI 96819

Month of ________, 19__
Date Measurement(s) Taken
__/__/___
(Month / Day / Year)

INSTRUCTIONS: Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use, and, if required, other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96806. For assistance, please call 587-0285 (Oahu only) or 1-800-468-4644 (neighbor islands).

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Quantity Pumped (gallons)</th>
<th>Method of Measurement</th>
<th>Chloride (mg/l)</th>
<th>Temp. (°F)</th>
<th>Water Level (ft. above msl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2401-07</td>
<td>ROYAL OAHU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other comments or additional information:

Submitted by (print) ___________________________ Title ___________________________
Signature ___________________________ Date ___________________________
## MONTHLY GROUND WATER DELIVERY REPORT

**INFORMATION TO BE USED BY U.S. GEOLOGICAL SURVEY**

**HOWARD H. HAMAMOTO**
**3100 UALENA ST., RM 204**
**HONOLULU, HI 96819**

Month of _____ 19_

**INSTRUCTIONS:** Please TYPE OR PRINT CLEARLY. Complete this form to report total monthly ground water use and other information from each of your well sources. Mail to: Commission on Water Resource Management, P.O. Box 621, Honolulu HI 96809. For assistance, please call 587-0265 (Oahu only) or 1-800-468-4644 (neighbor islands).

<table>
<thead>
<tr>
<th>State Well No.</th>
<th>Well Name</th>
<th>Quantity Delivered (gallons)</th>
<th>Type of Use*</th>
<th>Field No(s)</th>
<th>Acres Irrigated</th>
<th>Crop Type</th>
<th>Method of Measurement**</th>
</tr>
</thead>
<tbody>
<tr>
<td>2401-07</td>
<td>ROYAL OAHU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Use of water code:

<table>
<thead>
<tr>
<th>AQ:</th>
<th>Agriculture non-irrigation use (livestock, cane wash, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C:</td>
<td>Commercial</td>
</tr>
<tr>
<td>D:</td>
<td>Domestic</td>
</tr>
<tr>
<td>ID:</td>
<td>Irrigation - Drip</td>
</tr>
<tr>
<td>IF:</td>
<td>Irrigation - Furrow</td>
</tr>
<tr>
<td>IS:</td>
<td>Irrigation - Sprinkle</td>
</tr>
</tbody>
</table>

** For estimated values use code:

| P:     | Power consumption                                          |
| T:     | Total time of operation                                   |
| D:     | Comparison with past data                                 |
| X:     | Other means - (indicate method)                           |

Other comments or additional information:

Submitted by (print) ____________________________  Title ____________________________
Signature ____________________________  Date ____________________________
## ISLAND OF OAHU

### Aquifer System: WAIPAHU-WAIANA

<table>
<thead>
<tr>
<th>WUP NO</th>
<th>APPLICANT</th>
<th>WELL NO</th>
<th>WELL NAME</th>
<th>APPROVAL</th>
<th>WUP mgd</th>
</tr>
</thead>
<tbody>
<tr>
<td>212</td>
<td>DHHL</td>
<td>2101-01</td>
<td>RESERVATION</td>
<td>02/18/1994</td>
<td>1.581</td>
</tr>
<tr>
<td>83</td>
<td>KAHUA MEAT CO.</td>
<td>2102-02</td>
<td>KAHUA MEAT CO.</td>
<td>07/28/1993</td>
<td>2.437</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-04</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>3.104</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-05</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-06</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-07</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-08</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-09</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-10</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-11</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-12</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-13</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-14</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-15</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-16</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-17</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-18</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-19</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-20</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-21</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>122</td>
<td>CAMPBELL ESTATE</td>
<td>2102-22</td>
<td>EP 3, 4</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>77</td>
<td>C &amp; C HONOLULU</td>
<td>2201-04</td>
<td>EP 2</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>77</td>
<td>C &amp; C HONOLULU</td>
<td>2201-07</td>
<td>EP 2</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>84</td>
<td>HARRIS ROG CL</td>
<td>2201-14</td>
<td>HARRIS ROG</td>
<td>05/17/1992</td>
<td>0.003</td>
</tr>
<tr>
<td>420</td>
<td>CAC DHCD</td>
<td>2201-15</td>
<td>EP 2 BACKUP</td>
<td>01/01/1911</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-03</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>5.208</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-04</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-05</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-06</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-07</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-08</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-09</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-10</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-11</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-12</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-13</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-14</td>
<td>EP 5, 6</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>123</td>
<td>CAMPBELL ESTATE</td>
<td>2202-15</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>6.113</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-16</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-17</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-18</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-19</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>124</td>
<td>CAMPBELL ESTATE</td>
<td>2202-20</td>
<td>EP 7, 8</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>125</td>
<td>CAMPBELL ESTATE</td>
<td>2202-21</td>
<td>EP 15, 16</td>
<td>01/16/1992</td>
<td>12.154</td>
</tr>
<tr>
<td>90</td>
<td>WATANABE, A.</td>
<td>2300-11</td>
<td>WATANABE, A.</td>
<td>05/17/1989</td>
<td>0.600</td>
</tr>
<tr>
<td>91</td>
<td>WATANABE, A.</td>
<td>2300-20</td>
<td>WATANABE, A.</td>
<td>01/16/1992</td>
<td>9.400</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-01</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-02</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-03</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-04</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-05</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-06</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-07</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-08</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-09</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-10</td>
<td>WP 1</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>127</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-11</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>3.305</td>
</tr>
</tbody>
</table>

**EXHIBIT 5**
<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>APPLICANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2301-12</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-13</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-14</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-15</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-16</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-17</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-18</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-19</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-20</td>
<td>WP 4A, 4B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-21</td>
<td>WP 2A, 2B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-22</td>
<td>WP 2A, 2B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-23</td>
<td>WP 2A, 2B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-24</td>
<td>WP 2A, 2B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-25</td>
<td>WP 2A, 2B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-26</td>
<td>WP 2A, 2B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-27</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-28</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-29</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-30</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-31</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-32</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-33</td>
<td>WP 2C, 2D</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2301-34</td>
<td>HOAAE WELLS 1</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2301-35</td>
<td>HOAAE WELLS 2</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2301-36</td>
<td>HOAAE WELLS 3</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2301-37</td>
<td>HOAAE WELLS 4</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2301-38</td>
<td>HOAAE NO. 5</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2301-39</td>
<td>HOAAE NO. 6</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2302-01</td>
<td>KUNIA I WELLS</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2302-02</td>
<td>KUNIA I WELLS</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2302-03</td>
<td>KUNIA I WELLS</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2302-04</td>
<td>KUNIA I WELLS</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2358-06</td>
<td>PEARL CITY</td>
<td>KUAIOLIME BMS</td>
</tr>
<tr>
<td>2400-01</td>
<td>WAIPAHU I</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-02</td>
<td>WAIPAHU I</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-03</td>
<td>WAIPAHU I</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-04</td>
<td>WAIPAHU I</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-05</td>
<td>WAIPAHU II</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-06</td>
<td>WAIPAHU II</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-09</td>
<td>WAIPAHU III</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-10</td>
<td>WAIPAHU III</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-11</td>
<td>WAIPAHU III</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-12</td>
<td>WAIPAHU III</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2400-13</td>
<td>WAIPAHU III</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2401-04</td>
<td>KUNIA III</td>
<td>CAC DRCD</td>
</tr>
<tr>
<td>2401-05</td>
<td>KUNIA III</td>
<td>CAC DRCD</td>
</tr>
<tr>
<td>2401-06</td>
<td>KUNIA III</td>
<td>CAC DRCD</td>
</tr>
<tr>
<td>2402-01</td>
<td>KUNIA II, 3</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2402-02</td>
<td>KUNIA II, 3</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2402-03</td>
<td>KUNIA II, 3</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2457-01</td>
<td>PEARL CITY II</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2457-02</td>
<td>PEARL CITY II</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2457-03</td>
<td>PEARL CITY II</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2458-01</td>
<td>PEARL CITY SHAFT</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2458-03</td>
<td>PEARL CITY I</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2458-04</td>
<td>PEARL CITY I</td>
<td>HONOLULU BMS</td>
</tr>
<tr>
<td>2459-01</td>
<td>WP 6A, 6B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
<tr>
<td>2459-02</td>
<td>WP 6A, 6B</td>
<td>OAHU SUGAR CO., LTD.</td>
</tr>
</tbody>
</table>
WATER USE PERMIT INDEX REPORT 05/23/1996

ISLAND OF OAHU

Aquifer System: WAIPAHU-WAIWA

<table>
<thead>
<tr>
<th>WUP NO.</th>
<th>APPLICANT</th>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-03 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-04 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-05 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-06 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-07 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-08 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-09 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-10 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-11 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-12 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-13 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-14 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>132</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-15 WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>107</td>
<td>HONOLULU BWS</td>
<td>2459-19 WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.630</td>
</tr>
<tr>
<td>107</td>
<td>HONOLULU BWS</td>
<td>2459-20 WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>108</td>
<td>YOSHIMURA D</td>
<td>2459-21 WAIPAHU</td>
<td>05/17/1989</td>
<td>0.006</td>
</tr>
<tr>
<td>109</td>
<td>HONOLULU BWS</td>
<td>2459-22 WAIPIO HTS I</td>
<td>10/18/1995</td>
<td>0.500</td>
</tr>
<tr>
<td>109</td>
<td>HONOLULU BWS</td>
<td>2459-24 WAIPIO HTS I</td>
<td>10/18/1995</td>
<td>0.000</td>
</tr>
<tr>
<td>59</td>
<td>HONOLULU BWS</td>
<td>2500-01 WAIPIO HTS II</td>
<td>07/11/1985</td>
<td>2.000</td>
</tr>
<tr>
<td>59</td>
<td>HONOLULU BWS</td>
<td>2500-02 WAIPIO HTS II</td>
<td>07/11/1985</td>
<td>0.000</td>
</tr>
<tr>
<td>73</td>
<td>HONOLULU BWS</td>
<td>2557-03 PEARL CITY III</td>
<td>03/27/1987</td>
<td>0.500</td>
</tr>
<tr>
<td>73</td>
<td>U.S. NAVY</td>
<td>2580-10 WAIANA SHAFT</td>
<td>05/17/1989</td>
<td>14.977</td>
</tr>
<tr>
<td>154</td>
<td>IGE Y</td>
<td>2600-02 DAIRY COMPANY</td>
<td>07/19/1989</td>
<td>0.100</td>
</tr>
<tr>
<td>139</td>
<td>HONOLULU BWS</td>
<td>2600-03 MILILANI III</td>
<td>07/19/1989</td>
<td>1.550</td>
</tr>
<tr>
<td>112</td>
<td>HAWAI COUNTRY CLUB</td>
<td>2603-01 RAW COUNTRY CLUB</td>
<td>05/17/1989</td>
<td>0.220</td>
</tr>
<tr>
<td>133</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2658-01 WP 17A, 17B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>133</td>
<td>OAHU SUGAR CO., LTD.</td>
<td>2658-02 WP 17A, 17B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>67</td>
<td>HONOLULU BWS</td>
<td>2659-03 WAIPIO HTS III</td>
<td>08/22/1986</td>
<td>0.850</td>
</tr>
<tr>
<td>67</td>
<td>HONOLULU BWS</td>
<td>2659-02 WAIPIO HTS III</td>
<td>08/22/1986</td>
<td>0.000</td>
</tr>
<tr>
<td>113</td>
<td>DEL MONTE CORP.</td>
<td>2703-01 DEL MONTE CORP.</td>
<td>05/17/1989</td>
<td>0.154</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-01 MILILANI I</td>
<td>05/17/1989</td>
<td>2.980</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-02 MILILANI I</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>114</td>
<td>HONOLULU BWS</td>
<td>2800-03 MILILANI I</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>74</td>
<td>HONOLULU BWS</td>
<td>2859-01 MILILANI II</td>
<td>03/27/1987</td>
<td>1.900</td>
</tr>
<tr>
<td>74</td>
<td>HONOLULU BWS</td>
<td>2859-02 MILILANI II</td>
<td>03/27/1987</td>
<td>0.000</td>
</tr>
</tbody>
</table>

161 Permits Totaling 109.864

161 Permits Totaling 109.864

STATEWIDE THERE ARE 161 PERMITS TOTALING 109.864

EXHIBIT 5
SUSTAINABLE YIELD (SY) ESTIMATES
PEARL HARBOR SECTOR
(Million gallons per day)

<table>
<thead>
<tr>
<th>Estimated SY</th>
<th>Waipahu-Waiawa</th>
<th>Ewa-Kunia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated SY without basal return irrigation</td>
<td>119</td>
<td>20</td>
</tr>
<tr>
<td>Estimated SY without Waiahole Ditch return irrigation</td>
<td>102</td>
<td>11</td>
</tr>
<tr>
<td>Estimated SY without basal and Waiahole Ditch return irrigation</td>
<td>109</td>
<td>20</td>
</tr>
<tr>
<td>Estimated SY without basal and Waiahole Ditch return irrigation</td>
<td>92</td>
<td>11</td>
</tr>
</tbody>
</table>

Current allocated pumpage                     116.33   18.75
Allocated pumpage without OsCo.                60.72    13.74

Assumptions

1. Assumes 40% of applied irrigation contributes to sustainable yield estimates.

2. Current application of OSCo water:
   a. All 25 mgd of Waiahole Ditch flows presently irrigate the Waipahu-Waiawa Aquifer Sector.
   b. Although 60.61 mgd is allocated, actual pumpage from the basal lens is about 52 mgd. Of the 52 mgd of basal (pumped) water, 34 mgd irrigates the Waipahu-Waiawa Aquifer Sector and 18 mgd irrigates the caprock.

3. This is a preliminary staff analysis and is an extrapolation from existing information.

EXHIBIT 6
West Loch Golf Course Pumpage
EP 2 (Well Nos. 2201-03,04,07)
### TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EW A VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td>4,475</td>
<td>17,900</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td>6,429</td>
<td>9,000</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td>6,390</td>
<td>93,300</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td>6,439</td>
<td>26,400</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td>4,928</td>
<td>88,700</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1*</td>
<td>160.00</td>
<td>7,500</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17:por. 60, 64, 65</td>
<td>R-5</td>
<td>3.40</td>
<td>6,412</td>
<td>21,800</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td>6,391</td>
<td>29,400</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
NHAC opposes approval of the above-captioned Waikële Golf Club/O'ahu Sugar Company's water use permit application primarily because of the rate at which water from the Waipahu-Waiawa sector of the Pearl Harbor aquifer has been and continues to be subject to allocation. This makes it critical to now address problems we see in the approach the Water Commission is taking to manage water resources in this area. NHAC asserts that sound water resource management practices and protection of Hawaiian water rights must begin at the planning level.

The sustainable yield of this sector of the Pearl Harbor aquifer has been established at 119 mgd. From the testimony the Water Commission received at the April 15, 1996 public hearing concerning water use permit applications of the Ewa Plains Water Development Corporation and Campbell Estate it is clear the cessation of O'ahu Sugar Company irrigation and the associated reduction in ground water recharge has caused great uncertainty about a safe sustainable yield for the Pearl Harbor aquifer. In view of the interconnected nature of all of O'ahu's aquifers, NHAC asserts that a complete review and analysis of all O'ahu sustainable yields must be conducted and an update of the Hawai'i Water Plan must be completed and approved by the Water Commission before you move forward with any further allocation of water from Pearl Harbor aquifer sectors.

As noted by the Commission's Staff Submittal, Item #8B, dated December 6, 1995, current permitted water uses total 114.753 mgd. Taking into account DHHIL's reservation of 1.581 mgd, only slightly more than 2.5 mgd remains before the current questionable total sustainable yield is reached. We refer you to Table 1 of the above-referenced staff submittal entitled Waipahu-Waiawa Aquifer Systems which shows permit applications awaiting Water Commission action.
NHAC has serious concerns about the advisability of the Water Commission allocating essentially 100% of the very uncertain sustainable yield. As a result of the Water Commission's failure to establish reasonable priorities to guide water allocation decisions, the current first come, first served allocation scenario is inconsistent with the Water Code's resource protection intent. It is unacceptable that the Commission would consider allocating the full sustainable yield of the Waipahu-Waiawa portion of the Pearl Harbor aquifer without due consideration of the consequences on the legitimate, senior rights of others to water from the same aquifer.

Native Hawaiians who reside on kuleana lands which were historically in taro cultivation and other crops and/or who relied on water from this sector of the aquifer for water for irrigation, traditional and customary practices, and domestic purposes have priority over other uses of this water. Their rights are and have been continuously and systematically violated by a first come/first serve system of allocation. Hawaiians with kuleana lands with appurtenant rights which lay within the Waipahu-Waiawa sector of the Pearl Harbor aquifer have been prevented from cultivation of traditional crops by the cessation of the natural flow of a spring or stream due to groundwater pumpage. Their rights are being abridged and denied in derogation of the Water Code, common law, and the Constitution and statutes of this State. The Water Commission must address these concerns.

NHAC has attempted to address these concerns in other ways. We have participated in the development of Hawaiian rights administrative rules, we have participated in the Stream Protection and Management (SPAM) process and we have spent countless hours working on the review of the Water Code. Although this work has been important, there have not yet been any real concrete results. The rules have not yet been promulgated. No meaningful long term water planning has occurred. The Hawai'i Water Plan has not been developed to serve as a meaningful guide to implement the Water Commission's dual role of resource protection and resource allocation. Thus, the Commission should defer action on all Pearl Harbor water use applications until a sound planning basis for future action is established including a more meaningful process for the consideration and protection of Hawaiian rights and interests.

Hawaiians simply cannot accede to an allocation process that fully allocates water resources and then forces us to fight to get it back. Unfortunately at this time, we see no simple mechanisms or rules that will avoid this.

Constitutional and common law protections of Hawaiian's traditional and customary and other rights must be respected. A first come, first serve allocation approach does not respect those rights. If the Commission's system of allocation is to be guided by the parameter known as "sustainable yield," NHAC asserts no
water should be allocated once the allocated water amount comes within 90% of the sustainable yield unless and until the Commission has reserved water necessary for the protection of Hawaiians' appurtenant rights to water and uses related to traditional and customary practices both now and in the future. Such a buffer is essential for the Commission to perform its duties under the public trust doctrine applicable to water resource management under Hawai'i common-law and the Water Code.

In summary, to fulfill its statutory and constitutional obligations to the Native Hawaiian people, the Water Commission must take a more reasoned approach to water allocation than grabbing some water with the left hand and giving it away with the right, all the time perilously close to allocating the full sustainable yield of the aquifer. NBAC urges this Commission to defer all permit applications until a proper evaluation is made of the effect of recent developments such as the cessation of OSCo pumping and recharge on the Pearl Harbor aquifer. This includes protection of the rights of Native Hawaiians with respect to kuleana, appurtenant and traditional and customary rights such as those held by Mr. Charles Herring and other Native Hawaiians living on or holding an interest in kuleana lands particularly affected by lack of water availability in the Pearl Harbor aquifer.

Mahalo for your consideration of these matters.
May 8, 1996

Mr. Michael Wilson, Chairperson,
and Members of the Commission on
Water Resource Management
State of Hawaii
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813

Re: Application for Permit Modification: OSCo WP-1

Dear Chairman Wilson and Commissioners:

We have received from Native Hawaiian Advisory Council, Inc. (NHAC) its statement of objection to the application for modification of water use permit submitted by Waikele Golf Club, Inc. (WGC) and Oahu Sugar Company, Limited (OSCo). To our knowledge, this is the only objection timely filed in accordance with Hawaii Administrative Rules (HAR) §13-171-18(a) and (b).

This response to NHAC's objection is submitted pursuant to and in accordance with HAR §13-171-18(c) and (d). It is our understanding that the purpose of allowing the applicant to file a brief in response to objections raised is to allow for discourse amongst the proponents and objectors of the application with the aim of obviating a need for a public hearing or contested case if the points of contention can be resolved by clarification or accommodation.

NHAC's objection is based upon the erroneous presumption that the application requests a new allocation of water, which will add to the total amount already allocated from the Waipahu-Waiawa aquifer system. To the contrary, this application requests a modification of an already outstanding water use permit. Granting the application will not add to the total allocated amount from the Waipahu-Waiawa aquifer system.

The water use permit for OSCo's WP-1 was issued to OSCo by the Department of Land and Natural Resources, prior to the creation of the Commission on Water Resource Management (Commission). After the creation of the Commission, in 1989, OSCo filed with the Commission a Registration of Well and Declaration of Water Use for WP-1, which indicated that the water is used for Municipal (including resorts, hotels, businesses), Irrigation, Industrial and Military types of uses. WGC and OSCo were, and still are, of the opinion that golf course irrigation fell within these categories of permitted uses. Thus, WP-1 waters have been used to irrigate Waikele Golf Course and that fact has never been hidden from the Commission. Indeed, by way of letter dated July 26, 1995, OSCo and WGC notified the Commission of the transfer of the permit from OSCo to OSCo/WGC as a means of formally recognizing the long-standing and primary use of WP-1 water.
Thereafter, on August 28, 1995 Commission staff informed us that, according to your records, the uses permitted for WP-1 are limited to either agricultural and domestic use (August 28, 1995) or agricultural use only (March 28, 1996). Thus, we were notified that irrigation of Waikele Golf Course with WP-1 water would require a permit modification. Although we take issue with your records and disagree that a permit modification is required, WGC and OSCo submitted the application in the spirit of cooperation and to avoid present and future confusion. All of this was set forth in our letter of March 8, 1996 which was attached to our application.

In summary, this application is for a permit modification to clarify that the long standing use of WP-1 water for irrigation of Waikele Golf Course is a permitted use. It does not seek a new allocation of water and will not change the total amount of water allocated from the Waipahu-Waiawa aquifer system. Thus, NHAC’s comments about new allocations drawing dangerously close to the sustainable yield are not pertinent to this application.

Inasmuch as NHAC’s objection is based upon an erroneous premise, and inasmuch as there have been no other objections to the application, WGC and OSCo respectfully request that the Commission grant the requested permit modification.

Very truly yours,

Bert L. Hatton
Vice President, Oahu Sugar Company, Limited
Vice President, Waikele Golf Club, Inc.

cc: Native Hawaiian Advisory Council (via fax)
Monthly Pumpage
WP1 (Well Nos. 2301-01 to 10)

EXHIBIT 11

--- Monthly pumpage --- 12-MAV

Date (latest data 4/95)
9. PROPOSED WELL SECTION

Elevation at top of casing: 460 ft, msl

Ground Elevation: 458 ft, msl

Cement Grout: 423 ft

Rock Packing: 110 ft

Hole Diameter: 21 in

Solid Casing:
- Material: Steel
- Length: 435 ft
- Diameter: 14 in
- Wall thickness: 0.375 in

Casing: Perforated
- Material: Steel
- Length: 100 ft
- Diameter: 14 in
- Wall thickness: 0.3125 in
- Openings: 80 sq in./ft.

Total Depth: 543 ft

Open Hole:
- Length: 10 ft
- Diameter: 12 in

EXHIBIT 12

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
May 16, 1996

Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Water Use Permit Application for Department of Housing and Community Development/Chaney, Brooks and Company, Well Nos. 2201-03, 04, 07

Enclosed are comments from the Board of Water Supply (BWS) on the subject application. They were received after we transmitted Planning Department comments to you on April 26, 1996.

Should you have any questions, please call Eugene Takahashi of our staff at

Sincerely,

CHERYL D. SOON
Chief Planning Officer

CDS:lh

Attachment

cc: Honorable Jeremy Harris, Mayor
(Mayor’s Control No. 26059)
May 13, 1996

TO: CHERYL D. SOON, CHIEF PLANNING OFFICER
PLANNING DEPARTMENT

FROM: RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

SUBJECT: THE STATE WATER COMMISSION'S LETTER DATED MARCH 29, 1996 TO MAYOR HARRIS ON THE WATER USE PERMIT FOR DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT FOR WELL NOS. 2201-03, 04, AND 07

Thank you for the opportunity to comment on this application. We have no objection to the Department of Housing and Community Development's request to modify their previous application to reduce their request for EP-2 water in favor of taking more water from EP-3 and 4.

If you have any questions, please contact Bert Kuioka at [redacted].
TO: Aquatic Resources
Forestry and Wildlife/Natural Area Reserve System
Historic Preservation
Land Management
State Parks

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for
Department of Housing and Community Development/Chaney, Brooks and Company for Well
Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu
Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or
inconsistencies with the programs, plans, and objectives specific to your division only. Please
respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an
extension of the review period for this application, please contact Lenore Nakama at

LN:ss
Attachment(s)

Response:
( ) We have no comments
(%) We have no objections
( ) Comments attached

Contact Person: Andrew Menden

Signed: Andrew M. Menden

Chief Engineer
State of Hawaii  
Department of Land and Natural Resources  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Honolulu, Hawaii  
MAR 29 1996

TO: Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
Land Management  
State Parks

FROM: Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT: Request for Comments  
Water Use Permit Application  
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at [redacted].

Response:  
( ) We have no comments  
( ) We have no objections  
( ) Comments attached

Contact Person: [redacted]  
Phone: [redacted]

Signed: [redacted]  
Date: [redacted]
MEMORANDUM

To: Rae Loui, Deputy Director
Commission on Water Resource Management

From: William Devick, Acting Administrator
Division of Aquatic Resources

Subject: Comments on Water Use Permit Application

Comments Requested By: Rae M. Loui

Date of Request: 3/29/96  Date Received: 4/1/96

Summary of Project

Title: Water Use Permit Application
Proj. By: Department of Housing and Community Development
Location: Waipahu-Waiawa Ground Water Management Area, Oahu

Brief Description:

The applicant had previously submitted an application to increase the allocation for their EP2 well from .5 to 3.0 MGD. After reassessing their needs, the applicant has scaled back their request to 1.6 MGD.

The City will continue to use wells EP3 and EP4 to provide nonpotable water for Ewa Villages and EP2 for West Loch until an alternate irrigation system, such as effluent reuse becomes feasible.

Comments:

We have no objection to the proposed request.
April 26, 1996

Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Water Use Permit Application for Department of Housing and Community Development/Chaney, Brooks and Company, Wells No. 2201-03. 04. 07

This is in response to your memorandum dated March 29, 1996. We have reviewed the subject application and have no objections to use of non-potable water for irrigation purposes.

Should you have any questions, please call Eugene Takahashi of our staff at

Sincerely,

Cheryl D. Soon
Chief Planning Officer

CDS:lh
April 15, 1996

Mr. Michael Wilson, Chairperson
Department of Land and Natural Resources
Commission on Water Resource Management
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Water Use Permit for Department of Housing and Community Development for Well Nos. 2201-03, 04, and 07

Thank you for the opportunity to comment on this application. We have no objection to the Department of Housing and Community Development's request to modify their previous application to reduce their request for EP-2 water in favor of taking more water from EP 3 and 4.

We return the cover memo accordingly marked.

If you have any questions, please contact Bert Kuioka at

Very truly yours,

RAYMOND H. SATO
Manager and Chief Engineer

Attachment
TO: Honorable Kali Watson, Chairperson
Department of Hawaiian Home Lands

Honorable Lawrence Miike, Director
Department of Health
Attn: Mr. Dennis Tulang
Attn: Mr. William Wong

Honorable Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs

Ms. Esther Ueda, Executive Officer
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply
Attn: Mr. Chester Lao
Attn: Mr. Barry Usugawa

Mr. Patrick Onishi, Director
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at [contact information].

Response:

( ) We have no comments
( ) We have no objections
( ) Comments attached

Contact Person: Bert Kuioka
Phone: [redacted]

Signed: Raymond Sato
Manager and Chief Engineer
Date: 4/16/96
April 10, 1996

Mr. Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Water Use Permit Application, Waipahu-Waiawa Groundwater Management Area, Oahu

We have reviewed the subject application transmitted by your memorandum dated March 29, 1996, and have the following comments:

1) The EP2 well site, as represented on the U.S.G.S. map and tax map, is located within the State Land Use Agricultural District.

2) The WP-1 well site, as represented on the U.S.G.S. topographic map and tax map, is located within the State Land Use Agricultural District.

Pursuant to your request, we have enclosed the cover memo forms with the applicable information.

We have no further comments to offer at this time. We appreciate the opportunity to comment on this matter.

Should you have any questions, please feel free to call me or Bert Saruwatari of our office at [redacted]

Sincerely,

ESTHER UEDA
Executive Officer
TO:  Honorable Kali Watson, Chairperson
     Department of Hawaiian Home Lands

     Honorable Lawrence Miike, Director
     Department of Health
     Attn: Mr. Dennis Tulang
     Attn: Mr. William Wong

     Honorable Clayton H. W. Hee, Chairperson
     Office of Hawaiian Affairs

     Ms. Esther Ueda, Executive Officer
     Land Use Commission

     Mr. Raymond Sato, Manager & Chief Engineer
     Honolulu Board of Water Supply
     Attn: Mr. Chester Lao
     Attn: Mr. Barry Usugawa

     Mr. Patrick Onishi, Director
     Department of Land Utilization

     Mrs. Cheryl D. Soon, Chief Planning Officer
     Planning Department

FROM:  for: Michael D. Wilson, Chairperson  Edwin T. Kadota
        Commission on Water Resource Management

SUBJECT:  Water Use Permit Application
          Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for
Department of Housing and Community Development/Chaney, Brooks and Company for Well
Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu
Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or
inconsistencies with the programs, plans, or objectives specific to your organization or
department only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an
extension of the review period for this application, please contact Lenore Nakama at...

LN:ss
Attachment(s)

Response:

( ) We have no comments
( ) We have no objections
( ) Comments attached

Contact Person:  Esther Ueda  Phone:  

Signed:  Date: 4/10/96
TO:  Honorable Kali Watson, Chairperson
     Department of Hawaiian Home Lands
     Honorable Lawrence Miike, Director
     Department of Health
     Attn: Mr. Dennis Tulang
     Attn: Mr. William Wong
     Honorable Clayton H. W. Hee, Chairperson
     Office of Hawaiian Affairs
     Ms. Esther Ueda, Executive Officer
     Land Use Commission
     Mr. Raymond Sato, Manager & Chief Engineer
     Honolulu Board of Water Supply
     Attn: Mr. Chester Lao
     Attn: Mr. Barry Usugawa
     Mr. Patrick Onishi, Director
     Department of Land Utilization
     Mrs. Cheryl D. Soon, Chief Planning Officer
     Planning Department

FROM:  Michael D. Wilson, Chairperson
        Commission on Water Resource Management

SUBJECT:  Water Use Permit Application
           Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for
Department of Housing and Community Development/Chaney, Brooks and Company for Well
Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu
Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or
inconsistencies with the programs, plans, or objectives specific to your organization or
department only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an
extension of the review period for this application, please contact Lenore Nakama at

LN:ss
Attachment(s)

Response:

() We have no comments
X We have no objections
() Comments attached

Contact Person:  Lori N. Kajiwara  Phone:
Signed:  Lori N. Kajiwara  Date:  4-16-96
TO:  
Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
Land Management  
State Parks

From:  
Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT:  Request for Comments  
Water Use Permit Application  
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at (______).

Response:  
( ) We have no comments  
( ) We have no objections  
( ) Comments attached

Contact Person:  
Phone:  
Signed:  
Date: 4/17/96
TO: Honorable Kali Watson, Chairperson
Department of Hawaiian Home Lands

Honorable Lawrence Miike, Director
Department of Health
Attn: Mr. Dennis Tulang
Attn: Mr. William Wong

Honorable Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs

Ms. Esther Ueda, Executive Officer
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply
Attn: Mr. Chester Lao
Attn: Mr. Barry Usugawa

Mr. Patrick Onishi, Director
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at [redacted].

Response:

[ ] We have no comments
[ ] We have no objections
[ ] Comments attached

Contact Person: Luis A. Moreira
Phone: [redacted]

Signed: Luis A. Moreira
Date: 04/08/96
Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at [contact information]...

LN:ss
Attachment(s)

Response:

☐ We have no comments
☐ We have no objections
☐ Comments attached

Contact Person: [Bill Wong]
Phone: [contact information]
Signed: [Bill Wong]
Date: 4/29/96
Mr. Randall Wong  
Department of Housing and Community Development  
650 S. King St., 5th Floor  
Honolulu, HI 96813  

Dear Mr. Wong:

We acknowledge receipt, on March 18, 1996, of the required applicant information and authorized signature from Chaney, Brooks and Company to complete the water use permit for EP 2 (Well Nos. 2201-03,04,07). Enclosed is a copy of the public notice for your water use permit application that will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

Please be aware that there may be objections to your application. If objections are made, the objector is required to file such objections with the Commission and is also required to send you a copy of the objections.

You, or any other party, may respond to objections by filing a brief in support of your application with the Commission within ten (10) days of the filing of an objection. You, or the other party, must also send a copy of the response to the objector.

If you have any questions, please contact Lenore Nakama at

Sincerely,

[Signature]

for: RAE M. LOUI  
Deputy Director  

LN:ss  
Enclosure  
c: Willie Espero, Chaney, Brooks and Company
State of Hawaii  
Department of Land and Natural Resources  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Honolulu, Hawaii  
MAR 29 1996

TO: Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
Land Management  
State Parks

FROM: Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT: Request for Comments  
Water Use Permit Application  
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at [phone number].

Response: 
( ) We have no comments  
( ) We have no objections  
( ) Comments attached

Contact Person: ___________________________ Phone: _______________________________

Signed: ___________________________ Date: ___________________________
TO: Other Interested Parties

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or interferences with the programs, plans, and objectives of the organization or agency that you represent. Written objections should be made in accordance with Section 13-171-18 of our Administrative Rules and must be filed by the April 29, 1996 deadline.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at [Contact Information]

LN:ss
Attachment(s)

Response:

( ) We have no comments
( ) We have no objections
( ) Comments attached

Contact Person: [Name] Phone: [Number]

Signed: [Signature] Date: [Date]
TO: Honorable Kali Watson, Chairperson
Department of Hawaiian Home Lands

Honorable Lawrence Miike, Director
Department of Health
Attn: Mr. Dennis Tulang
Attn: Mr. William Wong

Honorable Clayton H. W. Hee, Chairperson
Office of Hawaiian Affairs

Ms. Esther Ueda, Executive Officer
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply
Attn: Mr. Chester Lao
Attn: Mr. Barry Usugawa

Mr. Patrick Onishi, Director
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
Waipahu-Waiawa Ground Water Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07. Public notice of this application will be published in the Honolulu Advertiser issues of April 8 and 15, 1996.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, or objectives specific to your organization or department only. Please respond by returning this cover memo form by April 29, 1996.

If you have any questions, require additional information, or would like to request an extension of the review period for this application, please contact Lenore Nakama at...

LN:ss
Attachment(s)

Response:

{ } We have no comments
{ } We have no objections
{ } Comments attached

Contact Person: Phone:

Signed: Date:
Honorable Jeremy Harris, Mayor  
City & County of Honolulu  
City Hall  
Honolulu, HI 96813  

Dear Mayor Harris:  

Notice of an Application for Water Use Permit  
Waipahu-Waiawa Ground Water Management Area, Oahu  

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-171-17(a), we are sending you a copy of the public notice for the water use permit application for Department of Housing and Community Development/Chaney, Brooks and Company for Well Nos. 2201-03, 04, 07, which will be published in the Honolulu Advertiser.  

In addition, Section 13-171-13(b), of our Administrative Rules, states:  

"Within sixty days after receipt of notice of a permit application, the county shall inform the commission if the proposed use is inconsistent with the county land use plans and policies."  

We have attached a copy of the application for your review and would appreciate receiving your comments, within the next sixty (60) days, on whether this water use is consistent with county plans and policies.

Aloha,

[Signature]

for: MICHAEL D. WILSON  
Chairperson

Enclosures
PUBLIC NOTICE

Application for Water Use Permit
Waipahu-Waiawa Ground Water Management Area, Oahu

The following applications for water use permits have been received and are hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

WP 1 (Well Nos. 2301-01 to 10)

Applicant: Waiekele Golf Club, Inc.
700 Bishop St., 21st Fl
Honolulu, HI 96813

Oahu Sugar Co., Ltd.
700 Bishop St., 21st Fl
Honolulu, HI 96813

Date Completed Application Received: March 13, 1996
Aquirer: Waipahu-Waiawa System, Pearl Harbor Sector, Oahu
Water Source: WP 1 (Well Nos. 2301-01 to 10) at Waieke Gulch, Oahu, Tax Map Key 9-4-2:8
Quantity Requested: 1,151,000 gallons per day.
Existing/New Water Use: Irrigation supply for 138.6-acre golf course; existing industrial uses at Oahu Sugar Mill
Place of Water Use: Waiekele Golf Course; Oahu Sugar Mill at Tax Map Keys: 9-4-7:10,36,55,57 & 9-4-2-4

This application is to modify the water use permit for Well Nos. 2301-01 to 10 to include irrigation use for Waiekele Golf Course (0.75 mgd); the remaining allocation will be used to continue various industrial uses at Oahu Sugar Mill (0.401 mgd).

EP 2 (Well Nos. 2201-03, 04, 07)

Applicant: Department of Housing and Community Development
650 S. King St., 5th Floor
Honolulu, HI 96813

Chaney, Brooks and Company
94-1024 Waipio Uka St., #201
Waipahu, HI 96797

Date Completed Application Received: March 18, 1996
Aquirer: Waipahu-Waiawa System, Pearl Harbor Sector, Oahu
Water Source: EP 2 (Well Nos. 2201-03, 04, 07) at Honolulu, Oahu, Tax Map Key 9-1-17:60
Quantity Requested: 1,600,000 gallons per day.
Existing/New Water Use: Irrigation supply for 214 acres grass, trees, foliage Placement of Water Use: West Loch municipal golf course and Shoreline Park, Asing District Park, and common area landscaping for the West Loch subdivision at Tax Map Key: 9-1-16,17,62 to 66

Written objections or comments on the above applications may be filed by anyone who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use(s), or any other interested person. Written objections shall: (1) state property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit(s). Written objections must be received by April 29, 1996. Objections must be sent to 1) the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809 and 2) the applicant(s) at the above address(es).

COMMISSION ON WATER RESOURCE MANAGEMENT

Dated: MAR 29 1996

Publish in: Honolulu Advertiser issues of April 8 and 15, 1996
March 18, 1996

Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P.O. Box 621  
Honolulu, HI. 96809

Gentlemen:

Subject: Application for Water Use Permit  
Ewa Pump 2, West Loch Project

This letter is written at the request of the City and County of Honolulu Department of Housing and Community Development in connection with their application for a water use permit for EP2.

The property manager for the West Loch subdivision, Chaney, Brooks and Company, is the representative for the homeowners' association. I am authorized as the contact person on their behalf and I may be reached at [redacted] or faxed at 676-7807. Our address is 94-1024 Waipio Uka Street, #201, Waipahu, Hawaii 96797.

Respectfully,

[Signature]

Willie Espero  
Community Association Manager
February 20, 1998

MEMORANDUM FOR THE RECORD

FROM: Glenn Bauer

SUBJECT: Basal Sources Which Supplied the Ewa Caprock

I spoke with Hugh Morita today regarding the Ewa Planation (Oahu Sugar) sources which supplied cane growing over the Ewa caprock, which includes both the alluvial and coralline portions.

He indicated that EP 3 & 7 went by pipe to Field 57. There it split, some of the water going to EP 23 and some towards the old Ewa Mill. EP 4 & 6 went by pipe to Booster Pump 18 at the mauka corner of Field 55 at elevation 120 ft. There the water irrigated all fields makai. EP 5 went by pipe along Pipeline Road, west of Ft. Weaver Rd, and discharged into a ditch at elevation 140-160 ft, and irrigated cane makai of the ditch. EP 8 was for domestic use. EP 2 remained around the Honouliuli Golf Course area. EP 15 & 16 irrigated cane in the Honouliuli area. Water from this source was not transported to EP 23.
Mr. Randall Wong
Department of Housing and Community Development
City and County of Honolulu
650 South King Street, 5th Floor
Honolulu, HI 96813

Dear Mr. Wong:

Water Use Permit Application for EP 2 (Well Nos. 2201-03, 04, 07)
Waipahu-Waiawa Ground Water Management Area, Oahu

We acknowledge receipt, on January 3, 1996, of your water use permit application for EP 2 (Well Nos. 2201-03, 04, 07). We understand that this application supersedes the previously-filed application for this source, dated November 22, 1995, which we are returning to you for your record (attached). A copy of your November 22, 1995 application has been made for our files.

From a telephone conversation on January 30, 1996 with Avis Kamimura of your staff, we understand that common areas for a homeowner's association in West Loch are the only non-City lands that are being proposed for this irrigation use. The water used by the homeowner's association is metered separately, and the association is billed for this service. As such, the homeowner's association should be stated as joint applicant to this proposed permit.

Please submit the name, address, telephone number, fax number (if any), and contact person for the homeowner's association. We also require an authorized signature for the homeowner's association. The information and signature may be submitted in a letter to the Commission that will be an addendum to your application.

Your application will be considered incomplete pending the receipt of the information requested above.

If you have any questions, please contact Lenore Nakama at

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss
Attachment(s)
c: Greg Hiyakumoto, R.M. Towill Corporation
TO: DLNR / CURRY
ATTN: Lenore Nakama

DATE: 1/9/96
FROM: Greg Hiyakumoto
PROJECT: Ewa Village
RMTC JOB NO: 1-16947-CE

PLEASE CONTACT OUR OFFICE SHOULD ANY PROBLEMS OCCUR WITH TRANSMISSION OR RECEIPT OF FACSIMILE.

NO. OF PAGES: 15
(INCLUDING THIS SHEET)

MESSAGE:

Please find the attached letters.

1) 4/21/95 Subm. RMTC NDA Pgart. 3 for EP 2 + EP 3, 4 subject to change.

2) 12/29/95 Subm. DHCO to CURRY for EP 2 only (Campbell is still reviewing the EP 3, 4 application; DHCO if you have questions needs their signature. Campbell may change the requested allocation amount).

PRELIMINARY
SUBJECT TO CHANGE
November 21, 1995

Department of Housing and Community Development
City and County of Honolulu
650 South King Street, 5th Floor
Honolulu, Hawaii 96813

Attention: Randy Wong

Gentlemen:

Subject: EP3,4 and EP2 Water Use and Pump Applications for Ewa Villages and West Loch Non-Potable

Please find the following applications for execution by your department and Campbell Estates:

a. EP3,4 Water Use Permit Application for 2.1 mgd
b. EP3,4 Pump Installation Permit
c. EP2 Water Use Permit Application for 1.6 mgd

The transmittal to the Commission on Water Resource Management (CWRM) should indicate that the EP2 Water Use Permit for 3.0 mgd, now on file with CWRM, is being replaced with the new EP2 application for 1.6 mgd. It should also indicate the intent of using EP3,4 for Ewa Villages and EP2 for West Loch until an alternate irrigation system (e.g., effluent reuse) becomes a reality.

Please contact me should you have any questions.

Very truly yours,

Greg H. Hiyakumoto
Senior Civil Engineer

Enclosures
APPLICATION FOR WATER USE PERMIT

[Ground Water or Surface Water]

In accordance with the rules of the State of Hawaii, Department of Land and Natural Resources, Division of Water Resources Management, please fill out the application below to request a water use permit.

PERMIT INFORMATION

1. (a) APPLICANT: DHC, City & County of Honolulu
   Contact Person: Randall Wong
   Address: 650 South King Street, 5th Fl.
   Honolulu, HI 96813

(b) LANDOWNER OF SOURCE: The Estate of James Campbell
   Contact Person: George Nio
   Address: 1001 Kamokila Boulevard
   Kapolei, HI 96707

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Pearl Harbor
   ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: EP3.4 (Nos. 2102-02.04 to 22)
   (b) PROPOSED (NEW) WELL/DIVERSION NAME: 

4. LOCATION: Address: Honolulu, HI, Tax Map Key 2-1-17:4
   (a) LOCATION: Address: Honolulu, HI, Tax Map Key 2-1-17:4
   (b) Current Land Use District: Residential
   (c) Current Zoning Code: See Table 1

5. SOURCE TYPE (choose one): □ Stream
   □ Groundwater (Confined)
   □ Groundwater (Unconfined)
   □ Diverted Surface Water
   □ Other (explain)

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Proposed use of water is: □ Existing □ New
   (b) Tax Map Key: 
   (c) Address: Eva Villages Golf Course and Subdivision, Renton Road
   (d) Current Land Use District: Residential
   (e) Current County Zoning Code: See Table 1

7. QUANTITY OF WATER REQUESTED: 2.1 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT: □ Water Meter
   □ Open Pipe
   □ Weir
   □ Other (explain)

9. QUALITY OF WATER REQUESTED: □ Fresh
   □ Brackish
   □ Salt
   □ Potable
   □ Non-Potable

10. PROPOSED USE: □ Municipal (including hotels, stores, etc.)
    □ Individual Domestic
    □ Irrigation
    □ Industrial
    □ Military
    □ Other (explain)

   For questions 12 & 13: If multiple THMs are involved, please complete Table 1 on back of application.

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: 0
12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP: 285 acres; Grass, Trees; Pellets

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 6:00 a.m. to 6:00 p.m.

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
   (a) Impact on Sustainable yield (?): None anticipated, this use is meant to replace cane use.
   (b) Instream Flow Standards affected (?): None
   (c) Hawaiian Home Lands use affected (?): None
   (d) Other existing legal uses affected (?): None
   (e) Other (pending permits, EIS, etc.) (?): DHC has filed applications for EP 3.4 pump

15. REMARKS, EXPLANATIONS: The water will be used to Irrigate the Eva Village Municipal golf course, Eva Mahiko Park, and common landscaping in the Eva Village Community.

For Official Use Only:

Applicant (print): ____________________ Landowner (print): ____________________
Signature: ____________________ Signature: ____________________
Date: ____________________ Date: ____________________

For Official Use Only:

Date Received: ____________________ Date Accepted: ____________________
Hydrologic Unit No.: ____________________ State Well No.: ____________________
Diversion Works No.: ____________________

8/19/93 WUPA Form
16. REMARKS, EXPLANATIONS (cont'd): This project is being done by the City Dept. of Housing and Community Development (DHCD) for the purpose of providing affordable housing, beneficial amenities and updated infrastructure to the community.

Originally, new caprock wells in the Ewa Village area were to be used to supply irrigation water. Various sites were tested by the BWS and were unsuccessfully. When the EP3 site was made available by Campbell Estate, it was considered as a possible source due to its close proximity to Ewa Village. DHCD is now in negotiation with Campbell Estate to use EP3. DHCD will need to pay for pump upgrades and will be assessed a license fee based on the amount of water withdrawn. DHCD intends to use EP3 until a suitable alternate source, such as effluent reuse, becomes practical to use or the prospective agreement between DHCD and Campbell Estate is terminated.

A pump installation permit for EP3.4 is concurrently being filed. Also, a water use permit to increase the EP2 well allocation (Nos. 2201-03, 04, 07) to 1.6 mgd is being filed by DHCD to meet the non-potable irrigation water needs of the West Loch community.

<table>
<thead>
<tr>
<th>TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT NAME</td>
</tr>
<tr>
<td>---------------</td>
</tr>
</tbody>
</table>

Please refer to attached table.
# APPLICATION FOR PERMIT

**(a) WELL OWNER**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHCD, City &amp; County of Honolulu</td>
<td>650 South King Street, 5th Fl. Honolulu, Hawaii 96813</td>
</tr>
</tbody>
</table>

**(b) LANDOWNER**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Estate of James Campbell</td>
<td>1001 Kamokila Boulevard Kapolei, Hawaii 96707</td>
</tr>
</tbody>
</table>

**(c) CONTRACTOR**

<table>
<thead>
<tr>
<th>Name and Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu Construction Co., Ltd.</td>
</tr>
<tr>
<td>3375 Keopuka Street Suite H490</td>
</tr>
</tbody>
</table>

## 2. WELL LOCATION/NAME:

- **Location:** EP3.4 (Nos. 2102-01 to 22)
- **Type:** Island Oahu

## 3. PROPOSED WORK:

- **Type:**
  - Abandoned/Sealed
  - New Well
  - New Pump

## 4. PROPOSED PUMP INFORMATION:

- **Type:**
  - Deep Well Tubular
  - Submersible
  - Constant Head
- **Capacity:** 6200 gallons per minute

## 5. PROPOSED USE:

- **Type:**
  - Domestic
  - Military
  - Agricultural
  - Conservation
- **Water Use:**
  - Rural
  - Industrial
  - Other (Specify)

## 6. PROPOSED AMOUNT OF WITHDRAWAL:

- **Volume:** 2.1 million gallons per day

## 7. PENDING ACTIONS:

- **Type:**
  - Ground Water Permit
  - Open-File

## 8. REMARKS, EXPLANATIONS:

DHCD has also filed water use permit applications for EP3.4 and EP2 (Nos. 2201-03,04,07). DHCD is now negotiating with Campbell Estate on the use of EP3.4.
Remarks, Explanations (cont'd): The existing pump at EP3 is planned to be retained. It is currently rated at 4200 gpm @ 150 ft. TDH, 200 Hp. The existing EP4 pump is planned to be replaced by a new pump rated at 3500 gpm @ 150 ft. TDH, 100 Hp. The EP4 well (w/cap) is presently intact and be capped. The EP3 well would therefore, would be used to supply both EP3 and EP4 pumps. At no time would both pumps run concurrently.

9. PROPOSED WELL SECTION
Not applicable - existing well is not being modified

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT

☐ Ground Water or ☐ Surface Water

In accordance, please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 221, Honolulu, Hawaii 96806. Application must be accompanied by a nonrefundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 977-0225 (neighbor islands), 1-800-440-4444.

PERMITTEE INFORMATION

1. (a) APPLICANT
   Dept. of Housing & Comm. Dev. (City & County of Honolulu)
   Firm/Name: [Redacted]
   Contact Person: [Redacted]
   Address: [Redacted]

(b) LANDOWNER OF SOURCE
   DHND, City & County of Honolulu
   Firm/Name: [Redacted]
   Contact Person: [Redacted]
   Address: [Redacted]

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Pearl Harbor
   ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: EP2 (Nos. 2201-03, 04, 07)

(b) PROPOSED (NEW) WELL/DIVERSION NAME: [Redacted]

(c) LOCATION: Address: Honolulu, Oahu, Hawaii
   Tax Map Key: 9-1-17: 60
   (Attach a USGS map, scale 1" = 2000', and a property tax map showing location referenced to established property boundaries.)

4. SOURCE TYPE (check one): ☐ Stream ☐ Flow ☐ Perched ☐ Artesian ☐ Diverted Surface ☐ Other (explain)

5. METHOD OF TAKING WATER (check one): ☐ Artesian ☐ Diverted Surface ☐ Other (explain)

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Proposed use of water is: ☐ Existing ☐ New ☐ Both existing & new use
   (b) Tax Map Key: ☐ ☐ ☐ (If location is over multiple TMAs, please complete Table 1 on back of application)
   (c) Address: West Loch Golf Course and Subdivision, Fort Weaver Road
   (d) Current Land Use District: ☐ Urban ☐ Agriculture ☐ Conservation ☐ Rural
   (e) Current County Zoning Code: See table 1

7. QUANTITY OF WATER REQUESTED: 1.6 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT: ☐ Flowmeter ☐ Open-flume ☐ Well ☐ Office ☐ Other (explain)

9. QUALITY OF WATER REQUESTED: ☐ Fresh ☐ Brackish ☐ Salt ☐ Potable ☐ Non-Potable

10. PROPOSED USE: ☐ Municipal (Including hotels, stores, etc.) ☐ Industrial ☐ Irrigation
       ☐ Individual Domestic ☐ Military ☐ Other (explain)

   For questions 12 & 13: If multiple TMAs are involved, please complete Table 1 on back of application.

11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: None

12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP: 21.4 acres; Grass, Trees, Poliaze (Sodium)

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 6:00 a.m. to 6:00 p.m.

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
   (a) Impact on Sustainable yield (?): None anticipated. This use is meant to replace other sugar cane use.
   (b) Instream Flow Standards affected (?): None
   (c) Hawaiian Home Lands use affected (?): None
   (d) Other existing legal uses affected (?): None
   (e) Other (pending permits, EIS, etc.): DHND-Naval Wateruse & pump installation permit applications for 234, 9 Nos. 2102-02, 04 to 22

15. REMARKS, EXPLANATIONS: The water will be used to irrigate the West Loch municipal golf course. Aning District: Park. The West Loch Shoreline Park and common landscaping in a coastal area is needed, continue on back side

   Applicant (print): ________________________ Landowner (print): ________________________
   Signature: ________________________ Signature: ________________________
   Date: ________________________ Date: ________________________

For Official Use Only:

For official use only: ________________

Hydrologic Unit No.: ________________

Diversion Works No.: ________________

Date Approved: ________________
This project is being done by the City Dept. of Housing and Community Development (DHCD) for the purpose of providing affordable housing and beneficial amenities to the community.

The EP2 allocation of 0.5 mgd is inadequate for all of West Loch and is now being exceeded. The pump capacity of EP2 is approximately 3 mgd.

<table>
<thead>
<tr>
<th>TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT NAME</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Please refer to attached table.
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Maliko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 57</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:por. 49</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por 46, 47, 48, 49, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por 46, 47, 48, 49, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por 46, 47, 48, 49, 55</td>
<td>R-5</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por 46, 47, 48, 49, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,300</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td>4,475</td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-1-7</td>
<td>A-1</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td>6,429</td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td>6,390</td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td>6,439</td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td>4,928</td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1</td>
<td>160.00</td>
<td>7,500</td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estate Subdivision</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>R-5</td>
<td>3.40</td>
<td>6,412</td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td>6,391</td>
<td>25</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,308,900</td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
Mrs. Rae M. Loui
Deputy Director
Commission on Water Resource Management
State Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mrs. Loui:

Subject: Nonpotable Water Usage at EP2
Transmittal of Water Use Permit

This is to advise the Commission on Water Resource Management that the nonpotable water use at EP2 has averaged 1.048 million gallons per day (mgd) over the past year.

As such, we are transmitting the attached application for water use at EP2 for 1.6 mgd to accommodate the increased demand at West Loch. Please note that this application is intended to replace the EP2 Water Use Permit for 3.0 mgd now on file with the Commission.

The City will continue to pursue the implementation of using EP3 and 4 for the provision of nonpotable water for Ewa Villages and EP2 for West Loch until an alternate irrigation system such as effluent reuse becomes feasible.

Please contact Avis Kamimura at [redacted] or Greg Hiyakumoto, engineer for the Department's consultant, R.M. Towill Corporation, at [redacted] if there are any questions.

We appreciate your cooperation and assistance in meeting our water needs for the communities in Ewa.

Sincerely,

ROLAND D. LIBBY, JR.
Director

Attachment

cc: Greg Hiyakumoto, RMTC ✓
State of Hawaii
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR WATER USE PERMIT

Ground Water or Surface Water

PERMUTTEE INFORMATION

1. (a) APPLICANT
   Department of Housing & Comm. Dev., City & County of Honolulu
   Fm/Name: Randall Wong
   Contact Person: Randall Wong

2. (b) LANDOWNER OF SOURCE
   DHUD, City & County of Honolulu
   Address: 650 South King Street, 5th Floor

SOURCE INFORMATION

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: EP2 (Hos. 2201-03, 04, 07)
   (b) PROPOSED (NEW) WELL/DIVERSION NAME: (to be determined)
   (c) LOCATION: Address: Honolulu, Oahu, Hawaii

USE INFORMATION

4. SOURCE TYPE
   (a) Groundwater
   (b) Surface Water
   (c) Other

5. METHOD OF TAKING WATER
   (a) Well
   (b) Pipe
   (c) Surface
   (d) Other

6. LOCATION OF PROPOSED WATER USE:
   (a) Proposed use of water for: Existing
   (b) Tax Map Key: 9-1-17:60

7. QUANTITY OF WATER REQUESTED: 1.5 million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   (a) Parameter
   (b) Open pipe
   (c) Well
   (d) Other

9. QUALITY OF WATER REQUESTED:
   (a) Fresh
   (b) Brackish
   (c) Salt
   (d) Potable
   (e) Non-Potable

10. PROPOSED USE:
    (a) Municipal (including hotels, stores, etc.)
    (b) Individual Domestic

PRELIMINARY SUBJECT TO CHANGE
11. TOTAL NUMBER OF RESIDENCES TO BE SERVED: None
12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP: 214 acres; Grass, Trees, Folilage
13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION: 6:00 a.m. to 6:00 p.m. (Anytime hours of operation, except 7 a.m. to 2 p.m.)
14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
   (a) Impact on Sustainable yield (M): None anticipated, this use is meant to replace non-sugar cane use.
   (b) Instream Flow Standards affected (M): None
   (c) Hawaiian Home Lands use affected (M): None
   (d) Other existing legal uses affected (M): None
   (e) Other (pending permits, EIS, etc.) (M): DROD: has filed: water use & pump installation perm applications for 229 (Kahului Water District) water use and pump installation permit applications for 229, 2102-04, 04 to 22
15. REMARKS, EXPLANATIONS: The water will be used to irrigate the West Loch municipal golf course, Ailing District Park, the West Loch Shoreline Park and common landscaping to
of more space is needed, pending on both uses.

Applicant (print)  
Signature  
Date  12-8-95

Landowner (print)  
Signature  
Date  12-8-95
This project is being done by the City Dept. of Housing and Community Development (DHCD) for the purpose of providing affordable housing and beneficial amenities to the community.

The EP2 allocation of 0.5 mgd is inadequate for all of West Loch and is now being exceeded. The pump capacity of EP2 is approximately 3 mgd.

16. REMARKS, EXPLANATIONS (com’d):

the West Loch area.

Please refer to attached table.
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWA VILLAGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17pop. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17pop. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17pop. 30, 68</td>
<td>R-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Adult - Family</td>
<td>9-1-17pop. 30, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;C&quot;</td>
<td>9-1-17pop. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad B/W</td>
<td>9-1-17pop. 49</td>
<td>R-5</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17pop. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,290</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16pop. 46, 47, 48, 54, 55</td>
<td>A-6*</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North - South Road</td>
<td>9-1-16pop. 46, 47, 48, 54, 55</td>
<td>none</td>
<td>9.50</td>
<td>6,388</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16pop. 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>0.30</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16pop. 46, 47, 48, 54, 55, 9-1-17pop. 4, 30, 68</td>
<td>AG-1*</td>
<td>204.90</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17pop. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>15,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17pop. 4</td>
<td>R-5</td>
<td>0.01</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17pop. 4</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBST LOCH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17pop. 66</td>
<td>R-1</td>
<td>4.00</td>
<td>4,475</td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-1777</td>
<td>A-1</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17pop. 66</td>
<td>R-5</td>
<td>1.40</td>
<td>6,429</td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17pop. 66</td>
<td>R-5</td>
<td>14.60</td>
<td>6,390</td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Adult - Family</td>
<td>9-1-17pop. 66</td>
<td>R-5</td>
<td>4.10</td>
<td>6,439</td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>9-1-17pop. 62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td>6,528</td>
<td>68,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17pop. 6, 40, 44, 45</td>
<td>AG-1</td>
<td>160.00</td>
<td>7,350</td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17pop. 6, 4, 44, 45</td>
<td>AG-1</td>
<td>160.00</td>
<td>7,350</td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17pop. 6, 6, 14</td>
<td>R-5</td>
<td>3.40</td>
<td>6,412</td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,553,720</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
December 29, 1995

Mrs. Rae M. Loui
Deputy Director
Commission on Water Resource Management
State Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mrs. Loui:

Subject: Nonpotable Water Usage at EP2
Transmittal of Water Use Permit

This is to advise the Commission on Water Resource Management that the nonpotable water use at EP2 has averaged 1.048 million gallons per day (mgd) over the past year.

As such, we are transmitting the attached application for water use at EP2 for 1.6 mgd to accommodate the increased demand at West Loch. Please note that this application is intended to replace the EP2 Water Use Permit for 3.0 mgd now on file with the Commission.

The City will continue to pursue the implementation of using EP3 and 4 for the provision of nonpotable water for Ewa Villages and EP2 for West Loch until an alternate irrigation system such as effluent reuse becomes feasible.

Please contact Avis Kamimura at [email] or Greg Hiyakumoto, engineer for the Department’s consultant, R.M. Towill Corporation, at [email] if there are any questions.

We appreciate your cooperation and assistance in meeting our water needs for the communities in Ewa.

Sincerely,

ROLAND D. LIBBY, JR.
Director

Attachment
cc: Greg Hiyakumoto, RMTC

appEP2.wc/k6
APPLICATION FOR WATER USE PERMIT

Ground Water  Surface Water

PERMITTEE INFORMATION

1. (a) APPLICANT
   Firm/Name: City & County of Honolulu
   Contact Person: Randall Wong
   Address: A 5th Floor
   Honolulu, HI 96813

(b) LANDOWNER OF SOURCE
   Firm/Name: DHCD, City & County of Honolulu
   Contact Person: Randall Wong
   Address: 650 South King Street 5th Floor
   Honolulu, HI 96813

SOURCE INFORMATION

2. WATER MANAGEMENT AREA: Pearl Harbor
   ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: EP2
      (Nos. 2201-03, 04, 07)
   (b) PROPOSED (NEW) WELLDIVERSION NAME:

LOCATION: Honolulu, Oahu, Hawaii
   (Attach a USGS map, scale 1" = 2000", and a property tax map showing source location referenced to established property boundaries.)

4. SOURCE TYPE (check one):
   Stream  Basin  Groundwater  Artesian  Well & Pump  Diverted Surface  Other (explain)

5. METHOD OF TAKING WATER (check one):
   Flowmeter  Open-pipe  Well  Orifice  Other (explain)

USE INFORMATION

6. LOCATION OF PROPOSED WATER USE: (if possible, show on same maps as source location. Otherwise, attach similar maps)
   (a) Proposed use of water is:
      Existing    New    Both existing & new uses
   (b) Tax Map Key:
       (If location of use is over multiple TMKs, please complete Table 1 on back of application)
   (c) Address:

   (d) Current Land Use District:

   (e) Current County Zoning Code:

   USE PERMIT

   Q. QUANTITY OF WATER REQUESTED: 1.6 million gallons per day (averaged over 1 year)

   8. METHOD OF MEASUREMENT:
      Flowmeter  Open-pipe  Well  Orifice  Other (explain)

   9. QUALITY OF WATER REQUESTED:
      Fresh  Brackish  Salt  Potable  Non-Potable

   10. PROPOSED USE:
       Municipal (including hotels, stores, etc.)  Industrial  Irrigation  Military
           Individual Domestic  Other (explain)

   For questions 12 & 13: If multiple TMKs are involved, please complete Table 1 on back of application.

   11. TOTAL NUMBER OF RESIDENCES TO BE SERVED:

   12. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP:

   13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:
       6:00 a.m. to 6:00 p.m. (daytime hours of operation, ex. 7 a.m. to 2 p.m.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
   (a) Impact on Sustainable yield (7):
       None anticipated, this use is meant to replace other sugar cane use.
   (b) Instream Flow Standards affected (7):
       None
   (c) Hawaiian Home Lands use affected (7):
       None
   (d) Other existing legal uses affected (7):
       None
   (e) Other (pending permits, EIS, etc.) (7):
       DHCD has filed water use & pump installation permit applications for EP3, EP4, EP6, EP7

15. REMARKS, EXPLANATIONS:
       The water will be used to irrigate the West Loch municipal golf course, using District Park, the West Loch Shoreline Park and common landscaping in the more space is needed, continue on back side)

   Applicant (print):
   Date  

   Landowner (print):
   Signature  Date  

For Official Use Only:

5/19/93 WUPA Form
This project is being done by the City Dept. of Housing and Community Development (DHCD) for the purpose of providing affordable housing and beneficial amenities to the community.

The EP2 allocation of 0.5 mgd is inadequate for all of West Loch and is now being exceeded. The pump capacity of EP2 is approximately 3 mgd.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>TMK</th>
<th>CURRENT COUNTY ZONING CODE</th>
<th>UNITS or NET ACRES</th>
<th>GPD/UNIT or GPD/acre</th>
<th>TOTAL GPD</th>
<th>% OF TOTAL TO BE USED OVER NEXT 4 YEARS</th>
</tr>
</thead>
</table>

Please refer to attached table.
## TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

Revised 11/22/95

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>approx. Total gpd acre</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5</td>
<td>15.30</td>
<td>95,900 100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>22,400 100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>25,600 100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>156,600 100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>4,500 100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>28,200 100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.60</td>
<td>6,409 26,200 100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>3,900 100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>60,700 100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>9.00</td>
<td>57,500 100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>AG-1*</td>
<td>206.00</td>
<td>1,545,000 100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>13,900 100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>120 100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>57,500 100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820 100%</td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td>17,900 100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td>22,400 100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td>9,000 100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td>93,300 100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td>26,400 100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td>88,700 100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1*</td>
<td>160.00</td>
<td>1,200,000 100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>3.40</td>
<td>21,800 100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td>29,400 100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900 100%</td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720 100%</td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
# SUMMARY OF NON-POTABLE WATER DEMANDS
## EWALILLAGES AND WEST LOCH DEVELOPMENTS

Based on the 4/11/94 (colored) plan from Lester Inouye

<table>
<thead>
<tr>
<th>Location</th>
<th>Acres</th>
<th>Gal/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>15.30</td>
<td>95,900</td>
</tr>
<tr>
<td>Village Green</td>
<td>3.50</td>
<td>22,400</td>
</tr>
<tr>
<td>Commercial</td>
<td>4.00</td>
<td>25,600</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>24.50</td>
<td>156,600</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>0.70</td>
<td>4,500</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>4.10</td>
<td>26,200</td>
</tr>
<tr>
<td>Renton Road</td>
<td>4.40</td>
<td>28,200</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>0.60</td>
<td>3,900</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9.50</td>
<td>60,700</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>0.50</td>
<td>3,300</td>
</tr>
<tr>
<td>Golf Course</td>
<td>206.00</td>
<td>1,545,000</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>2.20</td>
<td>13,900</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>0.02</td>
<td>120</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9.00</td>
<td>57,500</td>
</tr>
</tbody>
</table>

**TOTALS**

<table>
<thead>
<tr>
<th></th>
<th>Acres</th>
<th>Total Gal/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Acres</th>
<th>Gal/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>4.00</td>
<td>17,900</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>3.50</td>
<td>22,400</td>
</tr>
<tr>
<td>Church/School</td>
<td>1.40</td>
<td>9,000</td>
</tr>
<tr>
<td>District Park (Asing Park)</td>
<td>14.60</td>
<td>93,300</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>4.10</td>
<td>26,400</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>18.00</td>
<td>88,700</td>
</tr>
<tr>
<td>Golf Course</td>
<td>160.00</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>3.40</td>
<td>21,800</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>4.60</td>
<td>29,400</td>
</tr>
</tbody>
</table>

**TOTALS**

<table>
<thead>
<tr>
<th></th>
<th>Acres</th>
<th>Total Gal/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
</tr>
</tbody>
</table>

**TOTAL (EWA + WEST LOCH)**

|                     | 497.92 | 3,552,720     |
DEFERRAL -- COMPETING NEW WATER USE PERMIT APPLICATIONS

EP 2 (Well Nos. 2201-03,04,07), TMK 9-1-17:60 (por), for 3.0 mgd;
WP 2 (Well Nos. 2301-21 to 32), TMK 9-4-2:8, for 0.75 mgd;
Makakilo Golf Course Well (Well No. 2104-02), TMK 9-2-3:74, for 0.7 mgd; and
Honouliuli Wells 7,8,9 (Well Nos. 2302-07 to 09), TMK 9-2-1:1, for 3.36 mgd
Waipahu-Waiawa Groundwater Management Area, Oahu

Applicant(s):

(Well Nos. 2201-03, 04, 07)
Dept. of Housing & Community Development
City & County of Honolulu
650 S. King Street, 5th Floor
Honolulu, HI 96813

(Well Nos. 2301-21 to 32)
Royal Oahu Resort, Inc.
1088 Bishop St., Ste. 1214
Honolulu, HI 96813

(Well No. 2104-02)
Pu'u Makakilo Inc.
P.O. Box 78
Honolulu, HI 96810

(Well Nos. 2302-07 to 09)
Ewa Plain Water Development Corp.
680 Ala Moana Blvd., Ste. 406
Honolulu, HI 96813

Landowner(s):

Same

Oahu Sugar Co., Ltd.
700 Bishop St., 21st Floor
Honolulu, HI 96813

Same

The Estate of James Campbell
1001 Kamokila Blvd.
Kapolei, HI 96707

AGENDA 1
Item 14
Background:

The subject water use permit applications are for new potable and nonpotable uses in the Waipahu-Waiawa Aquifer (Exhibit 1). The applications by Royal Oahu Resort and the City Department of Housing and Community Development (DHCD) were completed on June 27, 1995 and June 30, 1995, respectively. These two applications require action to satisfy the ninety (90) day statutory directive for Commission on Water Resource Management (Commission) action. The application by Pu‘u Makakilo has been on hold since March 1994 at the applicant’s request for deferral of any action by the Commission. The application by Ewa Plain Water Development Corporation (EPWDC) was completed on September 14, 1995.

These completed pending applications show a total request for 7.81 million gallons per day (mgd). From Table 1, it can be seen that the pending requests exceed the available allocation for the aquifer.

Table 1. Waipahu-Waiawa Aquifer System

<table>
<thead>
<tr>
<th>ITEM</th>
<th>WAIPAHU-WAIAWA AQUIFER SYSTEM (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Yield</td>
<td>119</td>
</tr>
<tr>
<td>Less: Other Existing Permits: (shown in Exhibit 2)</td>
<td>-114.753</td>
</tr>
<tr>
<td>Less: Water Reservation:</td>
<td></td>
</tr>
<tr>
<td>Dept. of Hawaiian Home Lands</td>
<td>-1.581</td>
</tr>
<tr>
<td>Available Allocation</td>
<td>2.666</td>
</tr>
<tr>
<td>Less: Pending Applications:</td>
<td></td>
</tr>
<tr>
<td>DHCD (Well Nos. 2201-03, 04, 07)</td>
<td>-3.000</td>
</tr>
<tr>
<td>Royal Oahu Resort (Well Nos. 2301-21 to 32)</td>
<td>-0.750</td>
</tr>
<tr>
<td>Pu‘u Makakilo (Well No. 2104-02)</td>
<td>-0.700</td>
</tr>
<tr>
<td>EPWDC (Well Nos. 2302-07 to 09)</td>
<td>-3.360</td>
</tr>
<tr>
<td>Potential Available Allocation</td>
<td>-5.144</td>
</tr>
</tbody>
</table>

This would appear to be a situation of competing new water use permit applications, subject to the provisions in §174C-54, which states:
"If two or more applications which otherwise comply with section 174C-49 are pending for a quantity of water that is inadequate for both or all, or which for any other reason are in conflict, the commission shall first, seek to allocate water in such a manner as to accommodate both applications if possible; second, if mutual sharing is not possible, then the commission shall approve that application which best serves the public interest."

However, the staff is recommending that the Commission defer any decision on the merits of the applications at this time to allow for review and adjustment of the allocations for former Oahu Sugar Company (OSCo) groundwater sources, in accordance with the Commission's action of January 16, 1992 (Exhibit 3).

The staff was anticipating that the 1995 review and adjustment would take place following the resolution of the Waiahole Ditch issue; however, as it now appears that the contested case hearing on this matter will not be concluded till late 1995 or early 1996, the staff is initiating concurrent roundtable discussions with the various entities that now control former OSCo wells regarding current and foreseeable future demands for the groundwater. A recommendation on reductions to OSCo well allocations will be submitted to the Commission, tentatively on December 6, 1995.

RECOMMENDATION:

Staff recommends that the Commission defer action on the water use permit applications by the City Dept. of Housing and Community Development for Well Nos. 2201-03,04,07, Royal Oahu Resort for Well Nos. 2301-21 to 32, Pu'u Makakilo for Well No. 2104-02, and Ewa Plain Water Development Corporation for Well Nos. 2302-07 to 09) to provide additional time for the staff to review and submit recommendations to the Commission on adjustments for former Oahu Sugar Co. well allocations.

Respectfully submitted,

RAE M. LOUI
Deputy Director

Attachments

APPROVED FOR SUBMITTAL:

MICHAEL D. WILSON, Chairperson
Aquifer System: WAIKIU-WAIKAWA

<table>
<thead>
<tr>
<th>WELL NO.</th>
<th>WELL NAME</th>
<th>APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2101-01</td>
<td>KAHUA MEAT CO.</td>
<td>07/28/1993 4.569</td>
</tr>
<tr>
<td>2102-02</td>
<td>EP 3, 4</td>
<td>05/17/1989 0.110</td>
</tr>
<tr>
<td>2102-04</td>
<td>EP 3, 4</td>
<td>01/16/1992 3.304</td>
</tr>
<tr>
<td>2102-05</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-06</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-07</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-08</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-09</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-10</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-11</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-12</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-13</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-14</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-15</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-16</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-17</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-18</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-19</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-20</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-21</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2102-22</td>
<td>EP 3, 4</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2201-03</td>
<td>EP 2</td>
<td>04/22/1985 0.500</td>
</tr>
<tr>
<td>2201-04</td>
<td>EP 2</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2201-07</td>
<td>EP 2</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2201-14</td>
<td>HARRIS RUG</td>
<td>05/17/1989 0.003</td>
</tr>
<tr>
<td>2202-03</td>
<td>EP 5, 6</td>
<td>01/16/1992 8.000</td>
</tr>
<tr>
<td>2202-04</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-05</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-06</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-07</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-08</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-09</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-10</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-11</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-12</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-13</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-14</td>
<td>EP 5, 6</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-15</td>
<td>EP 7, 8</td>
<td>01/16/1992 6.113</td>
</tr>
<tr>
<td>2202-16</td>
<td>EP 7, 8</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-17</td>
<td>EP 7, 8</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-18</td>
<td>EP 7, 8</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-19</td>
<td>EP 7, 8</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-20</td>
<td>EP 7, 8</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2202-21</td>
<td>EP 15, 16</td>
<td>12.154</td>
</tr>
<tr>
<td>2300-11</td>
<td>NATAKANE, A.</td>
<td>05/07/1989 0.680</td>
</tr>
<tr>
<td>2300-20</td>
<td>NATAKANE, A.</td>
<td>05/17/1989 0.400</td>
</tr>
<tr>
<td>2300-21</td>
<td>WP 7A, 7B, 7C</td>
<td>01/16/1992 9.000</td>
</tr>
<tr>
<td>2300-22</td>
<td>WP 7A, 7B, 7C</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2300-23</td>
<td>WP 7A, 7B, 7C</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-01</td>
<td>WP 1</td>
<td>01/16/1992 1.151</td>
</tr>
<tr>
<td>2301-03</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-04</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-05</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-06</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-07</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-08</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-09</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-10</td>
<td>WP 1</td>
<td>01/16/1992 0.000</td>
</tr>
<tr>
<td>2301-11</td>
<td>WP 4A, 4B</td>
<td>01/16/1992 4.000</td>
</tr>
<tr>
<td>2301-12</td>
<td>WP 4A, 4B</td>
<td>01/16/1992 0.000</td>
</tr>
</tbody>
</table>
Aquifer System: WAIPAHU-WAIWAH

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Approval</th>
<th>MGP</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-13</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-14</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-15</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-16</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-17</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-18</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-19</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-20</td>
<td>WP 4A, 4B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-21</td>
<td>WP 2A, 2B</td>
<td>01/16/1992</td>
<td>5.594</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-22</td>
<td>WP 2A, 2B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-23</td>
<td>WP 2A, 2B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-24</td>
<td>WP 2A, 2B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-25</td>
<td>WP 2A, 2B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-26</td>
<td>WP 2A, 2B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-27</td>
<td>WP 2C, 2D</td>
<td>01/16/1992</td>
<td>5.594</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-28</td>
<td>WP 2C, 2D</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-29</td>
<td>WP 2C, 2D</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-30</td>
<td>WP 2C, 2D</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-31</td>
<td>WP 2C, 2D</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2301-32</td>
<td>WP 2C, 2D</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2301-34</td>
<td>HOEAE WELLS 1</td>
<td>05/17/1989</td>
<td>6.610</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2301-35</td>
<td>HOEAE WELLS 2</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2301-36</td>
<td>HOEAE WELLS 3</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2301-37</td>
<td>HOEAE WELLS 4</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2301-38</td>
<td>HOEAE NO.5</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2301-39</td>
<td>HOEAE NO.6</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>C&amp;C DHC</td>
<td>2301-40</td>
<td>KUNIA III</td>
<td>10/19/1994</td>
<td>1.970</td>
</tr>
<tr>
<td>C&amp;C DHC</td>
<td>2301-41</td>
<td>KUNIA III</td>
<td>10/19/1994</td>
<td>0.000</td>
</tr>
<tr>
<td>C&amp;C DHC</td>
<td>2301-42</td>
<td>KUNIA III</td>
<td>10/19/1994</td>
<td>0.000</td>
</tr>
<tr>
<td>C&amp;C DHC</td>
<td>2301-43</td>
<td>KUNIA III</td>
<td>10/19/1994</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2302-01</td>
<td>KUNIA I WELLS</td>
<td>05/17/1989</td>
<td>4.357</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2302-02</td>
<td>KUNIA I WELLS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2302-03</td>
<td>KUNIA I WELLS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2302-04</td>
<td>KUNIA I WELLS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>NAZARENE CHURCH</td>
<td>2358-49</td>
<td>PEARL CITY</td>
<td>07/19/1985</td>
<td>0.003</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2400-01</td>
<td>WAIPAHU I</td>
<td>07/19/1985</td>
<td>6.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2400-02</td>
<td>WAIPAHU I</td>
<td>07/19/1985</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2400-03</td>
<td>WAIPAHU I</td>
<td>07/19/1985</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2400-04</td>
<td>WAIPAHU I</td>
<td>07/19/1985</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2400-05</td>
<td>WAIPAHU II</td>
<td>08/22/1986</td>
<td>2.100</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2400-06</td>
<td>WAIPAHU II</td>
<td>08/22/1986</td>
<td>0.000</td>
</tr>
<tr>
<td>STATE DHHL</td>
<td>2400-07</td>
<td>WAIPAHU III</td>
<td>10/19/1994</td>
<td>0.144</td>
</tr>
<tr>
<td>STATE DHHL</td>
<td>2400-09</td>
<td>WAIPAHU III</td>
<td>10/19/1994</td>
<td>0.000</td>
</tr>
<tr>
<td>STATE DHHL</td>
<td>2400-11</td>
<td>WAIPAHU III</td>
<td>10/19/1994</td>
<td>0.000</td>
</tr>
<tr>
<td>STATE DHHL</td>
<td>2400-13</td>
<td>WAIPAHU III</td>
<td>10/19/1994</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2402-01</td>
<td>KUNIA II, 3</td>
<td>07/19/1989</td>
<td>1.260</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2402-02</td>
<td>KUNIA II, 3</td>
<td>07/19/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2402-03</td>
<td>KUNIA II, 3</td>
<td>07/19/1989</td>
<td>1.450</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2457-01</td>
<td>PEARL CITY II</td>
<td>05/17/1989</td>
<td>2.190</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2457-02</td>
<td>PEARL CITY II</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2457-03</td>
<td>PEARL CITY II</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2458-01</td>
<td>PEARL CITY SHAFT</td>
<td>05/17/1989</td>
<td>1.320</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2458-03</td>
<td>PEARL CITY I</td>
<td>05/17/1989</td>
<td>0.310</td>
</tr>
<tr>
<td>HONOLULU BNS</td>
<td>2458-04</td>
<td>PEARL CITY I</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-01</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-02</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-03</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-04</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-05</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-06</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
</tbody>
</table>
### Aquifer System: WAIPAHU-WAIAWA

<table>
<thead>
<tr>
<th>Applicant</th>
<th>Well No.</th>
<th>Well Name</th>
<th>Approval Date</th>
<th>MUP (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-07</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-08</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-09</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-10</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-11</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-12</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-13</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-14</td>
<td>WP 6A, 6B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-15</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.630</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-16</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-17</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-18</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-19</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2459-20</td>
<td>WAIPIO HTS</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>YOSHIMURA D</td>
<td>2459-21</td>
<td>WAIPAHU</td>
<td>05/17/1989</td>
<td>0.006</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2500-01</td>
<td>WAIPIO HTS</td>
<td>07/11/1985</td>
<td>2.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2500-02</td>
<td>WAIPIO HTS</td>
<td>07/11/1985</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2557-03</td>
<td>PEARL CITY</td>
<td>03/27/1987</td>
<td>0.500</td>
</tr>
<tr>
<td>U.S. NAVY</td>
<td>2558-10</td>
<td>WAIPAN SHAFT</td>
<td>05/17/1989</td>
<td>14.977</td>
</tr>
<tr>
<td>IGE Y</td>
<td>2600-02</td>
<td>DAIRY COMPANY</td>
<td>07/19/1989</td>
<td>0.100</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2600-03</td>
<td>MILILANI III</td>
<td>07/19/1989</td>
<td>1.550</td>
</tr>
<tr>
<td>HAWAII COUNTRY CLUB</td>
<td>2603-01</td>
<td>WAIPAN SH</td>
<td>05/17/1989</td>
<td>0.220</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2658-01</td>
<td>WP 17A, 17B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>OAHU SUGAR CO., LTD.</td>
<td>2658-02</td>
<td>WP 17A, 17B</td>
<td>01/16/1992</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2659-02</td>
<td>WAIPIO HTS</td>
<td>08/22/1986</td>
<td>0.850</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2659-03</td>
<td>WAIPIO HTS</td>
<td>08/22/1986</td>
<td>0.000</td>
</tr>
<tr>
<td>DEL MONTE CORP.</td>
<td>2703-01</td>
<td>DEL MONTE CORP.</td>
<td>05/17/1989</td>
<td>0.154</td>
</tr>
<tr>
<td>DEL MONTE FRESH PRODUCE</td>
<td>2703-01</td>
<td>KUNIA</td>
<td>08/16/1995</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2800-01</td>
<td>MILILANI I</td>
<td>05/17/1989</td>
<td>2.980</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2800-02</td>
<td>MILILANI I</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2800-03</td>
<td>MILILANI I</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2800-04</td>
<td>MILILANI I</td>
<td>05/17/1989</td>
<td>0.000</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2859-01</td>
<td>MILILANI II</td>
<td>03/27/1987</td>
<td>1.900</td>
</tr>
<tr>
<td>HONOLULU BWS</td>
<td>2859-02</td>
<td>MILILANI II</td>
<td>03/27/1987</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Revision of Oahu Sugar Company’s
Ground-Water Use Permits
Pearl Harbor Water Management Area, Oahu

Background

On May 17, 1989, the Commission on Water Resource Management (CWRM) approved adjustments to water use permits in the Pearl Harbor Water Management Area (PHWMA) to comply with the CWRM’s April 19, 1989 revisions to the PHWMA sustainable yields. The adjustments provided for a 5-year reallocation plan which incorporated the conversion of sugar cane cultivation to urban development as well as the estimated Oahu Sugar Co. (OSCo.) optimum basal ground-water demand.

Staff Review of Existing Water Uses

Staff reviewed existing water use patterns and authorized uses for all major water users within the PHWMA. Additionally, the sugar cane land conversion to urban land schedule was reviewed. Discussions and meetings were held with all major users to verify information on water uses. Based upon staff review it is evident that additional water use reductions could be applied to OSCo.'s authorized uses. Under current operations, sugar cane land taken out of production has occurred as scheduled and as anticipated from the May 17, 1989 CWRM action. Under current crop conditions, which reflect the 1989 reallocation plan, OSCo. basal ground-water requirements are currently 60.62 million gallons per day (mgd). This is 9.76 mgd below OSCo.'s scheduled 1992 authorized use from the 1989 5-year plan. OSCo. has agreed that 60.62 mgd would be adequate for their uses in the foreseeable future.

A well-by-well reduction of water use permits has been discussed with OSCo. to achieve the least amount of negative impact to them. The attached table shows the readjusted allocations by wells.

EXHIBIT 3
Chairperson and Members
Commission on Water Resource Management

January 16, 1992

RECOMMENDATION:

That the Commission approve the reduction of OSCo.'s allocation by 9.76 mgd to 60.62 mgd subject to the condition that water use permits issued according to the proposed revised schedule shall be interim permits subject to review and adjustment by 1995.

Respectfully submitted,

KAZUO G. AKITA
Manager-Chief Engineer

Attachment

APPROVED FOR SUBMITTAL:

WILLIAM W. PATY, Chairperson
### OAHU SUGAR COMPANY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EP2</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>WP17A, 17B</td>
<td>0.300</td>
<td>0.300</td>
<td>0.300</td>
<td>0.300</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>WP1</td>
<td>1.151</td>
<td>1.151</td>
<td>1.151</td>
<td>1.151</td>
<td>1.151</td>
<td>1.151</td>
<td>1.151</td>
<td>1.151</td>
</tr>
<tr>
<td>WP2C, 4C</td>
<td>6.250</td>
<td>5.594</td>
<td>5.594</td>
<td>5.594</td>
<td>5.594</td>
<td>5.594</td>
<td>5.594</td>
<td>5.594</td>
</tr>
<tr>
<td>WP4A, 4B</td>
<td>6.478</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
</tr>
<tr>
<td>WP6A, 6B</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>WP7A, 7B, 7C</td>
<td>13.000</td>
<td>13.000</td>
<td>13.000</td>
<td>13.000</td>
<td>9.000</td>
<td>9.000</td>
<td>9.000</td>
<td>9.000</td>
</tr>
<tr>
<td>Subtotal (OSCo)</td>
<td>78.651</td>
<td>68.808</td>
<td>65.749</td>
<td>64.293</td>
<td>55.610</td>
<td>55.610</td>
<td>55.610</td>
<td>55.610</td>
</tr>
</tbody>
</table>

### WAIANAE BASAL AQUIFER

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OAHU SUGAR COMPANY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WP5</td>
<td>6.000</td>
<td>4.500</td>
<td>4.500</td>
<td>4.500</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>EP10</td>
<td>7.000</td>
<td>4.700</td>
<td>4.700</td>
<td>1.590</td>
<td>5.010</td>
<td>5.010</td>
<td>5.010</td>
</tr>
<tr>
<td>Subtotal (OSCo)</td>
<td>13.000</td>
<td>9.200</td>
<td>9.200</td>
<td>6.090</td>
<td>5.010</td>
<td>5.010</td>
<td>5.010</td>
</tr>
<tr>
<td>Total OSCo.</td>
<td>91.651</td>
<td>78.008</td>
<td>74.949</td>
<td>70.383</td>
<td>60.620</td>
<td>60.620</td>
<td>60.620</td>
</tr>
</tbody>
</table>
State of Hawaii
Department of Land and Natural Resources
COMMISSION ON WATER RESOURCE MANAGEMENT
Honolulu, Hawaii
AUG – 2 1995

TO: Aquatic Resources
Forestry and Wildlife/Natural Area Reserve System
Historic Preservation
Land Management
Office of Conservation and Environmental Affairs
State Parks
Water and Land Development

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

LN:ss
Attachment(s)

Response:

(✓) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: MANABU TAGOMORI
Phone: 587-0230
Signed: Date: OCT – 4 1995
September 20, 1995

Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Lenore Nakama

Dear Ms. Loui:

Subject: Applications for Water Use Permit and
Well Construction/Pump Installation Permit
EP2 (Wells Nos. 2201-03, 04, 07)
Waipahu-Waiawa Groundwater Management Area, Oahu

We are requesting withdrawal of the subject Well Construction/Pump Installation Permit. Please continue processing of the subject Water Use Permit application, except that the quantity of water requested is hereby modified from 3.5 mgd to 3.0 mgd (to match the existing pump capacity).

It is the intent of the City Department of Housing and Community Development (DHCD) to minimize review time of the Water Use Permit application by separating it from the Well Construction/Pump Installation Permit.

If you have any questions, please contact me at [redacted] Thank you for your kokua.

Very truly yours,

Greg H. Hiyakumoto
Senior Civil Engineer

cc: DHCD (Avis Kamimura)
Mr. Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Your Letter of August 2, 1995 on the City Department of Housing and Community Development Application to Increase Pumpage at EP 2 and to Drill a New Standby Well

Thank you for the opportunity to comment on this application. We have no objections to the permit and return the memo form accordingly marked.

If you have any questions, please contact Herbert H. Minakami at [redacted]

Very truly yours,

[Signature]
RAYMOND H. SATO
Manager and Chief Engineer

Attachment
TO: Honorable Kali Watson, Chairperson
Department of Hawaiian Home Lands

Honorable Lawrence Miike, Director
Department of Health

Honorable Clayton H.W. Hee, Chairperson
Office of Hawaiian Affairs

Ms. Esther Ueda, Executive Officer
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply

Mr. Patrick Onishi, Director
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, or objectives specific to your organization or department only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

Response:

☐ We have no objections
☐ Not subject to our regulatory authority & permit
☐ Comments attached
☐ Additional information requested
☐ Extended review period requested

Contact Person: Herbert H. Minakami
Phone: [redacted]

Signed: Raymond H. Sato
Manager and Chief Engineer

Date: 9/14/95
TO: 
Honorable Kali Watson, Chairperson 
Department of Hawaiian Home Lands

Honorable Lawrence Miike, Director 
Department of Health

Honorable Clayton H.W. Hee, Chairperson 
Office of Hawaiian Affairs

Ms. Esther Ueda, Executive Officer 
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer 
Honolulu Board of Water Supply

Mr. Patrick Onishi, Director 
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer 
Planning Department

FROM: 
Michael D. Wilson, Chairperson 
Commission on Water Resource Management

SUBJECT: 
Water Use Permit Application 
waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, or objectives specific to your organization or department only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lehona Nakama at 587-0218.

LN:ss
Attachment(s)

Response:

We have no objections
Not subject to our regulatory authority & permit
Comments attached
Additional information requested
Extended review period requested

Contact Person: Art Challacombe 
Phone:

Signed: 
Date: 9-6-95

Patrick T. Onishi, Director
TO: Honorable Kali Watson, Chairperson
Department of Hawaiian Home Lands
Honorable Lawrence Miike, Director
Department of Health
Honorable Clayton H.W. Hee, Chairperson
Office of Hawaiian Affairs
Ms. Esther Ueda, Executive Officer
Land Use Commission
Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply
Mr. Patrick Onishi, Director
Department of Land Utilization
Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for
the City and County of Honolulu, Department of Housing and Community Development for Well
Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu

We would appreciate your review of the attached application for any conflicts or
inconsistencies with the programs, plans, or objectives specific to your organization or
department only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

Response:

- We have no objections
- Not subject to our regulatory authority & permit
- Comments attached
- Additional information requested
- Extended review period requested

Contact Person: Luis A. Manrique
Phone: 594-1935
Date: 09/05/95

Signed: [Signature]
Date: [Signature]
August 29, 1995

Honorable Michael D. Wilson, Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Water Use Permit Application
Waipahu-Waiawa Groundwater Management Area
Well Nos. 2201-03, 04, 07, 15

Thank you for giving us the opportunity to review the Water Use Permit for the Department of Housing and Community Development.

One of the growth management policies of the General Plan of the City and County of Honolulu is to encourage the development of the Ewa area to accommodate future growth on Oahu. The development of this water source will provide irrigation for municipal landscaping, parks and golf courses at Ewa Villages and West Loch and thereby support development in Ewa. This is consistent with the City’s General Plan.

The Board of Water Supply also supports this water use permit. Their comments are attached.
The Department of Wastewater Management is pursuing the use of reclaimed effluent in the caprock area for non-potable use. We note that DHCD indicates the potential use of that water source in the future.

Sincerely,

CHERYL D. SOON
Chief Planning Officer

cc: The Honorable Jeremy Harris
(Mayor Action Notice 23680)
TO: CHERYL D. SOON, CHIEF PLANNING OFFICER
   PLANNING DEPARTMENT
FROM: RAYMOND H. SATO, MANAGER AND CHIEF ENGINEER
   BOARD OF WATER SUPPLY
SUBJECT: STATE WATER COMMISSION’S LETTER TO MAYOR JEREMY HARRIS
        DATED AUGUST 2, 1995 ON THE CITY DEPARTMENT OF HOUSING
        AND COMMUNITY DEVELOPMENT’S (DHCD) APPLICATION TO
        INCREASE PUMPAGE AT EP 2 AND TO DRILL A NEW STANDBY WELL

We recommend supporting the application by DHCD. Our staff had previously discussed the issue of obtaining irrigation water for the city park and golf course projects at Ewa because:

1. Caprock water is no longer a feasible source of irrigation water unless reclaimed effluent is used to recharge the caprock aquifer; another source water would be still necessary to implement these plans.

2. With the abandonment of sugar, the obvious source is the plantation water. Campbell Estate, however, would commit water from the old plantation wells for only five years when a permanent source by the city is needed.

3. With the large reduction in pumpage from the abandonment of sugar, a water use permit from the Water Commission for city use is a reasonable expectation if no else can use the brackish water formerly pumped by the plantation.

For these reasons, we recommended that DHCD consider increasing pumpage at EP 2 and drilling a new standby well.

If you have any questions, please contact Herbert H. Minakami at
New water sources for Ewa

City departments team up to tap new water wells

By JACOB KAMHI
PBN Staff Reporter

The City & County of Honolulu Department of Housing & Community Development and the city Board of Water Supply are teaming up on an well project to provide new sources of water in Ewa.

Some projects that will be supplied by the $15.6 million proposed potable water system include the Tenney, Varona and Renton historic plantation villages, and the newly built Lincoln Village affordable project.

In addition, the new water system is expected to supply two planned market subdivisions to be built among other city projects, according to Roland Libby, the development department's deputy director.

Initial water well exploration is ongoing. Tests will determine if there is adequate yield to satisfy future potable water requirements for the area. The objective is to find a source that can generate 4.5 million gallons of water per day.

If exploration is successful, the city will award the construction contract for the permanent system by Dec. 31, and work could begin within 30 to 60 days after that, Libby said.

The final three well project and its main pipe infrastructure are in the design stage. They should be operating within two to three years after work begins.

The selected contractor must install 7,500 linear feet of 16-inch main pipe from the well to a reservoir, and 14,000 feet of 12-inch pipe from Farrington Highway to Renton Road, along Fort Weaver Road.

Libby said two reservoirs are planned: a 1.5 million-gallon reservoir first, followed by a 1.8 million-gallon reservoir later on. Each will be installed mauka of H-1 Freeway near Kualoa. He said the new water system will supply up to 2,200 housing units when the job is complete. The existing water system only provides water for 400 homes.

Although the Department of Housing & Community Development and the water board are working together, they ultimately have independent goals: the housing department’s concern is water for the Ewa villages, while the board wants to ensure water will be available for development beyond the villages, Libby said.

Ellen Hirayama, the water board’s systems planning section head, said the board is considering increasing the size of the 12-inch main pipe to a 42-inch main pipe, but the extra cost has not yet been budgeted.

“The board wants to install stronger infrastructure for water in the Ewa area,” she said.

The number of homes and buildings for the area is not clear, but the board is looking at Ewa as a major development area.

As new developers plan their projects, the board will have to negotiate costs for the additional water systems.

And Hirayama said Barbers Point Naval Air Station has asked the water board to take over the base’s water system as it is scheduled to close in 1997, which further increases the water board’s role in the area.

Hawaii incomes up 2%

The average Hawaii paycheck increased 2 percent last year, well below the U.S. average, according to a U.S. Department of Commerce study. Per capita income for the nation rose 4.3 percent in 1994, to $21,699. Hawaii’s per capita income rose 2 percent in 1992, to $24,699. The study found earnings declined in construction and increased at a below-average rate in private service industries.

Hemmeter walks away from firm

Christopher Hemmeter, former isle developer, has resigned as head of Resort Income Investors Inc., following a $10.9 million second-quarter loss for 1995. Much of the loss was due to a $12.4 million write-off that the company, a real estate investment trust Hemmeter founded, took during the fourth quarter of 1996.

State, fed and bank fund Kekuulani

Kekuulani Gardens, the first project involving the U.S. Department of Agriculture, the state and a private lender, may pave the way for more joint housing ventures, officials said. Bank of America Hawaii is providing a $6 million interim loan to Kekuulani Development Co. for the 3.3-acre project. When the two-bedroom, one-bath, 760-square-foot apartments are completed, the plan will include 552 milli
MEMORANDUM

LOG NO: 15202
DOC NO: 9508EJ06

TO: Rae M. Loui, Deputy Director
Commission on Water Resource Management

FROM: Don Hibbard, Administrator
Historic Preservation Division

SUBJECT: Application for Water Use Permit, City and County of Honolulu, Department of Housing and Community Development, Waipahu-Waiawa Ground Water Management Area, O‘ahu for Well Nos. 2201-03, 04, 07, 15 Honouliuli, ‘Ewa, O‘ahu
TMK: 9-1-17, 9-1-16

Thank you for the opportunity to review this project. The applicant proposes to use water from existing sources. Since an approved permit will not authorize any ground disturbing activities we believe that there will be “no effect” on historic sites.

EJ:jk
August 9, 1995

Mr. Michael D. Wilson
Chairperson
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Water Use Permit, Well Construction, and Pump Installation Permit Application for the West Loch and Ewa Villages Projects, Waipahu-Waiawa Groundwater Management Area, Oahu

We have reviewed the subject document received with your memorandum dated August 2, 1995, and have the following comment to offer:

1) The project site (EP 2) as shown on the USGS quad map provided with the application, appears to be located within the State Land Use Agricultural District. We have enclosed for your information a copy of a portion of USGS Quad 0-5 (Schofield Barracks, Hawaii) which depicts the State Land Use District Boundaries for the project site.

We have no other comments to offer at this time.

We have enclosed your cover memorandum as requested.

Should you have any questions, please feel free to call me or Kathy Yonamine at [contact information]

Sincerely,

ESTHER UEDA
Executive Officer

EU:KY:th

enc.
TO: Honorable Kali Watson, Chairperson
Department of Hawaiian Home Lands

Honorable Lawrence Miike, Director
Department of Health

Honorable Clayton H.W. Hee, Chairperson
Office of Hawaiian Affairs

Ms. Esther Ueda, Executive Officer
Land Use Commission

Mr. Raymond Sato, Manager & Chief Engineer
Honolulu Board of Water Supply

Mr. Patrick Onishi, Director
Department of Land Utilization

Mrs. Cheryl D. Soon, Chief Planning Officer
Planning Department

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Water Use Permit Application
waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for
the City and County of Honolulu, Department of Housing and Community Development for Well
Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu

We would appreciate your review of the attached application for any conflicts or
inconsistencies with the programs, plans, or objectives specific to your organization or
department only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

LN:ss
Attachment(s)

Response:

() We have no objections
() Not subject to our regulatory authority & permit
() Comments attached
() Additional information requested
() Extended review period requested

Contact Person: Esther Ueda
Phone: 587-3822

Signed: Date: August 9, 1995
State of Hawaii  
Department of Land and Natural Resources  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Honolulu, Hawaii  
AUG - 2 1995

TO:  
Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
Land Management  
Office of Conservation and Environmental Affairs  
State Parks  
Water and Land Development

FROM:  
Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT:  
Request for Comments  
Water Use Permit Application  
Waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

LN:ss  
Attachment(s)  
AUG 3 1995

Response:

☐ We have no objections  
☐ Not subject to our regulatory authority & permit  
☐ Comments attached  
☐ Additional information requested  
☐ Extended review period requested

Contact Person: Bill Davick  
Phone: 518-0210

Signed:  
Phone:  
Date:
TO: Aquatic Resources
   Forestry and Wildlife/Natural Area Reserve System
   Historic Preservation
   Land Management
   Office of Conservation and Environmental Affairs
   State Parks
   Water and Land Development

FROM: Rae M. Loui, Deputy Director
       Commission on Water Resource Management

SUBJECT: Request for Comments
         Water Use Permit Application
         Waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at [Redacted].

LN:ss
Attachment(s)

Response:
August 9, 1995
( ) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: [Redacted]
Phone:

Signed: [Redacted]
Date: [Redacted]

MICHAEL G. BUCK
Administrator
TO:  
Aquatic Resources  
Forestry and Wildlife/Natural Area Reserve System  
Historic Preservation  
Land Management

FROM:  
Rae M. Loui, Deputy Director  
Commission on Water Resource Management

SUBJECT: Request for Comments  
Water Use Permit Application  
Waipahu-Waialua Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

LN:ss  
Attachment(s)

Response:

( ) We have no objections  
( ) Not subject to our regulatory authority & permit  
( ) Comments attached below  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: Cathy Tilton  
Phone: 587-0382

Signed:  
Well sites do not appear to impact the Conservation District.
Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at [redacted].

LN:ss
Attachment(s)

Response:

( ) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: [redacted] Phone: 587-4829

Signed: [redacted] Date: 8/3/95
TO: Guy
DATE: 1/24
TIME: 8:10 a.m.

WHILE YOU WERE OUT

Elsie Gushiken

of: ITC Water Mgmt.

PHONE: ________

TELEPHONED / PLEASE CALL

CALLED TO SEE YOU / WILL CALL AGAIN

WANTS TO SEE YOU / URGENT

RETURNED YOUR CALL: ________

FILE: ________

MESSAGE:

#2201-03-04-07

(Well Designation)

[Handwritten note: West Lock]

Operator: ________
Well No. 
#220-03-04-07

Use to be O&Co Pump 2 and currently utilized by the City to irrigate West Loch Golf Course. It is on West Loch Golf Course property. City took over well.

1982
Showa ½ mgd or has it been increased? And if so — to what.

No, request came in on 5/13/88 ($0.5 mgd) for an increase but was rejected by letter 4/8/88. Present WVP still at 0.5 mgd.
Mr. Randy Wong
City & County of Honolulu
Department of Housing & Community Development
650 S. King St., 5th Floor
Honolulu, HI 96813

Dear Mr. Wong:

Enclosed is a copy of the public notice for your water use permit application for Well Nos. 2201-03, 04, 07, 15 which will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

Please be aware that there may be objections to your application. If objections are made, the objector is required to file such objections with the Commission and is also required to send you a copy of the objections. You, or any other party, may respond to objections by filing a brief in support of your application with the Commission within ten (10) days of the filing of an objection. You, or the other party, must also send a copy of the response to the objector.

We are seeking a determination from the Office of Environmental Quality Control as to the applicability of Chapter 343 to water use permits issued by the Commission. If you have completed the environmental review process for this project pursuant to Chapter 343, please submit the final disclosure document.

If you have any questions, please contact Lenore Nakama at [Redacted]

Sincerely,

RAE M. LOUI
Deputy Director

LN:ss
Enclosure
TO: Aquatic Resources
    Forestry and Wildlife/Natural Area Reserve System
    Historic Preservation
    Land Management
    Office of Conservation and Environmental Affairs
    State Parks
    Water and Land Development

FROM: Rae M. Loui, Deputy Director
      Commission on Water Resource Management

SUBJECT: Request for Comments
         Water Use Permit Application
         Waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or inconsistencies with the programs, plans, and objectives specific to your division only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at ___________

LN:ss
Attachment(s)

Response:

( ) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ___________________________________________ Phone: __________________

Signed: ___________________________________________ Date: __________________
TO: Other Interested Parties

FROM: Rae M. Loui, Deputy Director
Commission on Water Resource Management

SUBJECT: Request for Comments
Water Use Permit Application
Waipahu-Waialua Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu Star Bulletin issues of August 14 and 21, 1995.

We would appreciate your review of the attached application for any conflicts or interferences with the programs, plans, and objectives of the organization or agency that you represent. Written objections should be made in accordance with Section 13-171-18 of our Administrative Rules and must be filed by the September 6, 1995 deadline.

If you have any questions regarding this application, please contact Lenore Nakama at

LN:ss
Attachment(s)

Response:

( ) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ___________________________ Phone: ___________________________

Signed: ________________________________ Date: ___________________________
TO: Honorable Kali Watson, Chairperson
    Department of Hawaiian Home Lands

    Honorable Lawrence Miike, Director
    Department of Health

    Honorable Clayton H.W. Hee, Chairperson
    Office of Hawaiian Affairs

    Ms. Esther Ueda, Executive Officer
    Land Use Commission

    Mr. Raymond Sato, Manager & Chief Engineer
    Honolulu Board of Water Supply

    Mr. Patrick Onishi, Director
    Department of Land Utilization

    Mrs. Cheryl D. Soon, Chief Planning Officer
    Planning Department

FROM: Michael D. Wilson, Chairperson
      Commission on Water Resource Management

SUBJECT: Water Use Permit Application
         waipahu-Waiawa Groundwater Management Area, Oahu

Transmitted for your review and comment is a copy of a water use permit application for
the City and County of Honolulu, Department of Housing and Community Development for Well
Nos. 2201-03, 04, 07, 15. Public notice of this application will be published in the Honolulu

We would appreciate your review of the attached application for any conflicts or
inconsistencies with the programs, plans, or objectives specific to your organization or
department only. Please return this cover memo form by September 6, 1995.

If you have any questions regarding this application, please contact Lenore Nakama at

Response:

( ) We have no objections
( ) Not subject to our regulatory authority & permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
Honorable Jeremy Harris, Mayor
City & County of Honolulu
City Hall
Honolulu, HI 96813

Dear Mayor Harris:

Notice of an Application for Water Use Permit
Waipahu-Waiawa Groundwater Management Area, Oahu

In accordance with the Department of Land and Natural Resources Administrative Rules, Section 13-171-17(a), we are sending you a copy of the public notice for the water use permit application for the City and County of Honolulu, Department of Housing and Community Development for Well Nos. 2201-03, 04, 07, 15, which will be published in the Honolulu Star Bulletin.

In addition, Section 13-171-13(b), of our Administrative Rules, states:

"Within sixty days after receipt of notice of a permit application, the county shall inform the commission if the proposed use is inconsistent with the county land use plans and policies."

We have attached a copy of the application for your review and would appreciate receiving your comments, within the next sixty (60) days, on whether this water use is consistent with county plans and policies.

Aloha,

[Signature]
MICHAEL D. WILSON

Attachments
PUBLIC NOTICE

Application for Water Use Permit
Waipahu-Waiawa Groundwater Management Area, Oahu

The following application for water use permit has been received and is hereby made public in accordance with Department of Land and Natural Resources Administrative Rules 13-171, "Designation and Regulation of Water Management Areas."

EP 2 (Well Nos. 2201-03, 04, 07, 15)
Applicant: City & County of Honolulu
Dept. of Housing & Community Development
650 S. King St., 5th Floor
Honolulu, HI 96813
Date Completed Application Received: June 30, 1995
Aquifer: Waipahu-Waiawa System, Pearl Harbor Sector, Oahu
Water Source: EP 2 (Well Nos. 2201-03, 04, 07, 15) at Honouliuli, Oahu, Tax Map Key 9-1-17 & 16 (por)
Quantity Requested: 3,500,000 gallons per day.
New Water Use: Irrigation supply for 498 acres grass, trees, and foliage for golf course(s), landscape, and common areas
Place of Water Use: West Loch & Ewa Villages Subdivisions at multiple tax map keys (Zone 9, section 1)

The City is proposing to replace the pumps in the existing EP 2 well battery (2201-03,04,07) with two 1400 gpm capacity pumps and to construct a new backup well (2201-15) for future irrigation use at the West Loch and Ewa Villages golf course(s) and subdivision(s).

Written objections or comments on the above application may be filed by any person who has property interest in any land within the hydrologic unit of the source of water supply, any person who will be directly and immediately affected by the proposed water use, or any other interested person. Written objections shall: (1) state property or other interest in the matter (provide TMK information); (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; and (3) state all grounds for objections to the proposed permit. Written objections must be received by September 6, 1995. Objections must be sent to 1) the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809 and 2) the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT

[Signature]
RAE M. LOUI
Chairperson

Dated: 7/31/95

Mr. Randy Wong  
City & County of Honolulu  
Department of Housing and  
Community Development  
650 S. King Street, 5th Floor  
Honolulu, Hawaii 96813  

Dear Mr. Wong:

Applications for Water Use Permit and  
Well Construction/Pump Installation Permit  
EP 2 (Well Nos. 2201-03, 04, 07)  
Waipahu-Waiawa Groundwater Management Area, Oahu  

We acknowledge receipt, on November 23, 1994, of your applications for water use permit and combined well construction/pump installation permit for EP 2 (Well Nos. 2201-03, 04, 07).

As was discussed with your consultant, additional information is required to complete your well construction/pump installation permit application (enclosed). Please describe the proposed construction work for each well in greater detail. For example, the proposed well section (on the back of the application) indicates a total depth of 250 ft; however, Well No. 2201-07 has a total depth of 282 ft. at present.

The current county zoning code for each Tax Map Key (or portion thereof) listed in Table 1 (attached) should be provided to complete your water use permit application. The "Urban" land use designation is a state land use designation. We will keep your water use permit application on hold pending receipt of county zoning information to complete your water use permit application and resubmittal of your well construction/pump installation permit application.

If you have any questions, please contact Lenore Nakama at [Contact Information].

Sincerely,

[Signature]
RAE M. LOUI  
Deputy Director

LN:ss  
Enclosures

c: Gregg H. Hiyakumoto, R.M. Towill Corp.
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>Urban</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>Urban</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>Urban</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>Urban</td>
<td>24.90</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>Urban</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>Urban</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>Urban</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-17:por. 46, 47, 48, 54, 55</td>
<td>Urban</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-17:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>Urban</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-17:por. 46, 47, 48, 54, 55</td>
<td>Urban</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>Urban</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>Urban</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>Urban</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>Urban</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td>284.32</td>
<td></td>
<td>2,043,820</td>
<td></td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>4.00</td>
<td></td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>Urban</td>
<td>3.50</td>
<td></td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>1.40</td>
<td></td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>14.60</td>
<td></td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>4.10</td>
<td></td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>9-1-17:por. 62, 63, 64, 65, 66</td>
<td>Urban</td>
<td>18.00</td>
<td></td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>Urban</td>
<td>160.00</td>
<td></td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>Urban</td>
<td>3.40</td>
<td></td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>Urban</td>
<td>4.60</td>
<td></td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td>213.6</td>
<td></td>
<td>1,508,900</td>
<td></td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td>497.92</td>
<td></td>
<td>3,552,720</td>
<td></td>
</tr>
</tbody>
</table>
 APPLICATION FOR PERMIT

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
      Firm/Name: City & County of Honolulu
      Contact Person: Randy Wong
      Address: 650 S. King Street, 5th Floor
               Honolulu, HI 96813

   (b) LANDOWNER
      Firm/Name: City & County of Honolulu
      Contact Person: Randy Wong
      Address: 650 S. King Street, 5th Floor
               Honolulu, HI 96813

   (c) CONTRACTOR
      Firm/Name: Unknown at this time.
      Ph: ___________________________
      Address ___________________________
      Contractor's C-97 License No. ___________________________

2. WELL LOCATION/TAX MAP KEY:
   WELL LOCATION/NAME: West Loch
   Island: Oahu
   Address: Honolulu, Oahu, Hawaii
   Tax Map Key: 9-1-17

   (Attach a USGS map, scale 1"=2000', and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
      Drill New Well
      Modify Existing Well
      Redrill
      Install New Pump
      Replace Pump
      Modify Pump
      * Be sure to complete and submit well abandonment report upon completion of work.

   (b) WELL TYPE:
      Dug
      Bored
      Driven
      Drilled
      Radial
      Is this well a part of a battery of wells? Yes No

   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Pump Type:
   (a) Deep Well Turbine
   (b) Submersible
   (c) Centrifugal

   Rated Pump Capacity: 1400 gallons per minute / each (3 pumps)
   Motor:
   (a) Rotary
   (b) Rotary-Displacement
   (c) Propeller
   (d) Reciprocating
   (e) Impulse
   (f) Electric, rated horsepower of 250+

5. PROPOSED USE:
   Municipal (including hotels, stores, etc.)
   Military
   Domestic (individual, noncommercial water system)
   Industrial
   Irrigation (crop)
   Other

   State Land Use District:
   Urban
   Agriculture
   Rural
   Conservation

   County Zoning (describe) ___________________________

5. (a) PROPOSED AMOUNT OF WITHDRAWAL:
   3.6 million gallons per day

6. (a) METHOD OF FLOW MEASUREMENT:
      Flow-meter
      Open Pipe
      Office Plate
      Well

7. PENDING ACTIONS:
   CDUA
   SMA
   UES
   EA
   NONE

8. REMARKS, EXPLANATIONS:
   The proposed use will be irrigation for common landscaping, parks and golf courses at the City's affordable housing projects of West Loch and Ewa Villages.

   ___________________________
   City & County of Honolulu
   Well Owner (contact: Randy Wong)

   ___________________________
   City & County of Honolulu
   Landowner (contact: Randy Wong)

   ___________________________
   Contractor (unknown)

   ___________________________
   ___________________________
   ___________________________
   Signature
   Signature
   Signature

   ___________________________
   ___________________________
   ___________________________
   Date
   Date
   Date

   ___________________________
   Longitude

   ___________________________
   Aquifer System Name

   ___________________________
   For Official Use Only:
   Date Received
   Date Accepted

   ___________________________
   ___________________________
   ___________________________
   Date
   Date
   Date
**9. PROPOSED WELL SECTION**

Elevation at top of casing: 42 ± ft., msl.

Ground Elevation: 40 ± ft., msl.

Cement Grout: 100 ft.

Rock Packing: N/A ft.

Hole Diameter: 18 in.

Total Depth: 250 ft.

Solid Casing:
- Material: Steel ASTM A-53
- Length: 100 ft.
- Diameter: 14 in.
- Wall thickness: 3/8 in.

Casing: ☑ Perforated ☐ Screen
- Material
- Length: N/A ft.
- Diameter: N/A in.
- Wall thickness: N/A in.
- Openings: __ sq. in./L.F.

Open Hole:
- Length: 150 ft.
- Diameter: 13 in.

Remarks, Explanations (cont'd):

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.*
November 22, 1994

Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Gentlemen:

Subject: Application for Water Use Permit (Ground Water) and
Application for Well Construction and Pump Installation Permit
West Loch and Ewa Villages Projects
Department of Housing and Community Development
City and County of Honolulu

The City Department of Housing and Community Development (DHCD) has projects which are both existing and under construction to provide affordable housing and community amenities.

Originally, the irrigation water source for both Ewa Villages and West Loch was to be provided by caprock wells in the Ewa Villages area. Unfortunately, exploratory well tests by the Board of Water Supply (BWS) yielded poor quality and low capacity.

With both existing and imminent projects to serve, the City is now in the process of searching for a suitable irrigation source. Use of effluent from Honouliuli Wastewater Treatment Plant is appropriate, however, technology and infrastructure prevents any practical application at this time.

With the cessation of sugar cultivation, DHCD is exploring the possibility of reallocating some of the water now assigned to Oahu Sugar Company wells EP 3, 4, 5, 6, 7 and 8 to the City for irrigation use. It is proposed that the City's well EP 2, located in the West Loch Golf Course, be used as the main supply source. EP 2 now has an allocation of 0.5 mgd. It is desired that this allocation be increased to supply the needs of Ewa Villages and West Loch (approximately 3.5 mgd). Hydrologist at BWS believe that the increased draw at well EP 2 would increase its salinity and make it non-potable. Non-potable water is currently supplied by wells EP 3, 4, 5, 6, 7 and 8.
Thank you for your consideration of these applications. Please do not hesitate to call should there be any questions.

Very truly yours,

Greg H. Hiyakumoto
Senior Civil Engineer

Enclosure
APPLICATION FOR WATER USE PERMIT

**PERMITTEE INFORMATION**

1. (a) APPLICANT
   - Firm/Name: State of Hawaii
   - Address: 650 South King Street, 5th Floor
   - Honolulu, HI 96813

   - Contact Person: Randy Wong
   - Phone: [Redacted]

   (b) LANDOWNER OF SOURCE
   - Firm/Name: State of Hawaii
   - Address: 650 South King Street, 5th Floor
   - Honolulu, HI 96813

   - Contact Person: Randy Wong
   - Phone: [Redacted]

**SOURCE INFORMATION**

2. WATER MANAGEMENT AREA:
   - Pearl Harbor
   - ISLAND: Oahu

3. (a) EXISTING WELL/DIVERSION NAME AND STATE NUMBER: 682-2201-03-04-07
   - USE PERMIT 00-01-15

   (b) LOCATION: Address Honolulu, Oahu, HI
   - Tax Map Key: 9 - 1 - 17 & 16
   - (Attach a USGS map, scale 1" = 2000', and a property tax map showing source location referenced to established property boundaries.)

**USE INFORMATION**

6. LOCATION OF PROPOSED WATER USE: (If possible, show on same maps as source location. Otherwise, attach similar maps)
   - (a) Proposed use of water is: Existing
   - (b) Tax Map Key: [Map Key Information]
   - (c) Address: West Loch (682-2201-03-04-07)
   - (d) Current Land Use District: Urban
   - (e) Current County Zoning Code: Municipal Golf Course, Road, Landscape, Municipal Parks

7. QUANTITY OF WATER REQUESTED: 3.5 Million gallons per day (averaged over 1 year)

8. METHOD OF MEASUREMENT:
   - Flowmeter
   - Open-pipe
   - Weir
   - Orifice
   - Other (explain)

9. QUALITY OF WATER REQUESTED:
   - Fresh
   - Brackish
   - Salt
   - Potable
   - Non-Potable

10. PROPOSED USE:
    - Municipal (including hotels, stores, etc.)
    - Industrial
    - Military
    - Other (explain)

**TOTAL NUMBER OF RESIDENCES TO BE SERVED:**

11. TOTAL ACRES TO BE IRRIGATED AND TYPE OF CROP:
    - Grass, Trees, Foliage
    - [Area] [crop]

12. TOTAL ACRES OF WATER WITHDRAWAL OR DIVERSION:
    - 6 a.m. to 6 p.m.
    - (daytime hours of operation, ex. 7 a.m. to 2 p.m.)

13. PROPOSED TIME OF WATER WITHDRAWAL OR DIVERSION:
    - (pending permits, etc.)

14. APPLICANT MUST BRIEFLY DESCRIBE FOLLOWING POTENTIAL RESTRICTIONS ON WATER USE:
    - (a) Impact on Sustainable yield: Since this usage is meant to replace sugar cane irrigation, no impact are anticipated.
    - (b) Instream Flow Standards affected: None
    - (c) Hawaiian Home Lands use affected: None
    - (d) Other existing legal uses affected: None
    - (e) Other (pending permits, EIS, etc.):(i): None

15. REMARKS, EXPLANATIONS:
    - Water use is required for irrigating municipal cemem, landscape, parks, and golf courses at Ewa Villages and West Loch developments to support the City's affordable housing

**NOTE:** Space is needed, continue on back side

For Official Use Only:
- Date Received: [Date]
- Hydrologic Unit No.: [Number]
- Diversion Works No.: [Number]
- State Well No.: [Number]
16. REMARKS, EXPLANATIONS (cont'd): program. These developments are existing and under development/
construction. Currently, West Loch is using Well EP2 and Ewa Villages is using Wells EP3, 4, 5, 6, 7 & 8.
Improvements are proposed at EP2 to supply the entire 3.5 mgd. Exploratory caprock well testing in
the Ewa Villages golf course in 1993 yielded marginal quality water. It is expected that water quality
will continue to degrade now that Oahu Sugar will not irrigate the area. The proposed wells are
essentially a replacement for water use formerly given to EP 3, 4, 5, 6, 7 and 8 and will be over
the same lands.

<table>
<thead>
<tr>
<th>TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT NAME</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Please refer to the attached table.
### TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>Urban</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>Urban</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>Urban</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi - Family</td>
<td>9-1-17:por. 39, 68</td>
<td>Urban</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>Urban</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>Urban</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>Urban</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>Urban</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>Urban</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>Urban</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>Urban</td>
<td>206.00</td>
<td>7,300</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>Urban</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>Urban</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>Urban</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>4.00</td>
<td>6,427</td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>Urban</td>
<td>3.50</td>
<td>6,427</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>1.40</td>
<td>6,427</td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>Urban</td>
<td>14.60</td>
<td>6,427</td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi - Family</td>
<td>por. 9-1-66</td>
<td>Urban</td>
<td>4.10</td>
<td>6,427</td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>Urban</td>
<td>18.00</td>
<td>6,427</td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>Urban</td>
<td>160.00</td>
<td>6,427</td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-1</td>
<td>Urban</td>
<td>3.40</td>
<td>6,427</td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>Urban</td>
<td>4.60</td>
<td>6,427</td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MINUTES OF THE MEETING OF THE
COMMISSION ON WATER RESOURCE MANAGEMENT

DATE: January 16, 1992
TIME: 9:00 a.m.
PLACE: Kalanimoku Building
       Board Room, Room 132
       1151 Punchbowl Street
       Honolulu, Hawaii

ROLL Call: Chairperson Paty called the meeting of the Commission on Water
Resource Management to order at 9:09 a.m.

The following were in attendance:

MEMBERS: Chairperson William Paty
Dr. Michael Chun
Mr. Robert Nakata
Mr. Richard Cox
Dr. John Lewin

EXCUSED: Mr. Guy Fujimura

STAFF: Mr. Manabu Tagomori
Mr. George Matsumoto
Mr. Edwin Sakoda
Mr. Glenn Bauer
Ms. Sherrie Samuels
Mr. Roy Hardy
Mr. William Rozeboom
Ms. Sharon Kokubun

COUNSEL: Mr. William Tam

OTHERS:
Mr. A. Morisako
Mr. Jim Eychaner
Mr. Barry Ching
Mr. Tom Nance
Mr. Dan Jenkins
Mr. Jim Wriston
Mr. Max Shoura
Mr. Brian Burke
Mr. Shigeru Yoshizak
Mr. Rich Pedrini
Ms. Helen Garrigan
Mr. Samuel Keala, Jr.
Mr. Gen Morita
Mr. Futomu Kaji
Mr. A. Locricchio
Ms. Majorie Ziegler
Ms. Mary Prothro
Mr. Rick Fontaine
Mr. Chester Lao
Mr. David Martin
Mr. Michael Burke
Mr. Hugh Morita
Mr. Dan Lum
Mr. Cheng Hsin Chang
Mr. Tim Ayau
Ms. Francine Duncan
Mr. Raymond Pedrini
Ms. Shari Berinobis
Mr. Bob Imose
Mr. Nana Morita
Mr. Teoli Black
Ms. Clara Olds
Ms. Donna Wong
Ms. Shannon Wood

(Although items are shown in a numerical order, some items were moved up to
accommodate the applicants.)

ITEM 1
REVISION OF OAHU SUGAR COMPANY'S GROUND WATER USE PERMITS, PEARL HARBOR WATER MANAGEMENT AREA, OAHU

Mr. Sakoda revised the recommendation on the request of Oahu Sugar Company because they were not comfortable with the words "interim permits":

"That the Commission approve the reduction of OSCo's allocation by 9.76 mgd to 60.62 mgd subject to the condition that water use permits issued according to the proposed revised schedule shall be [interim permits] subject to review and adjustment by 1995."

Mr. Sakoda stated that staff's main concern was that the permits be reviewed by 1995.

Mr. Cox mentioned that this was a substantial decrease from what was given earlier. He understood OSCo still used a large amount of surface water licensed from the state and asked if that was lost would OSCo need to go back to their original approval for water use. He asked OSCo's representative for their comments.

Mr. Michael Burke said they could live with the reallocation as amended by staff. In the numbers on the pump by pump allocation, as the numbers become tighter there would be a need for flexibility between pump allocations. The possibility of the state withdrawing their water would remove substantial water from the Waialae System.

Mr. Cox recalled that the BWS hasn't always followed their pump by pump allocations and asked Mr. Sakoda if formal or informal adjustments had been made. Mr. Hardy replied that allocations and needs were matched as much as possible but adjustments need to be made from time to time. The numbers are not absolute in the sense that in a month by month pumpage, the numbers given are yearly averages. Hopefully, within the time period the numbers would remain within the averages. When reviews were made of all the major water users, OSCo stood out as having the most "cushion". In discussions with OSCo, they agreed upon the reduction to the present allocations.

Chairperson Paty asked where pumps 15 and 16 were located. These pumps had the biggest reduction from 19 to 10 mgd. Mr. Burke said those pumps were just mauka of H-1, between Waipahu and Malaekahau. These pumps irrigate the Ewa plains, which partially supply the Kapolei City and Kapolei Village area. Pumps 3-8 all work together with 15 and 16 as one major system. As long as there is flexibility in the total amount it would be a workable number for OSCo.

Mr. Martin submitted testimony and recommendations (see attached). He asked for the Commission's view on the concerns expressed.

Chairperson Paty understood that they would like to see broader distribution of discussion. Mr. Martin replied that that was correct, a broader distribution of discussion and recognition of other rights that may need to be discussed.

Mr. Nakata asked if people are standing in line for this water. Mr. Hardy asked if Mr. Nakata meant as far as actual applications for water use, there were none at this time. Although staff has been asking for information regarding updates for future demands.

Mr. Nakata felt NHAC's recommendation was appropriate and that the Commission should look at it.
Dr. Lewin asked for the status of applications to the County regarding future water use in that area because the Commission has heard some concerns that there are applications for water exceed what can be provided. Mr. Hardy said he can't answer for the County in so far as what's available in the Hawaii Water Plan because that is more of a long-term plan.

Chairperson Paty recognized that by cutting the use down by 9 mgd does not mean there will be 9 mgd for someone else to use. New wells should be developed and utilized.

Mr. Tagomori commented that like the West Hawaii area, there have been numerous discussions with the BWS in terms of what kind of applications are being requested for their system. Discussions are also ongoing among the major landowners about their water needs. Much of this information is in the Oahu Water Use and Development Plan and it is being reviewed. If there is to be a reallocation, there will be a formal process through the Commission.

Chairperson Paty wanted to assure that Mr. Nakata's concern that NHAC's suggestion be incorporated in the Plan. Mr. Tagomori replied that public hearings and other processes will be followed.

Mr. Cox asked if the reduction of total approved uses to 185 mgd by 1995 was still being looked at. Mr. Tagomori said they are looking at such a plan.

Unanimously approved with the amendment proposed by Mr. Sakoda and with the understanding that there is some flexibility on individual pumps for OSCo. and that staff start looking at long-range plans as suggested (Cox/Chun).

ITEM 7
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION,
APPLICATION FOR A STREAM CHANNEL ALTERATION PERMIT,
UHELEKAWAWA STREAM, WAIPOUU, KAUAI

Referring to the Division of Aquatic Resources preference for an overstream installation if possible, Dr. Lewin asked how it would affect the Commission's general policy in terms of the trade-offs in reducing construction costs to developers versus a policy which mitigates environmental effects that could occur.

Ms. Samuels stated that under the Instream Program a policy statement and management plan is currently being developed. A draft including recommended policy will be available for the Commission sometime this year.

Mr. Cox recalled approving the installation of the sewer system and asked if that project should be coordinated with this project so as not to cause disturbances to the stream at two different times. Mr. Matsumoto stated that the coordination is currently taking place. Mr. Cox stated that he did not notice any referral to coordination of projects in the recommendations. Ms. Samuels said it was not added because she was told the agencies involved were coordinating the matter.

Dr. Chun suggested the representative for the Department of Transportation (DOT) could possibly make a statement to that effect.

Mr. Harold Yoshizaki SEY Engineers, representing the applicant, responded to the DAR's preference for overstream utility lines coordination between
Chairperson and Members
Commission on Water Resource Management
State of Hawaii
Honolulu, Hawaii

Gentlemen:

Revision of Oahu Sugar Company's
Ground-Water Use Permits
Pearl Harbor Water Management Area, Oahu

Background

On May 17, 1989, the Commission on Water Resource Management (CWRM) approved adjustments to water use permits in the Pearl Harbor Water Management Area (PHWMA) to comply with the CWRM's April 19, 1989 revisions to the PHWMA sustainable yields. The adjustments provided for a 5-year reallocation plan which incorporated the conversion of sugar cane cultivation to urban development as well as the estimated Oahu Sugar Co. (OSCo.) optimum basal ground-water demand.

Staff Review of Existing Water Uses

Staff reviewed existing water use patterns and authorized uses for all major water users within the PHWMA. Additionally, the sugar cane land conversion to urban land schedule was reviewed. Discussions and meetings were held with all major users to verify information on water uses. Based upon staff review it is evident that additional water use reductions could be applied to OSCo.'s authorized uses. Under current operations, sugar cane land taken out of production has occurred as scheduled and as anticipated from the May 17, 1989 CWRM action. Under current crop conditions, which reflect the 1989 reallocation plan, OSCo. basal ground-water requirements are currently 60.62 million gallons per day (mgd). This is 9.76 mgd below OSCo.'s scheduled 1992 authorized use from the 1989 5-year plan. OSCo. has agreed that 60.62 mgd would be adequate for their uses in the foreseeable future.

A well-by-well reduction of water use permits has been discussed with OSCo. to achieve the least amount of negative impact to them. The attached table shows the readjusted allocations by wells.
RECOMMENDATION:

That the Commission approve the reduction of OSCo.'s allocation by 9.76 mgd to 60.62 mgd subject to the condition that water use permits issued according to the proposed revised schedule shall be issued subject to review and adjustment by 1995.

Respectfully submitted,

[Signature]

KAZUO G. AKITA
Manager-Chief Engineer

Attachment

APPROVED FOR SUBMITTAL:

[Signature]

WILLIAM W. PATY, Chairperson
### Oahu Sugar Company

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EP2</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>EP3, 6&amp;7, 0.5</td>
<td>5.362</td>
<td>3.687</td>
<td>3.558</td>
<td>3.304</td>
<td>3.304</td>
<td>3.304</td>
<td>3.304</td>
<td>1.919</td>
</tr>
<tr>
<td>EP17A, 17B, 0.4</td>
<td>0.300</td>
<td>0.300</td>
<td>0.300</td>
<td>0.300</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>EP22A</td>
<td>6.478</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
<td>4.000</td>
</tr>
<tr>
<td>Subtotal (OSCo)</td>
<td>78.651</td>
<td>68.808</td>
<td>65.749</td>
<td>64.293</td>
<td>55.610</td>
<td>55.610</td>
<td>55.610</td>
<td>50.069</td>
</tr>
</tbody>
</table>

### Waianae Basal Aquifer

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EP5</td>
<td>6.000</td>
<td>4.500</td>
<td>4.500</td>
<td>4.500</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>EP10, 7, 1, 1</td>
<td>7.000</td>
<td>4.700</td>
<td>4.700</td>
<td>1.590</td>
<td>5.010</td>
<td>5.010</td>
<td>5.010</td>
<td>2.564</td>
</tr>
<tr>
<td>Subtotal (OSCo)</td>
<td>13.000</td>
<td>9.200</td>
<td>9.200</td>
<td>6.090</td>
<td>5.010</td>
<td>5.010</td>
<td>5.010</td>
<td>2.564</td>
</tr>
</tbody>
</table>

Total OSCo: 91.651 78.008 74.949 70.383 60.620 60.620 60.620 52.633
December 6, 1991

Mr. Manabu Tagomori
Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
P. O. Box 373
Honolulu, HI 96809

Dear Manabu:

Enclosed are a listing of fields actually withdrawn from Oahu Sugar Company's demise by Campbell Estate via Area and Rental Agreements and a list of basal well by well pumpage requirement to total 60.62 MGD when our present allocation is readjusted.

If any other information is required, please give me a call.

Very truly yours,

W. D. Balfour, Jr.
Vice President and Manager

WDB:yk
enclosures
OAHU SUGAR COMPANY, LTD.
Recommended Distribution of Revised 60.62 MGD
Basal Groundwater Allocation

<table>
<thead>
<tr>
<th>Koolau Sub-area:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EP2</td>
<td>0.000 MGD</td>
</tr>
<tr>
<td>EP3,4</td>
<td>3.304 MGD</td>
</tr>
<tr>
<td>EP5,6</td>
<td>8.000 MGD</td>
</tr>
<tr>
<td>EP7,8</td>
<td>6.813 MGD</td>
</tr>
<tr>
<td>EP15,16</td>
<td>12.154 MGD</td>
</tr>
<tr>
<td>WP17A,17B</td>
<td>0.000 MGD</td>
</tr>
<tr>
<td>WP1</td>
<td>1.151 MGD</td>
</tr>
<tr>
<td>WP2A,2B</td>
<td>5.594 MGD</td>
</tr>
<tr>
<td>WP2C,4C</td>
<td>5.594 MGD</td>
</tr>
<tr>
<td>WP4A,4B</td>
<td>4.000 MGD</td>
</tr>
<tr>
<td>WP6A,6B</td>
<td>0.000 MGD</td>
</tr>
<tr>
<td>WP7A,7B,7C</td>
<td>9.000 MGD</td>
</tr>
<tr>
<td></td>
<td>=======</td>
</tr>
<tr>
<td></td>
<td>55.610 MGD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waianae Sub-area:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>WP5</td>
<td>0.000 MGD</td>
</tr>
<tr>
<td>EP10</td>
<td>5.010 MGD</td>
</tr>
<tr>
<td></td>
<td>=======</td>
</tr>
<tr>
<td></td>
<td>5.010</td>
</tr>
</tbody>
</table>

TOTAL 60.620 MGD
## OAHU SUGAR COMPANY, LTD

Campbell Estate Sugarcane Acreage Withdrawals and Cessation of Cultivation on Lands Supplied With Water from the Pearl Harbor Water Management Area Basal Aquifer

<table>
<thead>
<tr>
<th>Area and Rental</th>
<th>Effective Date</th>
<th>Field Agrmt #</th>
<th>Signed Date</th>
<th>Number</th>
<th>Cane Area Withdrawn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed Agreements:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61 5/31/88 8/16/88</td>
<td>57</td>
<td>0.197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62 5/26/88 11/10/88</td>
<td>48</td>
<td>33.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63 9/21/88 1/19/89</td>
<td>69</td>
<td>63.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64 4/16/89 3/8/90</td>
<td>80</td>
<td>4.571</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 5/1/89 3/8/90</td>
<td>77</td>
<td>114.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66 11/10/88 3/8/90</td>
<td>76</td>
<td>40.195</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>81</td>
<td>94.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pending Agreements:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68 4/16/89</td>
<td>14</td>
<td>52.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 6/13/90</td>
<td>16</td>
<td>55.113</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71 10/20/89</td>
<td>74</td>
<td>59.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73 10/19/89</td>
<td>35</td>
<td>0.086</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74 11/18/88</td>
<td>69</td>
<td>65.586</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75 11/12/88</td>
<td>92</td>
<td>76.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76 10/26/90</td>
<td>93</td>
<td>36.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77 4/23/88</td>
<td>57</td>
<td>146.266</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78 4/10/89</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>829.328</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79 5/2/89</td>
<td>20</td>
<td>21.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80 5/1/90</td>
<td>12</td>
<td>139.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81 10/19/90</td>
<td>86</td>
<td>2.067</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83 10/12/90</td>
<td>64</td>
<td>87.842</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REGISTRATION OF WELL
AND DECLARATION OF WATER USE

INSTRUCTIONS: Please type or print. If information is not available or not applicable, indicate as N/A. Fill out as completely as possible, sign, and file form with the Division of Water Resource Management, P.O. Box 373, Honolulu, Hawaii 96809. Phone 548-3448 or 544-7543 for assistance.

BATTERY OF WELLS: For a battery of wells, on the surface, in a tunnel, or in a shaft, submit a registration form for each well together with a single map or plot plan showing layout of wells.

STATE WELL NO.: 2201-04.07
WELL NAME OR DESIGNATION: OLD 60-2
SOURCE OR STATION NAME (For a battery of wells): WEST LOCH GOLF COURSE WELL

A. WELL OPERATOR
Firm name: C E C PARKS & ASSOCIATION
Contact person: 
Address: 650 S. KING
HONOLULU HI
Zip: 96813 Phone: 

B. OWNER OF WELL SITE
Firm name: C & C
Contact person: 
Address: 
Zip: 

C. WELL LOCATION
Tax Map Key: 9-1-17.6 Town, Place, District: WAIANU, EWA
Attach USGS "Quad" map (scale 1:24,000), tax map, or other map showing the well location.

D. WELL DATA
For Drilled Wells, submit "as-built" drawing, driller's log, and pump test results, and complete items below.
For Tunnels and Shachts, submit construction drawings, plot plan, or sketch map.

Ground elevation (Mean sea level): -40 ft.
Reference point (Used to measure depth to water): Elevation: -40 ft.
Description:GameManager

Depth to water (Below reference point): 25 ft.
Maximum recorded chloride: 30 ppm
Minimum recorded chloride: 10 ppm
Maximum chloride in 1987: N/A ppm

E. INSTALLED PUMP DATA
Pump type: Vertical shaft
Power: Diesel, HP
Pump capacity: _______ gallons per minute
Pump installation contractor: 

For Official Use Only:
Date received: 1-15-94 Date accepted:
Field checked by: Date: Latitude: Hydrologic Unit:
Comments: Longitude: State Well No.: 

References: Hawaii Revised Statutes, Chapter 174C.
Hawaii Administrative Rules, Chapters 13-167 to 13-171.
F. DECLARATION OF WATER USE

NOTE: The purpose of the Declaration of Water Use is to obtain information necessary for the management of the State's water resources. The Declaration does not confer a legal right to water or its use.

Water use data are recorded: □ Daily □ Weekly □ Monthly

Method of measurement: □ Flow Meter □ Orifice

Quantity of Use (Report metered or estimated monthly water use from the well described on the reverse side of this form, for the calendar years 1983 through 1987. For a battery of wells which are not individually metered, but which are connected to a single meter or other measuring device, report total use from the battery.):

WATER USE, IN GALLONS x 1000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>180</td>
<td>750</td>
<td>380</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>February</td>
<td>650</td>
<td>880</td>
<td>140</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>March</td>
<td>130</td>
<td>1000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>April</td>
<td>1260</td>
<td>1410</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>May</td>
<td>2370</td>
<td>1520</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>June</td>
<td>1770</td>
<td>1760</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>July</td>
<td>1960</td>
<td>1280</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>August</td>
<td>3120</td>
<td>1930</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>September</td>
<td>1680</td>
<td>1910</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>October</td>
<td>1570</td>
<td>1570</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>November</td>
<td>1810</td>
<td>450</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>December</td>
<td>1130</td>
<td>1360</td>
<td>36</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ANNUAL</td>
<td>1050</td>
<td>1360</td>
<td>36</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Minimum day's use: 85460 gallons Maximum day's use: 14617 gallons

Typical times of usage: ___________ 

Type of Use (Check all category boxes that apply and provide additional information as indicated.):

<table>
<thead>
<tr>
<th>Category</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Municipal (including resorts, hotels, businesses)</td>
<td></td>
</tr>
<tr>
<td>□ Domestic (systems serving 25 people or less)</td>
<td></td>
</tr>
<tr>
<td>☑ Irrigation</td>
<td></td>
</tr>
<tr>
<td>□ Number of service connections: ___________</td>
<td></td>
</tr>
<tr>
<td>□ Acres Irrigated: 140</td>
<td></td>
</tr>
<tr>
<td>□ Crop(s):</td>
<td>□ Sugar</td>
</tr>
<tr>
<td></td>
<td>□ Other (specify):</td>
</tr>
<tr>
<td>□ Non-Crop:</td>
<td>□ Landscape</td>
</tr>
<tr>
<td></td>
<td>□ Other (specify):</td>
</tr>
<tr>
<td>□ Method:</td>
<td>□ Drip</td>
</tr>
<tr>
<td></td>
<td>□ Cooling</td>
</tr>
<tr>
<td></td>
<td>□ Other (specify):</td>
</tr>
<tr>
<td>□ Industrial</td>
<td></td>
</tr>
<tr>
<td>□ Military</td>
<td></td>
</tr>
<tr>
<td>□ Other</td>
<td></td>
</tr>
<tr>
<td>□ Specify (livestock, aquaculture, etc.):</td>
<td></td>
</tr>
</tbody>
</table>

I declare that the contents of the above Declaration of Water Use are, to the best of my knowledge and belief, true, correct, and complete.

Water User's Signature: __________________________ Date: ___________

Printed Name: __________________________ Firm or Title (Well Operator, etc.): __________________________
3/24/88

I'll get a map and call you for pickup.

Yukio Takeda

Mr. K. Park, Esq.

Yukio Takeda

3/24/88
Honorable Hiram Kamaka, Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kamaka:

This is to acknowledge receipt of your letter of May 13, 1988, and application for a Water Use Permit for an additional water withdrawal of 1.0 mgd from Wells 2201-03, 04, 07 (EP-2).

Under the present situation, all water available in the Koolau Subarea has been allocated. The sustainable yield is 200 million gallons per day (mgd) and the total allocation is 199.998 mgd. We are therefore unable to approve your request for an additional 1.0 mgd from EP-2.

However, in accordance with our administrative rules, transfers of water use from one user to another may be considered by the Commission.

If you have any questions, please contact Mr. Manahu Taomori, Deputy for Water Resource Management, at 88888888888.

Very truly yours,

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management
May 13, 1988

Honorable William W. Paty, Chairperson
Board of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: Request for 1 mgd "Permitted Use" from Wells 2201-03, 04, 07

Thank you for expeditiously processing and approving transfer of 0.5 mgd "preserved use" from Wells 2201-03, 04, 07 of Oahu Sugar Company's Pump EP-2 to the City and County of Honolulu.

We request an additional 1 mgd of "permitted use" from these same wells for irrigation of the planned golf course, park and greenbelt areas of the West Loch Estates project.

The application for the additional "permitted use" is enclosed.

Sincerely,

HIRAM K. KAMAKA, Director

HKK:jf

Attach.

cc: Managing Director
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809

DEPARTMENT MASTER APPLICATION FORM

I. LANDOWNER/WATER SOURCE OWNER
(If State land, to be filled in by Government Agency in control of property)
City & County of Honolulu
Dept. of Parks & Recreation
Name ________________________________
Address 650 South King Street
Honolulu, HI 96813

Telephone No. __________________________
SIGNATURE ____________________________
Date MAY 13, 1983

II. APPLICANT (Water Use, omit if applicant is landowner)
Name ________________________________
Address ______________________________

Telephone No. __________________________
Interest in Property ______________________
(Indicate interest in property; submit written evidence of this interest)
*SIGNATURE ____________________________
Date ________________________________

*If for a Corporation, Partnership, Agency or Organization, must be signed by an authorized officer.

III. TYPE OF PERMIT(S) APPLYING FOR
( ) A. State Lands

( ) B. Conservation District Use

( ) C. Withdraw Water From A Ground Water Control Area

( ) D. Supply Water From A Ground Water Control Area

( ) E. Well Drilling/Modification

IV. WELL OR LAND PARCEL LOCATION REQUESTED

District Ewa
Island Oahu
County Honolulu
Tax Map Key Honolulu area, along Ft. Weaver Road
Area of Parcel West Loch golf course
(Indicate in acres or sq. ft.) 180+ acres
Term (if lease) ______________________________
State of Hawaii
Department of Land and Natural Resources

APPLICATION FOR: (check one)

☒ PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE
☐ PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Instructions: Fill out, sign, and send application with pertinent attachments to Dept. of Land & Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

City & County of Honolulu
650 S. King St.
Dept. of Parks & Recreation

1. NAME OF APPLICANT: Dept. of Parks & Recreation
Address: Hon., HI 96813

2. REQUESTED BENEFICIAL USE OF WATER:
☐ Domestic ☐ Municipal ☐ Military ☐ Agricultural ☐ Industrial ☐ Other ____________________________ (specify)

Appropriately describe nature and purpose of requested use: See attachment

Proposed commencement date of water use:

3. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:
Average Annual 1 mgd; Maximum Month 1.5 mgd; Maximum Day 1.5 mgd

Appropriately describe schedule or times of taking requested withdrawal:
Withdrawal in accordance with irrigation schedule of golf course, park and greenbelt areas.

4. NATURE AND TERM OF REQUESTED PERMIT: ☐ Temporary ☐ Permanent
Requested period of permit ____________________________

5. PROPOSED SOURCE OF WATER SUPPLY:
☐ Existing source ☐ Modification of existing source ☐ New source
Briefly describe existing or proposed source and any related facilities and submit map, plot plan, and plans or drawings of source of supply: Wells 2201-03, 04, 07 of Pump EP-2

If construction work is proposed for new or modified existing source, give:
Commencement Date ____________________________ Completion Date ____________________________

6. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY
In a separate attachment to this application, applicant must provide a written assessment addressing the desirability of issuing the requested permit, including such considerations as the availability of water, the beneficial purpose of the proposed water use, and the impact, if any, of the proposed water use on existing permitted uses, preserved uses, and individual household uses.

Signature: ____________________________ Date: MAY 13 1988
Water User or Supplier

Signature: ____________________________ Date: MAY 17 1988
Owner of Water Source

In accordance with Department Regulation No. 9, every permit approved and issued by the Board of Land & Natural Resources shall be for a specified period of time, for a specified beneficial use, subject to suspension and revocation, and subject to the shortage and emergency powers of the Board. Consideration of applications for a permit shall include: availability of water, beneficial purpose of water use, non-impairment of the most beneficial use and development of the water resources in the designated area, and no substantial and material interference with existing uses of water.

For Official Use:
Docket No. ____________________________
180 days ____________________________
Board Approved Disapproved ____________________________
Well No. ____________________________
2. **REQUESTED BENEFICIAL USE OF WATER:**

Appropriately describe nature and purpose of requested use: An additional 1.0 mgd "permitted use" from EP Pump 2, Wells 2201-03, 04, 07 will be used to provide part of the total irrigation requirements of 1.5 mgd to irrigate the golf course, park and greenbelt areas of the City's proposed West Loch Estates project. Proposed commencement date of water use: June 1988.

6. **ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:**

EP Pump 2 has an existing "preserved use" of 0.5 mgd. The original "preserved use" assigned EP Pump 2 at the time of designation was 1.699 mgd. EP Pump 2 has historically provided water in excess of 1.5 mgd prior to designation of the Pearl Harbor Ground Water Control Area.

The City and County, Department of Parks and Recreation acquired EP Pump 2 (Wells 2201-03, 04, 07) from Oahu Sugar Company for the purpose of providing water to irrigate the golf course, park and common areas for the proposed West Loch Estates development. The "preserved use" for EP Pump 2 was transferred to the City's Department of Parks and Recreation. There should be no adverse impact to the Pearl Harbor groundwater basin as a result of this transfer.

We understand that the Department of Land and Natural Resources has recently completed its re-evaluation of the sustainable yields of the Pearl Harbor Basin. This request for 1.0 mgd "permitted use" is contingent on additional water being available for allocation in the Pearl Harbor Ground Water Control Area.

The City and County of Honolulu, Department of Parks and Recreation will install, operate and maintain the transmission, distribution and storage facilities required to utilize EP Pump 2 as a source of irrigation water for the West Loch project.
Dear Mr. Kamakau,

This is EP-2. Under the present situation, all water available in the Koolau Subarea has been allocated. The sustainable yield is 200 million gallons per day and the total allocation is 199.998 mgd. We are therefore unable to approve your request for an additional 0.002 mgd from EP-2.

However, in accordance with our administrative rules, transfers of water use from one permit to another may be considered by the Commission.

If you have any questions... at 548-7533.
DIOCON OF WATER RESOURCE MANAGEMENT

FROM: [Signature]  DATE: 6-19  FILE IN:

TO: INITIAL:

- M. TAGOMORI
- D. Lum
- G. Matsumoto
- G. Akita
- L. Chang
- Y. Shiroma
- E. Sakoda
- D. Nakano
- S. Miyamoto
- S. Samuels
- S. Chow
- P. Matsuo
- H. Young
- R. Suzuki
- N. Kaneshiro
- S. Kokubun
- D. Hinoada
- L. Liu
- F. Ching

PLEASE:

- See Me
- Take Action By
- Route to Your Branch
- Review & Comment
- Draft Reply
- Acknowledge Receipt
- Xerox copies
- File
- Mail
- For Information

REMARKS:

This is more born on our part.

Ed, let's try again —

[Handwritten note: "state: (1) Under present"]

[Handwritten note: "However, situation later altered"]

[Handwritten note: "[Two numbers: 1. 2.]"]

[Handwritten note: "Rules away between to [illegible] all water available in the area. Water area has been allocated. The 5th is 700 and total allocation is"]
Honorable Hiram Kamaka, Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kamaka:

This is to acknowledge receipt of your letter of May 13, 1988, and application for a Water Use Permit for an additional water withdrawal of 1.0 mgd from Wells 2201-03,04,07 (EP-2).

We are presently in the process of re-evaluating the availability of ground water in the Pearl Harbor area. Until the re-evaluation is completed, we will not be acting upon any new requests for Water Use Permits. We are therefore returning your application.

If you have any questions, please contact Mr. Manabu Tagomori, Deputy for Water Resource Management, at [redacted]

Very truly yours,

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management
SURVEY BRANCH

Vision of Water Resource Management

FROM: ____________ DATE: 5/19/88 FILE IN: ____________

TO: INITIAL: ____________

✓ D. LUM

✓ E. Sakoda
D. Nakano
P. Haraguchi
R. Jinnai
M. Ohye
D. Hamada
K. Oshiro
M. Tagomori
G. Matsumoto
G. Akita
L. Chang
S. Kokubun

PLEASE:

☐ See Me
☐ Call
☑ Review & Comment
☐ Take Action
☐ Investigate & Report
☐ Draft Reply
☐ Acknowledge Receipt
☐ Type Draft
☐ Type Final
☐ Xerox copies
☐ File
☐ Mail

REMARKS:

WUP application for additional 1.0 mad from EP2 source. Board just transferred 0.5 mad from OSCo.

FOR YOUR

☐ Approval
☐ Signature
☐ Information

on 23 Apr 88.
Kamaka (D)
May 18, 1988

Honorable Hiram Kamaka, Director
Department of Parks and Recreation
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Kamaka:

This is to acknowledge receipt of your letter of May 13, 1988, and attached application for a Water Use Permit for an additional 1.0 mgd from Wells 2201-03, 04, 07 (EP-2).

We are presently in the process of re-evaluating the availability of ground water in the Pearl Harbor area. Until the re-evaluation is completed, we will not be acting upon any new requests for Water Use Permits. We are therefore returning your application. Should water become available, we will ask you to resubmit the application at a later date.

If you have any questions, please contact Mr. Manabu Tagomori, Deputy for Water Resource Management.

Very truly yours,

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management
May 13, 1988

Honorable William W. Paty, Chairperson
Board of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: Request for 1 mgd "Permitted Use" from Wells 2201-03, 04, 07

Thank you for expeditiously processing and approving transfer of 0.5 mgd "preserved use" from Wells 2201-03, 04, 07 of Oahu Sugar Company's Pump EP-2 to the City and County of Honolulu.

We request an additional 1 mgd of "permitted use" from these same wells for irrigation of the planned golf course, park and greenbelt areas of the West Loch Estates project.

The application for the additional "permitted use" is enclosed.

Sincerely,

HIRAM K. KAMAKA, Director

HKK:jf

Attach.

cc: Managing Director
State of Hawaii
Department of Land and Natural Resources

APPLICATION
FOR:

☒ PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE
☐ PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Instructions: Fill out, sign, and send application with pertinent attachments to Dept. of Land & Natural Resources, P.O. Box 373, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

1. NAME OF APPLICANT: City & County of Honolulu
   Address: 650 S. King St.
   Recreation

2. REQUESTED BENEFICIAL USE OF WATER:
   ☐ Domestic ☐ Municipal ☐ Military ☐ Agricultural ☐ Industrial ☐ Other _______
   (specify)
   Appropriate describe nature and purpose of requested use: See attachment

   Proposed commencement date of water use:

3. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:
   Average Annual 1 mgd; Maximum Month 1.5 mgd; Maximum Day 1.5 mgd.
   Appropriately describe schedule or times of taking requested withdrawal:
   Withdrawal in accordance with irrigation schedule of golf course, park
   and greenbelt areas.

4. NATURE AND TERM OF REQUESTED PERMIT:
   ☐ Temporary ☒ Permanent
   Requested period of permit

5. PROPOSED SOURCE OF WATER SUPPLY:
   ☒ Existing source ☐ Modification of existing source ☐ New source
   Briefly describe existing or proposed source and any related facilities and submit map,
   plot plan, and plans or drawings of source of supply:
   Wells 2201-03, 04, 07 of Pump EP-2

   If construction work is proposed for new or modified existing source, give:
   Commencement Date ________________________ Completion Date ________________________

6. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY
   In a separate attachment to this application, applicant must provide a written assessment
   addressing the desirability of issuing the requested permit, including such considerations as
   the availability of water, the beneficial purpose of the proposed water use, and the impact,
   if any, of the proposed water use on existing permitted uses, preserved uses, and individual household uses.

   Signature: ___________________________ Date: ________________________
   Water User or Supplier

   Signature: ___________________________ Date: ________________________
   Owner of Water Source

In accordance with Department Regulation No. 9, every permit approved and issued by the Board of Land & Natural Resources shall be for a specified period of time, for a specified beneficial use, subject to suspension and revocation, and subject to the shortage and emergency powers of the Board. Consideration of applications for a permit shall include: availability of water, beneficial purpose of water use, non-impairment of the most beneficial use and development of the water resources in the designated area, and no substantial and material interference with existing uses of water.

For Official Use:

Docket No. ___________________________
180 days
Board Approved ________ Disapproved ________
Well No. ___________________________
2. REQUESTED BENEFICIAL USE OF WATER:

Appropriately describe nature and purpose of requested use: An additional 1.0 mgd "permitted use" from EP Pump 2, Wells 2201-03, 04, 07 will be used to provide part of the total irrigation requirements of 1.5 mgd to irrigate the golf course, park and greenbelt areas of the City's proposed West Loch Estates project. Proposed commencement date of water use: June 1988.

6. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:

EP Pump 2 has an existing "preserved use" of 0.5 mgd. The original "preserved use" assigned EP Pump 2 at the time of designation was 1.699 mgd. EP Pump 2 has historically provided water in excess of 1.5 mgd prior to designation of the Pearl Harbor Ground Water Control Area.

The City and County, Department of Parks and Recreation acquired EP Pump 2 (Wells 2201-03, 04, 07) from Oahu Sugar Company for the purpose of providing water to irrigate the golf course, park and common areas for the proposed West Loch Estates development. The "preserved use" for EP Pump 2 was transferred to the City's Department of Parks and Recreation. There should be no adverse impact to the Pearl Harbor groundwater basin as a result of this transfer.

We understand that the Department of Land and Natural Resources has recently completed its re-evaluation of the sustainable yields of the Pearl Harbor Basin. This request for 1.0 mgd "permitted use" is contingent on additional water being available for allocation in the Pearl Harbor Ground Water Control Area.

The City and County of Honolulu, Department of Parks and Recreation will install, operate and maintain the transmission, distribution and storage facilities required to utilize EP Pump 2 as a source of irrigation water for the West Loch project.
DEPARTMENT OF LAND AND NATURAL RESOURCES

PERMIT
TO WITHDRAW AND USE GROUND WATER

Applicant: C&C Dept of Parks & Rec. Application Date: 2/26/88
Address: 650 S. King St., Hon., HI 96813
Ground Water Control Area: Pearl Harbor Subarea: Koolau
Well(s) Name: EP2 State Well No.(s): 2201-03, 04, 07
Amount of Withdrawal: (Average Annual) 0.5 mgd
Beneficial Purpose of Withdrawal: Municipal-Irrigation
Area or Projects Served: West Loch Estates

The applicant is hereby granted a permit to withdraw and use ground water from the source identified above, in accordance with Chapter 177, HRS, Administrative Rule, Chapter 166 of Title 13; and the following:

General Conditions. (1) the water use authorized by this permit must be for the beneficial purpose described in this permit; (2) the use must not interfere substantially and materially with existing individual household uses, existing preserved uses, or existing permitted uses; (3) the use is subject to the shortage and emergency powers of the Board of Land and Natural Resources; (4) this permit may be suspended or revoked in accordance with Chapter 166 of Title 13; (5) the permit holder may be required to relinquish this permit at any time or specified time after issuance to the Board of Land and Natural Resources in accordance with Chapter 166 of Title 13; (6) an approved flowmeter(s) must be installed to measure withdrawals; and a record of the withdrawals must be kept and reported to the Department of Land and Natural Resources, Division of Water and Land Development, P.O. Box 373, Honolulu, Hawaii 96809, on a monthly basis.

Additional Conditions.

This permit is subject to the requirements of other applicable laws, rules, and ordinances.

The term of this permit shall be twenty years from the date of issuance, subject to review and adjustment every five years.

The development of the ground water source shall be completed within 24 months from the date of permit issuance.

The issuance of this permit was approved by the Board of Land and Natural Resources at its meeting on April 22, 1988

Chairperson of the Board
Date of Issuance: MAY 26 1988
Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

City and County of Honolulu Department of Parks
and Recreation Water Use Permit Application
Pearl Harbor Ground Water Control Area, Oahu

Applicant: City and County of Honolulu, Dept. of Parks & Recreation

Background: The City and County Department of Parks and Recreation (City) plans to acquire the EP2 (Wells 2201-03,04,07) ground-water source from Oahu Sugar Company for irrigation of the golf course, park, and common areas of the proposed West Loch Estates development. Oahu Sugar Company no longer uses EP2 and has agreed to relinquish its 0.5 million gallons per day (mgd) "preserved use" and have it transferred to the City. The City will install, operate, and maintain the transmission, distribution, and storage facilities required to utilize EP2 as a source of irrigation water for the West Loch Estates Project.

Action Requested: To transfer Oahu Sugar Company's "preserved use" of 0.5 mgd from EP2 to the City as a "permitted use".

Use: Municipal. The source will be used to provide a portion of the irrigation requirement of 2.0 mgd necessary to irrigate the golf course, park, and greenbelt areas of the West Loch Estates Project.

Source Location: EP2 consists of three wells (2201-03,04,07) and is located in Honolulu, approximately 1500 feet southwest of the Farrington Highway-Fort Weaver Road interchange.

Impact on Surrounding Wells: No detrimental effects.

Salinity Expected: Potable to slightly brackish (range of 127 to 318 parts per million chlorides).

Water Availability: The status of the Koolau Subarea of the Pearl Harbor Ground Water Control Area will not change since the proposed action transfers Oahu Sugar Company's "preserved use" to the City as "permitted use". There will be no increase in withdrawals from the aquifer.

RECOMMENDATION:

That the Board approve the transfer of 0.5 mgd of "preserved use" from Oahu Sugar Company's EP2 source to 0.5 mgd of "permitted use" to the City and County Department of Parks and Recreation for irrigation of the golf course, park, and green belt areas of the West Loch Estates Project, subject to the requirements of other applicable laws, rules and ordinances, and the following conditions:

1. The term of the permit shall be twenty years from the date of issuance, subject to review and adjustment every five years.

2. The development of the ground water source shall be completed within 24 months from the date of permit issuance.

Respectfully submitted,

MANABU TAGOMORI
Manager-Chief Engineer

APPROVED FOR SUBMITTAL

WILLIAM W. PATY, Chairperson

ITEM D-1
Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

City and County of Honolulu Department of Parks
and Recreation Water Use Permit Application
Pearl Harbor Ground Water Control Area, Oahu

Applicant: City and County of Honolulu, Dept. of Parks & Recreation

Background: The City and County Department of Parks and Recreation (City) plans to acquire the EP2 (Wells 2201-03,04,07) ground-water source from Oahu Sugar Company for irrigation of the golf course, park, and common areas of the proposed West Loch Estates development. Oahu Sugar Company no longer uses EP2 and has agreed to relinquish its 0.5 million gallons per day (mgd) "preserved use" and have it transferred to the City. The City will install, operate, and maintain the transmission, distribution, and storage facilities required to utilize EP2 as a source of irrigation water for the West Loch Estates Project.

Action Requested: To transfer Oahu Sugar Company's "preserved use" of 0.5 mgd from EP2 to the City as a "permitted use".

Use: Municipal. The source will be used to provide a portion of the irrigation requirement of 2.0 mgd necessary to irrigate the golf course, park, and greenbelt areas of the West Loch Estates Project.

Source Location: EP2 consists of three wells (2201-03,04,07) and is located in Honouliuli, approximately 1500 feet southwest of the Farrington Highway-Fort Weaver Road interchange.

Impact on Surrounding Wells: No detrimental effects.

Salinity Expected: Potable to slightly brackish (range of 127 to 318 parts per million chlorides).

Water Availability: The status of the Koolau Subarea of the Pearl Harbor Ground Water Control Area will not change since the proposed action transfers Oahu Sugar Company's "preserved use" to the City as "permitted use". There will be no increase in withdrawals from the aquifer.

RECOMMENDATION:

That the Board approve the transfer of 0.5 mgd of "preserved use" from Oahu Sugar Company's EP2 source to 0.5 mgd of "permitted use" to the City and County Department of Parks and Recreation for irrigation of the golf course, park, and greenbelt areas of the West Loch Estates Project, subject to the requirements of other applicable laws, rules and ordinances, and the following conditions:

(1) The term of the permit shall be twenty years from the date of issuance, subject to review and adjustment every five years.

(2) The development of the ground water source shall be completed within 24 months from the date of permit issuance.

Respectfully submitted,

MANABU TAGOMORI
Manager-Chief Engineer

APPROVED FOR SUBMITTAL

WILLIAM W. PATY, Chairperson
PUBLIC NOTICE

Consideration of a Transfer of Water Use in the
Pearl Harbor Ground Water Control Area, Oahu

All interested parties are hereby notified that the Board of Land and Natural Resources plans to act on the following item at its regularly scheduled meeting on Friday morning, April 22, 1988, at 9:00 a.m., in Room 132, Kalanimoku Building, 1151 Punchbowl Street, Honolulu, Hawaii.

The City and County of Honolulu Department of Parks and Recreation requests the use of 0.5 million gallons per day of water from Oahu Sugar Company's EP2 ground water source for irrigation purposes at the West Loch Estates Project

State of Hawaii
BOARD OF LAND AND NATURAL RESOURCES

WILLIAM W. PATY
Chairperson of the Board

Dated: ______________________

Publish in the Honolulu Star Bulletin, April 11, 1988
Transfer of 0.5 mgd Water Use from Oahu Sugar Co.
Pump EP2 to City and County Parks Department

This is to acknowledge receipt of your letter of February 26, 1988, and the attached application for a Water Use Permit to use 0.5 million gallons per day (mgd) from Oahu Sugar Company's Pump EP-2 (Wells 2201-03,04,07). We understand that Oahu Sugar Company has agreed to relinquish its preserved use of 0.5 mgd from EP-2 by the signatures of Bert Hatton, its Vice President, and Michael Burke, its Assistant Secretary, on the application form.

We are processing your application and will contact your office should there be any questions.

Very truly yours,

WILLIAM W. PATY, Chairperson
Commission on Water Resource Management
February 26, 1988

Honorable William W. Paty, Chairperson
Board of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: Transfer of 0.5 mgd from Oahu Sugar Pump EP-2
(2101-03, 04, 07) to the City and County of Honolulu,
Department of Parks and Recreation

We request favorable action on the transfer of 0.5 mgd "preserved use" from
wells 2101-03, 04, 07 of Oahu Sugar Company's Pump EP-2 to the City and County
of Honolulu, Department of Parks and Recreation. The City plans to acquire
Pump EP-2 from Oahu Sugar Company for use as an irrigation source for the West
Loch Estates project.

The application for transfer of the "preserved use" is enclosed.

Sincerely,

HIRAM K. KAMAKA, Director

HKK:jf

Attach.

cc: Managing Director
WATER RESOURCES & FLOOD CONTROL BRANCH
Division of Water and Land Development

FROM:  

DATE:  3/16/88

TO:  INITIAL:  

G. MATSUMOTO  
D. Lum  
E. Sakoda  
D. Nakano  
M. Ohye  
T. Nakama  
R. Jinnai  
S. Miyamoto  
S. Samuels  
S. Chow  
D. Hamada  
K. Oshiro  
D. Stewart  
M. Tagomori  
G. Akita  
L. Chang  
S. Kokubun  

PLEASE:  
See Me  
Call  
Review & Comment  
Take Action  
Investigate & Report  
Draft Reply  
Acknowledge Receipt  
Type Draft  
Type Final  
Xerox Final  
copies  
File  
Mail  

REMARKS:  
RE: 177-20 (b) - attached.  

FOR YOUR  
Approval  
Signature  
Information  

0  Does section I on page 1 of application imply approval of transfer? Yes - according to Griffin.
Ed

Call Geo Hie

If you need copy I

approval. I think
Geo said he has or

has seen approval

by OEC. RVEH

527-6134
to the effective date of the establishment of a designated ground-water area shall be conclusively presumed to be years of nonuse, (2) years of nonuse caused by a shortage of water due to natural conditions will be considered neither years of use nor nonuse, and (3) years during which a declaration was required to have been filed under section 177-16 but during which none was filed shall be conclusively presumed to be years of nonuse. [L 1961, c 122, pt of §1; Supp, §87B-18]

§177-19 Permits for ground-water use. After the board of land and natural resources has designated a ground-water area for protection or regulation, except in respect to domestic uses and uses preserved under section 177-15(a), a withdrawal of water directly from any designated ground-water area may be made only in accordance with a permit issued by the board. [L 1961, c 122, pt of §1; Supp, §87B-19]

§177-20 Permits to supply ground water. (a) No state or local government agency shall contract to obtain ground-water supply within a designated ground-water area from any person not holding a permit to supply water, unless permission is obtained from the board of land and natural resources by the state or local governmental agency.

(b) No person shall contract to supply or sell the rights to ground water from a designated ground-water area to another person unless permission is obtained from the board by the supplier or seller.

(c) Permission required by this section shall not be withheld except for good cause and shall be deemed granted unless the board acts or commences hearings thereon within ninety days after application therefor. [L 1961, c 122, pt of §1; Supp, §87B-20]

§177-21 Application and notice. (a) Each application for a permit required under this chapter shall be in writing and shall state specifically the information determined by board of land and natural resources rule or regulation to be necessary to determine (1) the merits of the water use, (2) the hazards to public health, safety or welfare, (3) the desirability of the permit, and (4) any qualifications of the applicant the board deems appropriate to effectuate this chapter.

(b) At least ten days prior to the granting of any permit, the board shall cause notice of the application to be given by publication at the applicant's expense in a newspaper of general circulation in each county in which the water resources will be substantially affected by the granting of the permit. The board by rule, regulation, or order, may also require the applicant to mail notices of the application to any state or local governmental agency or other person who may have an interest in the application. [L 1961, c 122, pt of §1; Supp, §87B-21]

§177-22 Granting of permits. (a) In granting permits and determining the duration of permits, the board of land and natural resources shall have as its objective the most beneficial use of the ground-water resources of the State.

(b) Permits may be granted if.

(1) There is water available for use;
(2) The use of the water will be beneficial;
(3) The most beneficial use and development of the water resources of the State will not be impaired by granting the permit; and
M. TAGOMORI — See Me
G. Matsumoto — Take Action By
L. Chang — Route to Your Branch
G. Akita — Review & Comment
D. Lum — Draft Reply By
S. Miyamoto — Acknowledge Receipt
S. Samuels — Xerox copies
P. Haraguchi — Return
N. Imada — File
P. Matsuo — Mail
N. Kaneshiro — For Information
R. Suzuki — S. Kokubun
—— D. Hamada
—— L. Nanbu
—— F. Ching

Yes - needs bd approval
Hush
3/10/80
February 26, 1988

Honorable William W. Paty, Chairperson  
Board of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: Transfer of 0.5 mgd from Oahu Sugar Pump EP-2 (2201-03, 04, 07) to the City and County of Honolulu, Department of Parks and Recreation

We request favorable action on the transfer of 0.5 mgd "preserved use" from wells 2201-03, 04, 07 of Oahu Sugar Company's Pump EP-2 to the City and County of Honolulu, Department of Parks and Recreation. The City plans to acquire Pump EP-2 from Oahu Sugar Company for use as an irrigation source for the West Loch Estates project.

The application for transfer of the "preserved use" is enclosed.

Sincerely,

HIRAM K. KAMAKA, Director

HKK:jf

Attach.

cc: Managing Director
STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
P. O. BOX 621  
HONOLULU, HAWAII 96809  

DEPARTMENT MASTER APPLICATION FORM  

(Print or Type)  

I. LANDOWNER/WATER SOURCE OWNER  
(If State land, to be filled in by Government Agency in control of property)  
Name: Oahu Sugar Company  
Address: P. O. Box 0  
Waipahu, Hawaii 96797  

Telephone No. 643-3258  
SIGNATURE: Its Vice President  

Its Assistant Secretary  
Date: February 25, 1988  

III. TYPE OF PERMIT(S) APPLYING FOR  
( ) A. State Lands  
( ) B. Conservation District Use  
( ) C. Withdraw Water From A Ground Water Control Area  
( ) D. Supply Water From A Ground Water Control Area  
( ) E. Well Drilling/Modification  

II. APPLICANT (Water Use, omit if applicant is landowner)  
City and County of Honolulu  
Name: Department of Parks & Recreation  
Address: 650 South King Street  
Honolulu, Hawaii 96813  

Telephone No.  
Interest in Property: Future user  
of Property: (Indicate interest in property; submit written evidence of this interest)  
SIGNATURE:  
Date: 11/17/87  

IV. WELL OR LAND PARCEL LOCATION REQUESTED  
District: Ewa  
Island: Oahu  
County: Honolulu  
Tax Map Key: Ft. Weaver Road  
Area of Parcel: 150±  
(Indicate in acres or sq. ft.)  
Term (if lease):
APPLICATION FOR: (check one)

x PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE

PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Fill out, sign page 1, send application with pertinent attachments to Department of Land and Natural Resources, P. O. Box 621, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

1. REQUESTED BENEFICIAL USE OF WATER:
   ___ Domestic ___ Municipal ___ Military ___ Agricultural ___ Industrial
   __ Other ___ (specify)

   Appropriately describe nature and purpose of requested use: *
   (See attachment.)

   Proposed commencement date of water use: ______________________
   (See attachment.)

2. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:
   Average Annual 0.5 mgd; Maximum Month 0.75 mgd; Maximum Day 0.75 mgd.
   Appropriately describe schedule or times of taking requested withdrawal:
   Withdrawal in accordance with irrigation schedule of golf
courses, park and common areas.

3. NATURE AND TERM OF REQUESTED PERMIT:
   ___ Temporary ___ Permanent
   Requested period of permit ______________________

4. PROPOSED SOURCE OF WATER SUPPLY:
   ___ Existing source ___ Modification of existing source ___ New Source
   Briefly describe existing or proposed source and any related facilities
   and submit map, plot plan, and plans or drawings of source of supply:
   (Wells 2101-03, 04, 07 of Oahu Sugar Pump EP-2).

   If construction work is proposed for new or modified existing source, give:
   Commencement Date ________________ Completion Date ________________

5. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:
   In a separate attachment to this application, applicant must provide a
   written assessment addressing the desirability of issuing the requested
   permit, including such considerations as the availability of water, the
   beneficial purpose of the proposed water use, and the impact if any, of
   the proposed water use on existing permitted uses, preserved uses, and
   individual household uses.

   (See attachment)

* Use additional sheets as necessary.
1. REQUESTED BENEFICIAL USE OF WATER:
Appropriately describe nature and purpose of requested use: The 0.5 mgd "preserved use" for EP Pump 2 Wells (2101-03, 04, 07) will be used to provide a portion of the irrigation requirements of 2.0 mgd required to irrigate the golf course, park and greenbelt areas of the City's proposed West Loch Estates Project. Proposed commencement date of water use: April 1988.

5. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:
EP Pump 2 has an existing "preserved use" of 0.5 mgd which is currently assigned to Oahu Sugar Co. The City and County Department of Parks and Recreation plans to acquire EP Pump 2 (Wells 2101-03, 04, 07) from Oahu Sugar Co. for the purpose of providing water to irrigate the golf course, park, and common areas for the proposed West Loch Estates development. In order to proceed with this plan, the "preserved use" for EP Pump 2 will have to be transferred to the City Department of Parks and Recreation. There should be no adverse impact to the Pearl Harbor groundwater basin as a result of this proposed transfer.

The City and County of Honolulu, Department of Parks and Recreation will install, operate and maintain the transmission, distribution and storage facilities required to utilize EP Pump 2 as a source of irrigation water for the West Loch Estates project.
November 17, 1987

Honorable William W. Paty, Chairperson
Board of Land and Natural Resources
State of Hawaii
P. O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Paty:

Subject: Transfer of 0.5 mgd from Oahu Sugar Pump EP-2 (2101-03, 04, 07) to the City and County of Honolulu, Department of Parks and Recreation

We request favorable action on the transfer of 0.5 mgd "preserved use" from wells 2101-03, 04, 07 of Oahu Sugar Company's Pump EP-2 to the City and County of Honolulu, Department of Parks and Recreation. The City plans to acquire Pump EP-2 from Oahu Sugar Company for use as an irrigation source for the West Loch Estates project.

Enclosed is a letter from Oahu Sugar Company agreeing to the "preserved use" transfer.

Sincerely yours,

HIRAM K. KAMAKA, Director

cc: Managing Director
DEPARTMENT MASTER APPLICATION FORM

(Print or Type)

I. LANDOWNER/WATER SOURCE OWNER
(If State land, to be filled in by Government Agency in control of property)

Name Oahu Sugar Company
Address P. O. Box 0
Waipahu, Hawaii 96797

Telephone No. __________

II. APPLICANT (Water Use, omit if applicant is landowner)

City and County of Honolulu
Name Department of Parks & Recreation
Address 650 South King Street
Honolulu, Hawaii 96813

Telephone No. __________

Interest in Property Future user

*(Indicate interest in property; submit written evidence of this interest)

*SIGNATURE ______________________________
Date ______________________________

III. TYPE OF PERMIT(S) APPLYING FOR

( ) A. State Lands

( ) B. Conservation District Use

( ) C. Withdraw Water From A Ground Water Control Area

( ) D. Supply Water From A Ground Water Control Area

( ) E. Well Drilling/Modification

IV. WELL OR LAND PARCEL LOCATION REQUESTED

District Ewa
Island Oahu
County Honolulu
Tax Map Key Honolulu area along Ft. Weaver Road
Area of Parcel 150

(Indicate in acres or sq. ft.)

Term (if lease) ______________________________
APPLICATION FOR: (check one)

x PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE
____ PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Fill out, sign page 1, send application with pertinent attachments to Department of Land and Natural Resources, P. O. Box 621, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

1. REQUESTED BENEFICIAL USE OF WATER:

___ Domestic ___ Municipal ___ Military ___ Agricultural ___ Industrial
___ Other

(specify)

Appropriately describe nature and purpose of requested use:*

(See attachment.)

Proposed commencement date of water use:

(See attachment.)

2. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:

Average Annual 0.5 mgd; Maximum Month 0.75 mgd; Maximum Day 0.75 mgd.

Appropriately describe schedule or times of taking requested withdrawal:
Withdrawal in accordance with irrigation schedule of golf courses, park and common areas.

3. NATURE AND TERM OF REQUESTED PERMIT:

___ Temporary x Permanent

Requested period of permit

4. PROPOSED SOURCE OF WATER SUPPLY:

____ Existing source x Modification of existing source ___ New Source

Briefly describe existing or proposed source and any related facilities and submit map, plot plan, and plans or drawings of source of supply:
(Wells 2101-03, 04, 07 of Oahu Sugar Pump EP-2.)

If construction work is proposed for new or modified existing source, give:
Commencement Date ____________________ Completion Date ____________________

5. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:

In a separate attachment to this application, applicant must provide a written assessment addressing the desirability of issuing the requested permit, including such considerations as the availability of water, the beneficial purpose of the proposed water use, and the impact if any, of the proposed water use on existing permitted uses, preserved uses, and individual household uses.

(See attachment)

* Use additional sheets as necessary.
1. **REQUESTED BENEFICIAL USE OF WATER:**

Appropriately describe nature and purpose of requested use: The 0.5 mgd "preserved use" for EP Pump 2 Wells (2101-03, 04, 07) will be used to provide a portion of the irrigation requirements of 2.0 mgd required to irrigate the golf course, park and greenbelt areas of the City's proposed West Loch Estates Project. Proposed commencement date of water use: April 1988.

5. **ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:**

EP Pump 2 has an existing "preserved use" of 0.5 mgd which is currently assigned to Oahu Sugar Co. The City and County Department of Parks and Recreation plans to acquire EP Pump 2 (Wells 2101-03, 04, 07) from Oahu Sugar Co. for the purpose of providing water to irrigate the golf course, park, and common areas for the proposed West Loch Estates development. In order to proceed with this plan, the "preserved use" for EP Pump 2 will have to be transferred to the City Department of Parks and Recreation. There should be no adverse impact to the Pearl Harbor groundwater basin as a result of this proposed transfer.

The City and County of Honolulu, Department of Parks and Recreation will install, operate and maintain the transmission, distribution and storage facilities required to utilize EP Pump 2 as a source of irrigation water for the West Loch Estates project.
August 14, 1987

MEMORANDUM

FROM: Dan Lum

SUBJECT: Meeting with Oahu Sugar Co.; 9:30 am, August 11, 1987

Present: Bill Balfour of Oahu Sugar Co., Mike Burke of Amfac Properties, Manabu Tagomori and Dan Lum

EP2/EP8. Bill Balfour is willing to give EP8 water to the City and County of Honolulu Parks Department providing BWS take over Ewa Village water service. He will not give any water from EP3,4. As conditioned above, he will give BWS 1.5 mgd use from EP8 for transfer to EP2. Ewa Village uses approximately 1 mgd.

Makaleha Springs, Kauai. Kealia has been historically water short, Lihue Plantation needs all the water from the Springs which flows into their ditch system. Mike Burke says, the Spring provides 16% of the base flow of the ditch. The ditch serves only sugar cane irrigation for Plantation lands, State and Hawaiian Home Lands land. Lihue Plantation plans to express their concerns against development of Makaleha Springs by Kauai Department of Water in response to the forthcoming EIS.

Kahana Tunnel Bulkhead, Oahu. Bill is concerned about the loss of the 1 mgd flow for the three years it would take to fill the dike reservoir. Manabu indicated one alternative to making up this short term loss is by pumping dike water up into the ditch system from the Waiahole booster pump source. Bill feels that Oahu Sugar Co. should manage the operation of the bulkead and tunnel system, for obvious reasons.

[Signature]

DAN LUM

DL:ko
 Wait for response from Bill Bulfin

Ed, this will come up again soon.
DIVISION OF WATER AND LAND DEVELOPMENT

FROM: [Signature]  DATE: 6/2  FILE IN: 

TO: INITIAL:  PLEASE:  REMARKS:

M. TAGOMORI  See Me  Need your comments of
G. Matsumoto  Take Action By  Memorandum
L. Chang  Route to Your Branch
G. Akita  Review & Comment
D. Lum  Draft Reply By  Acknowledge Receipt
S. Miyamoto  Xerox copies
S. Samuels  Return
N. Imada  File
P. Matsuo  Mail

N. Kaneshiro  For Information
S. Kokubun
D. Hamada
L. Nanbu
F. Ching

RUSH by Mike  9:38 PM Mon. 26 March 1979
### WATER RESOURCES & FLOOD CONTROL BRANCH
Division of Water and Land Development

**FROM:** [signature]  **DATE:** 8/6  **FILE IN:**

**TO:** INITIAL:  **PLEASE:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Action</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>G. Matsumoto</td>
<td>See Me</td>
<td>Met with R. Fujita &amp; G. Hin re Transfer of 1.5 mgd use from EP78 source to EP2 for applicant</td>
</tr>
<tr>
<td>D. Lum</td>
<td>Call</td>
<td></td>
</tr>
<tr>
<td>E. Sakoda</td>
<td>Review &amp; Comment</td>
<td></td>
</tr>
<tr>
<td>D. Nakano</td>
<td>Take Action</td>
<td></td>
</tr>
<tr>
<td>M. Ohye</td>
<td>Investigate &amp; Report</td>
<td></td>
</tr>
<tr>
<td>T. Nakama</td>
<td>Draft Reply</td>
<td></td>
</tr>
<tr>
<td>R. Jinnai</td>
<td>Acknowledge Receipt</td>
<td></td>
</tr>
<tr>
<td>S. Miyamoto</td>
<td>Type Draft</td>
<td></td>
</tr>
<tr>
<td>S. Samuels</td>
<td>Type Final</td>
<td></td>
</tr>
<tr>
<td>S. Chow</td>
<td>cc: C&amp;C - Parks Dept.</td>
<td></td>
</tr>
<tr>
<td>D. Hamada</td>
<td>Xerox copies</td>
<td></td>
</tr>
<tr>
<td>K. Oshiro</td>
<td>File</td>
<td></td>
</tr>
<tr>
<td>D. Stewart</td>
<td>Mail</td>
<td></td>
</tr>
<tr>
<td>M. Tagomori</td>
<td>Approval</td>
<td></td>
</tr>
<tr>
<td>G. Akita</td>
<td>Signature</td>
<td></td>
</tr>
<tr>
<td>L. Chang</td>
<td>Information</td>
<td></td>
</tr>
</tbody>
</table>

**FOR YOUR**

<table>
<thead>
<tr>
<th>Name</th>
<th>Action</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard S.</td>
<td>Approval</td>
<td></td>
</tr>
<tr>
<td>Kokubun</td>
<td>Signature</td>
<td></td>
</tr>
</tbody>
</table>

**INITIALS**

*Richard S. Kokubun* is being pushed hard. Target is ASAP.
Mr. William W. Paty, Chairperson  
Board of Land and Natural  
Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809  

Dear Mr. Paty:  

Subject: Transfer of 0.5 mgd From Oahu Sugar Pump EP-2 (2201-03, 04, 07) and 1.5 mgd From Pumps EP-7 and 8 (2202-15 to 20) for a Total of 2.0 mgd to the City and County Department of Parks and Recreation

We request favorable action on the transfer of a total of 2.0 mgd preserved use from wells of Oahu Sugar Company (OSC) to the City and County Department of Parks and Recreation. The wells involved are 2201-03, 04, 07 of Pump EP-2 and 2202-15 to 20 of Pumps EP-7 and 8. The City will operate and utilize the facilities of Pump EP-2 Wells 2201-03, 04, 07.

OSC has already agreed to the transfer of EP-8 allocation to the City.

If you have any questions, please call _______ at _________.

Very truly yours,
1. **REQUESTED BENEFICIAL USE OF WATER:**

Appropriately describe nature and purpose of requested use: 
To transfer 1.5 mgd from EP Pumps 7 & 8 Wells (2202-15 to 20) to EP Pump 2 Wells (2201-03, 04, 07) which has an existing Preserved Use of 0.5 mgd, to increase its total allocation to 2.0 mgd. Proposed commencement date of water use: ASAP.

5. **ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:**

The City and County Department of Parks and Recreation proposes the transfer of 1.5 mgd from EP Pumps 7 & 8 Wells (2202-15 to 20) to EP Pump 2 Wells (2201-03, 04, 07) which has an existing Preserved Use of 0.5 mgd, to increase the total to 2.0 mgd for EP Pump 2. The water will be used to irrigate the golf course, park, and common areas for the proposed West Loch Estate development. There should be no adverse impact as a result of this proposed transfer.

The proposed system will be operated and maintained by the City and County of Honolulu, Department of Parks and Recreation.
# DEPARTMENT MASTER APPLICATION FORM

I. LANDOWNER/WATER SOURCE OWNER (If State land, to be filled in by Government Agency in control of property)

<table>
<thead>
<tr>
<th>Name</th>
<th>Oahu Sugar Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>P. O. Box 0</td>
</tr>
<tr>
<td></td>
<td>Waipahu, Hawaii 96797</td>
</tr>
</tbody>
</table>

II. APPLICANT (Water Use, omit if applicant is landowner)

<table>
<thead>
<tr>
<th>City &amp; County of Honolulu</th>
<th>Department of Parks &amp; Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>650 South King Street</td>
</tr>
<tr>
<td>Address</td>
<td>Honolulu, Hawaii 96813</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone No.</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Interest in Property Future user of source (Indicate interest in property; submit written evidence of this interest)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SIGNATURE</th>
<th>Date</th>
</tr>
</thead>
</table>

III. TYPE OF PERMIT(S) APPLYING FOR

<table>
<thead>
<tr>
<th>( ) A. State Lands</th>
<th>( ) B. Conservation District Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>(x) C. Withdraw Water From A Ground Water Control Area</td>
<td>(x) D. Supply Water From A Ground Water Control Area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(x) E. Well Drilling/Modification</th>
</tr>
</thead>
</table>

IV. WELL OR LAND PARCEL LOCATION REQUESTED

<table>
<thead>
<tr>
<th>District</th>
<th>Ewa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Island</td>
<td>Oahu</td>
</tr>
<tr>
<td>County</td>
<td>Honolulu</td>
</tr>
<tr>
<td>Tax Map Key</td>
<td>Honolulu area, along Ft. Weaver Road</td>
</tr>
<tr>
<td>Area of Parcel</td>
<td>150 sq. ft.</td>
</tr>
<tr>
<td>Term (if lease)</td>
<td></td>
</tr>
</tbody>
</table>

- 1 -
APPLICATION FOR: (check one)

PERMIT TO WITHDRAW WATER FOR BENEFICIAL USE

PERMIT TO SUPPLY WATER FOR BENEFICIAL USE

Fill out, sign page 1, send application with pertinent attachments to Department of Land and Natural Resources, P. O. Box 621, Honolulu, Hawaii 96809. A non-refundable filing fee of $100 is required, excepting military, federal, state, and local government agencies.

1. REQUESTED BENEFICIAL USE OF WATER:
   - Domestic
   - Municipal
   - Military
   - Agricultural
   - Industrial

   Appropriately describe nature and purpose of requested use:

   (See attachment.)

   Proposed commencement date of water use:

   (See attachment.)

2. REQUESTED AMOUNT OF WITHDRAWAL OR SUPPLY:
   - Average Annual 2.0 mgd; Maximum Month 3.5 mgd; Maximum Day 3.5 mgd.

   Appropriately describe schedule or times of taking requested withdrawal:
   - Withdrawal in accordance with irrigation schedule of golf courses, park and common areas.

3. NATURE AND TERM OF REQUESTED PERMIT:
   - Temporary
   - Permanent

   Requested period of permit

4. PROPOSED SOURCE OF WATER SUPPLY:
   - Existing source
   - Modification of existing source
   - New Source

   Briefly describe existing or proposed source and any related facilities and submit map, plot plan, and plans or drawings of source of supply:

   If construction work is proposed for new or modified existing source, give:
   - Commencement Date
   - Completion Date

5. ASSESSMENT OF REQUESTED WATER USE OR SUPPLY:
   - In a separate attachment to this application, applicant must provide a written assessment addressing the desirability of issuing the requested permit, including such considerations as the availability of water, the beneficial purpose of the proposed water use, and the impact if any, of the proposed water use on existing permitted uses, preserved uses, and individual household uses.

   (See attachment.)

* Use additional sheets as necessary.
State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Water and Land Development  
Honolulu, Hawaii  

June 10, 1982  

Chairman and Members  
Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii  

Gentlemen:  

RESUBMITTAL  
Terms of Water Withdrawal and Use Permits  

The Department's Administrative Rules on ground water control require that the Board specify the period or duration of permits and the commencement and completion dates for the construction of ground water sources. After investigation and study of this matter, DOWALD is ready to make specific recommendations for adoption by the Board of Land and Natural Resources.  

The Ground Water Use Law specifies that permits may be issued up to a maximum of 50 years and allows for extension of the permit after one-half of the permit period has lapsed. The staff is recommending that the duration of each permit be established at twenty (20) years with a review every five years by the Board to determine compliance with provisions of the permit. The staff feels that 20 years is a reasonable time for regulating ground water withdrawals and uses at this early stage of the program. As the Department gains experience in ground water regulation, the duration of the permits may be reviewed and adjusted as appropriate in the future.  

On the commencement and completion dates, the staff recommends that a period of 24 months be established for completing the development of the ground water source. This construction period is a reasonable time for drilling, testing, and for the installation of permanent pumps and controls to fully bring the ground water source into operation. The period may be extended upon a showing of good cause and good faith performance. The permit and construction dates should commence on the date the permit is issued by the Department.  

It is recommended that the above terms be standardized for all water withdrawal and use permits issued by the Board, subject to adjustments required by the Board for any permit.  

RECOMMENDATION:  

That the Board establish the terms of ground water withdrawal and use permits at 20 years from the date of issuance of the permit with a five-year Board review to determine compliance with the provisions of the permit and that the development of the ground water source be completed within 24 months from the date of permit issuance for all permits issued by the Board, subject to adjustments required by the Board for any permit.  

Respectfully submitted,  

ROBERT T. CHUCK  
Manager-Chief Engineer  

APPROVED FOR SUBMITTAL  

SUSUMU ONO, Chairman  

ITEM D-1  

G/10/82  

B12
State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Water and Land Development
Honolulu, Hawaii
April 11, 1980

Chairman and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Gentlemen:

RESUBMITTAL
(Deferred Item D-2 of March 20, 1980 meeting)

Certification of Water Withdrawals and Uses
Pearl Harbor Ground Water Control Area, Oahu

The Pearl Harbor Ground Water Control Area (GWCA) which includes the
Ewa and Wahiawa judicial districts, was designated for State regulation by the
Board of Land and Natural Resources (BLNR) in September 1973 under authority
of Chapter 177, HRS, and the Department of Land and Natural Resources (DLNR)
Regulation 9. The regulatory procedures call for the BLNR to certify existing water
withdrawals and uses and to issue permits for new ground water developments in
the Pearl Harbor Ground Water Control Area.

The users of water within the Pearl Harbor Ground Water Control Area have
submitted records of pumpage to the Department and from these submit the annual
withdrawals and maximum daily pumpage for individual wells and/or well fields are
tabulated as shown in the attached "Certification of Water Withdrawals and Uses" which
is made a part hereof. As a result, the following is recommended for certification of
existing uses:

<table>
<thead>
<tr>
<th>User</th>
<th>Average Annual (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Water Supply</td>
<td>78.850</td>
</tr>
<tr>
<td>U.S. Navy</td>
<td>21.350</td>
</tr>
<tr>
<td>U.S. Army</td>
<td>5.455</td>
</tr>
<tr>
<td>Private</td>
<td>5.855</td>
</tr>
<tr>
<td>Oahu Sugar Company</td>
<td>115.000</td>
</tr>
<tr>
<td>Total</td>
<td>224.413</td>
</tr>
</tbody>
</table>

Oahu Sugar Company submitted figures which exceeded the 115 mgd listed
above but because their submission represents unmeasured pumpages, the Depart-
ment's staff is recommending that 115 mgd be certified. Oahu Sugar, in the meantime,
will investigate the matter and if deemed necessary will request that the Board hold a
hearing as is allowed under Section 4.4 of Regulation 9 of the Department of Land and
Natural Resources.

RECOMMENDATION:

That the Board certify the existing uses and quantity of withdrawal for each well
as indicated in the attached "Certification of Water Withdrawals and Uses" dated
April 11, 1980 which reflects the recommended withdrawal quantity as follows: Board
of Water Supply at 78.85 mgd; U.S. Navy, 21.35 mgd; U.S. Army, 5.455 mgd;
Private, 5.855 mgd; and Oahu Sugar Company, 115.0 mgd; subject to the provisions
of applicable laws and rules and regulations.

Respectfully submitted,

ROBERT T., CHUCK
Manager-Chief Engineer

SUSUMU ONO, Chairman

APPROVED FOR SUBMITTAL:

A5
MOTION

Based on the submittal of the staff dated April 11, 1980, I move that the Board approve the issuance of conditional certification to the major users of the ground water who have filed the prescribed declarations, in the amounts recommended by the staff in its submittal dated April 11, 1980, subject to the following:

1. Submission by each user of a water use plan, meeting the management objectives and policies of the Board, within 3 months from the issuance of such objectives and policies by the Board in the State's water management plan.

2. Approval of the water use plans by the Board.

3. Review of the conditional certification within the next 3 years.

4. Reduction in the quantity of water conditionally certified in the event that such water is not being beneficially used as defined by law or that the water use plan is not being implemented effectively.

5. Adjustment in quantity, in the case of Oahu Sugar, upon the installation of a new and more accurate metering system, but in no event will said adjustment exceed the amount of the 1979 withdrawal as contained in the declared use attached to the submittal.
<table>
<thead>
<tr>
<th>User/Source</th>
<th>State Wall No.</th>
<th>Total Walls</th>
<th>Use</th>
<th>Source Capacity (mgd)</th>
<th>5-Year Average (mgd)</th>
<th>1970 Use</th>
<th>Max. Daily Average (mgd)</th>
<th>Total Annual (mgd)</th>
<th>Average Daily (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aina Gulch</td>
<td>2115-03, 05</td>
<td>2</td>
<td>Mun.</td>
<td>3.00</td>
<td>0.00</td>
<td>0.700</td>
<td>1.00</td>
<td>375.000</td>
<td>(1.000)</td>
</tr>
<tr>
<td>Aina Walls</td>
<td>2146-04, 07</td>
<td>2</td>
<td>Mun.</td>
<td>3.00</td>
<td>1.010</td>
<td>1.620</td>
<td>1.770</td>
<td>375.000</td>
<td>(1.000)</td>
</tr>
<tr>
<td>Halewa Wells</td>
<td>2159-27 to 30</td>
<td>3</td>
<td>Mun.</td>
<td>4.45</td>
<td>1.070</td>
<td>1.000</td>
<td>1.630</td>
<td>363.000</td>
<td>(1.000)</td>
</tr>
<tr>
<td>Waipio Hgs. Wells I</td>
<td>2426-22, 24</td>
<td>3</td>
<td>Mun.</td>
<td>4.60</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Waipio Hgs. Wells II</td>
<td>2359-03, 05</td>
<td>3</td>
<td>Mun.</td>
<td>6.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pearl City (Fallen)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal (In-District)</td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export to Honolulu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makaha Sands</td>
<td>2354-01</td>
<td>1</td>
<td>Mun.</td>
<td>22.90</td>
<td>13.400</td>
<td>14.100</td>
<td>19.970</td>
<td>4,313.000</td>
<td>(14.200)</td>
</tr>
<tr>
<td>Kamilo Wells</td>
<td>2350-02, 09</td>
<td>2</td>
<td>Mun.</td>
<td>4.00</td>
<td>1.070</td>
<td>1.990</td>
<td>2.140</td>
<td>726.000</td>
<td>(1.090)</td>
</tr>
<tr>
<td>Kalanuu Wells</td>
<td>2356-05 to 16</td>
<td>6</td>
<td>Mun.</td>
<td>12.00</td>
<td>10.200</td>
<td>11.700</td>
<td>13.630</td>
<td>4,380.000</td>
<td>(11.700)</td>
</tr>
<tr>
<td>Kaukonu' Warriors</td>
<td>2357-02, 04</td>
<td>3</td>
<td>Mun.</td>
<td>4.30</td>
<td>0.800</td>
<td>1.130</td>
<td>1.130</td>
<td>405.000</td>
<td>(1.130)</td>
</tr>
<tr>
<td>Waimoku Wells</td>
<td>2355-01, 03</td>
<td>4</td>
<td>Mun.</td>
<td>2.15</td>
<td>0.570</td>
<td>0.300</td>
<td>2.200</td>
<td>600.000</td>
<td>(0.300)</td>
</tr>
<tr>
<td>Keawola Wells I</td>
<td>2115-03, 05</td>
<td>2</td>
<td>Mun.</td>
<td>3.00</td>
<td>1.170</td>
<td>1.190</td>
<td>2.590</td>
<td>401.000</td>
<td>(1.190)</td>
</tr>
<tr>
<td>Subtotal (Export to Honolulu)</td>
<td></td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiau-Waianan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kula Wells I</td>
<td>2352-01 to 04</td>
<td>4</td>
<td>4 Mun.</td>
<td>24.00</td>
<td>5.560</td>
<td>6.030</td>
<td>19.700</td>
<td>7,375.000</td>
<td>(6.030)</td>
</tr>
<tr>
<td>Honua Walls</td>
<td>2351-24 to 26</td>
<td>6</td>
<td>4 Mun.</td>
<td>14.50</td>
<td>0.000</td>
<td>0.030</td>
<td>12.980</td>
<td>3,412.000</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Subtotal (Export to Waiau-Waianan)</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL (Board of Water Supply)</td>
<td></td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User/Source</th>
<th>State Wall No.</th>
<th>Total Walls</th>
<th>Use</th>
<th>Source Capacity (mgd)</th>
<th>5-Year Average (mgd)</th>
<th>1970 Use</th>
<th>Max. Daily Average (mgd)</th>
<th>Total Annual (mgd)</th>
<th>Average Daily (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aina Gulch</td>
<td>2115-03, 05</td>
<td>2</td>
<td>Mun.</td>
<td>3.00</td>
<td>0.00</td>
<td>0.700</td>
<td>1.00</td>
<td>375.000</td>
<td>(1.000)</td>
</tr>
<tr>
<td>Aina Walls</td>
<td>2146-04, 07</td>
<td>2</td>
<td>Mun.</td>
<td>3.00</td>
<td>1.010</td>
<td>1.620</td>
<td>1.770</td>
<td>375.000</td>
<td>(1.000)</td>
</tr>
<tr>
<td>Halewa Wells</td>
<td>2159-27 to 30</td>
<td>3</td>
<td>Mun.</td>
<td>4.45</td>
<td>1.070</td>
<td>1.000</td>
<td>1.630</td>
<td>363.000</td>
<td>(1.000)</td>
</tr>
<tr>
<td>Waipio Hgs. Wells I</td>
<td>2426-22, 24</td>
<td>3</td>
<td>Mun.</td>
<td>4.60</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Waipio Hgs. Wells II</td>
<td>2359-03, 05</td>
<td>3</td>
<td>Mun.</td>
<td>6.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pearl City (Fallen)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wells</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal (In-District)</td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export to Honolulu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makaha Sands</td>
<td>2354-01</td>
<td>1</td>
<td>Mun.</td>
<td>22.90</td>
<td>13.400</td>
<td>14.100</td>
<td>19.970</td>
<td>4,313.000</td>
<td>(14.200)</td>
</tr>
<tr>
<td>Kamilo Wells</td>
<td>2350-02, 09</td>
<td>2</td>
<td>Mun.</td>
<td>4.00</td>
<td>1.070</td>
<td>1.990</td>
<td>2.140</td>
<td>726.000</td>
<td>(1.090)</td>
</tr>
<tr>
<td>Kalanuu Wells</td>
<td>2356-05 to 16</td>
<td>6</td>
<td>Mun.</td>
<td>12.00</td>
<td>10.200</td>
<td>11.700</td>
<td>13.630</td>
<td>4,380.000</td>
<td>(11.700)</td>
</tr>
<tr>
<td>Kaukonu' Warriors</td>
<td>2357-02, 04</td>
<td>3</td>
<td>Mun.</td>
<td>4.30</td>
<td>0.800</td>
<td>1.130</td>
<td>1.130</td>
<td>405.000</td>
<td>(1.130)</td>
</tr>
<tr>
<td>Waimoku Wells</td>
<td>2355-01, 03</td>
<td>4</td>
<td>Mun.</td>
<td>2.15</td>
<td>0.570</td>
<td>0.300</td>
<td>2.200</td>
<td>600.000</td>
<td>(0.300)</td>
</tr>
<tr>
<td>Keawola Wells I</td>
<td>2115-03, 05</td>
<td>2</td>
<td>Mun.</td>
<td>3.00</td>
<td>1.170</td>
<td>1.190</td>
<td>2.590</td>
<td>401.000</td>
<td>(1.190)</td>
</tr>
<tr>
<td>Subtotal (Export to Honolulu)</td>
<td></td>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiau-Waianan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kula Wells I</td>
<td>2352-01 to 04</td>
<td>4</td>
<td>4 Mun.</td>
<td>24.00</td>
<td>5.560</td>
<td>6.030</td>
<td>19.700</td>
<td>7,375.000</td>
<td>(6.030)</td>
</tr>
<tr>
<td>Honua Walls</td>
<td>2351-24 to 26</td>
<td>6</td>
<td>4 Mun.</td>
<td>14.50</td>
<td>0.000</td>
<td>0.030</td>
<td>12.980</td>
<td>3,412.000</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Subtotal (Export to Waiau-Waianan)</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL (Board of Water Supply)</td>
<td></td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Declared Existing Use and Preserved Use

<table>
<thead>
<tr>
<th>User/Source</th>
<th>State Well No.</th>
<th>Total Wells</th>
<th>Use Capacity (mgd)</th>
<th>5-year Average (mgd)</th>
<th>1979 Use</th>
<th>Average Daily Use (mgd)</th>
<th>Maximum Daily Use (mgd)</th>
<th>Total Annual Use (ml)</th>
<th>Average Daily Use (mgd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MILITARY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schofield Ret. (2, 3, 4, 5) 2361-06 to 04, 18</td>
<td>4</td>
<td>MIL.</td>
<td>10.846</td>
<td>4.852</td>
<td>5.455</td>
<td>MIL.</td>
<td>0.252</td>
<td>1,001,972</td>
<td>(5.455)</td>
</tr>
<tr>
<td>Navy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waipawa Shaft</td>
<td>2510-10</td>
<td>1</td>
<td>MIL.</td>
<td>25.929</td>
<td>16.701</td>
<td>13.360</td>
<td>MIL.</td>
<td>3.100</td>
<td>4,015,000</td>
</tr>
<tr>
<td>Red Hill Shaft</td>
<td>2314-01</td>
<td>1</td>
<td>MIL.</td>
<td>17.529</td>
<td>7.546</td>
<td>5.644</td>
<td>MIL.</td>
<td>0.860</td>
<td>2,648,250</td>
</tr>
<tr>
<td>Barbers Pt. Shaft</td>
<td>2160-08</td>
<td>1</td>
<td>MIL.</td>
<td>5.040</td>
<td>5.466</td>
<td>3.288</td>
<td>MIL.</td>
<td>0.280</td>
<td>221,350</td>
</tr>
<tr>
<td>Waipawa Shaft</td>
<td>2515-22</td>
<td>1</td>
<td>MIL.</td>
<td>11.629</td>
<td>0.400</td>
<td>0.220</td>
<td>MIL.</td>
<td>0.220</td>
<td>15,750</td>
</tr>
<tr>
<td>Subtotal (Navy)</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58,700</td>
</tr>
<tr>
<td><strong>TOTAL (Military)</strong></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>76,000</td>
</tr>
<tr>
<td><strong>PRIVATE USERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cali Radioly 197-2A</td>
<td>2355-18</td>
<td>1</td>
<td>Ind.</td>
<td>2.160</td>
<td>0.964</td>
<td>0.964</td>
<td>Ind.</td>
<td>0.624</td>
<td>330,690</td>
</tr>
<tr>
<td>Cali Radioly 197-2B</td>
<td>2356-36</td>
<td>1</td>
<td>Ind.</td>
<td>2.160</td>
<td>0.961</td>
<td>0.790</td>
<td>Ind.</td>
<td>0.150</td>
<td>187,620</td>
</tr>
<tr>
<td>Del Monte Corp. 2353-07</td>
<td></td>
<td>1</td>
<td>Agr.</td>
<td>2.000</td>
<td></td>
<td></td>
<td>Agr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Del Monte Corp. 2353-08</td>
<td></td>
<td>1</td>
<td>Agr.</td>
<td>2.000</td>
<td>1.971</td>
<td>2.151</td>
<td>Agr.</td>
<td>2.150</td>
<td>774,150</td>
</tr>
<tr>
<td>Del Monte Corp. 2763-01</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td>0.622</td>
<td></td>
<td></td>
<td>Dom.</td>
<td>0.220</td>
<td>90,300</td>
</tr>
<tr>
<td>Harris Bag 230-8</td>
<td>2801-14</td>
<td>1</td>
<td>Ind.</td>
<td>0.622</td>
<td>0.000</td>
<td>0.000</td>
<td>Ind.</td>
<td>0.000</td>
<td>1,000</td>
</tr>
<tr>
<td>Hewaii Country Club 230-9</td>
<td></td>
<td>1</td>
<td>Other</td>
<td>0.622</td>
<td>0.197</td>
<td>0.220</td>
<td>Other</td>
<td>0.420</td>
<td>20,300</td>
</tr>
<tr>
<td>Kahana Melt Co. 285</td>
<td>2181-01</td>
<td>1</td>
<td>Other</td>
<td>0.622</td>
<td>0.220</td>
<td></td>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearl Country Club 191-2</td>
<td>2358-34</td>
<td>1</td>
<td>Other</td>
<td>0.660</td>
<td>0.320</td>
<td>0.220</td>
<td>Other</td>
<td>0.320</td>
<td>23,020</td>
</tr>
<tr>
<td>Waianae Thyng School 193-1A, 1B</td>
<td>2357-01, 02</td>
<td>2</td>
<td>Other</td>
<td>0.920</td>
<td>0.145</td>
<td>0.134</td>
<td>Other</td>
<td>0.134</td>
<td>49,040</td>
</tr>
<tr>
<td>Waianae 228</td>
<td>2360-11</td>
<td>1</td>
<td>Agr.</td>
<td>0.864</td>
<td>0.743</td>
<td>0.630</td>
<td>Agr.</td>
<td>0.250</td>
<td>242,290</td>
</tr>
<tr>
<td>Waianae 228-9</td>
<td>2360-30</td>
<td>1</td>
<td>Agr.</td>
<td>0.570</td>
<td>0.457</td>
<td>0.600</td>
<td>Agr.</td>
<td>0.500</td>
<td>144,060</td>
</tr>
<tr>
<td>Yoshihara, D.Y. 228-9</td>
<td>2459-21</td>
<td>1</td>
<td>Agr.</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>Agr.</td>
<td>0.010</td>
<td>2,100</td>
</tr>
<tr>
<td>Alioto, Santos 2450-12</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alioto, Santos 2450-17</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gons, George 2451-10</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gons, George 2451-17</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minami, K. Ltd. 2455-08</td>
<td></td>
<td>1</td>
<td>Agr.</td>
<td></td>
<td></td>
<td></td>
<td>Agr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nakamoto, Edward M. 2330-10</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kawano, Toshi 2450-16</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nakama, Walter 2555-40</td>
<td></td>
<td>1</td>
<td>Dom.</td>
<td></td>
<td></td>
<td></td>
<td>Dom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL (Private Users)</strong></td>
<td></td>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,045,170</td>
</tr>
</tbody>
</table>

**Total Withdrawal, Pearl Harbor GWCA**

|              | 641,928 | 241,045 | 233,292 | 641,490 | 81,919.745 | (224,412) |

*Withdrawal to be certified shall be equal to the existing pump capacity.*
WATER SYSTEM ANALYSIS
(REVISION TO JULY 1978 REPORT)

WAIPAHU LANDS
WAIPIO, EWA, OAHU, HAWAII
TAX MAP KEY: 9-4-02: 4, 5 & 24

FOR
AMFAC PROPERTIES, INC.

BY
COMMUNITY PLANNING, INC.

OCTOBER 1979
INTRODUCTION

This report is a revision to the water system analysis, July 1978. This report reflects the following changes to the July 1978 report:

1. Water service for the 4.0 acre park site (Point 38) now provided by the "395" service level (previously "228" service level).
2. The density of the residential development (Point 42) EWA of manager's drive reduced from 130 to 100 units.
3. The density of the apartments (Point 60) near civic center increased from 88 to 172 units.

This revised study will be referred to as Case VI, analyzing both max day + fire flow and peak hour flow, as well as reservoir sizing requirements, as set forth by the board of water supply.
I. PURPOSE OF THIS REPORT

The purpose of this report is to determine the water transmission pipe sizing for the Waipahu Lands Project, based on the City and County of Honolulu, Board of Water Supply, Water System Standards (March 1977) and to be a basis for review and approval by the Board of Water Supply.

This report revises the "Water System Analysis", Waipahu Lands, Amfac Properties, Inc. of July 1978. It evaluates CASE VI, the Ultimate Development with the changes as previously stated in the introduction.

Based on the results of the systems analysis, the pipeline layout and sizing is as shown on the CASE VI plan. Note that there have been no changes, from the CASE IV plan, in pipeline size or alignment, due to the CASE VI revisions.

The revised land uses are as follows:

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>ACREAGE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (previously School)</td>
<td>6.0</td>
<td>40</td>
</tr>
<tr>
<td>Park</td>
<td>4.0</td>
<td>---</td>
</tr>
<tr>
<td>Residential</td>
<td>91.6</td>
<td>324</td>
</tr>
<tr>
<td>Apartments (medium density)</td>
<td>8.3</td>
<td>144</td>
</tr>
<tr>
<td>Apartments (low density)</td>
<td>5.3</td>
<td>172</td>
</tr>
<tr>
<td>Civic Center</td>
<td>6.7</td>
<td>---</td>
</tr>
<tr>
<td>Japanese Church and School</td>
<td>1.1</td>
<td>---</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>123.0</strong></td>
<td><strong>680</strong></td>
</tr>
</tbody>
</table>

The following case was analyzed for efficient pipe sizing:

CASE VI - Ultimate development of proposed Development Plan. This case is based on the construction and installation of an additional "228" reservoir, deep wells, pipelines and appurtenances.

II. METHOD OF ANALYSIS (see previous report)
III. RESULTS AND RECOMMENDATIONS

Based on the hydraulic calculations, the results and recommendations are as follows:

1. **CASE VI**

   Ultimate Development - Units 4-A, 4-B, 4-C, 4-D, Apartments (medium density) - 8.3 Acres, Apartment (low density) - 5.3 Acres, Residential (previously School) - 6.0 Acres, Civic Center - 6.7 Acres, Japanese Church and School - 1.1 Acres and the remaining residential areas (Total 123.0 Acres).

   This case analyzes the Ultimate Development with an 8" dead end piping system.

   a) **MAX DAY + FIRE FLOW** - low pressure = 35.9 psi, above 20 psi minimum

   b) **PEAK HOUR FLOW** - low pressure = 43.8 psi, above 40 psi minimum

      - pipe velocity = 4.35 fps, below the 6 fps maximum

   **Recommendation:** CASE VI meets both MAX DAY + FIRE FLOW and PEAK HOUR FLOW criteria and therefore the 8" dead end piping system, as shown on the CASE VI plan meets the Board of Water Supply Standards.

   Looping of the 8" water line is recommended for efficient system operation, if possible. Again, note that the CASE VI recommended plan uses the same alignment and pipe sizing as previously recommended in the CASE IV plan.

2. **Proposed "228" Reservoir**

   Reservoir to be sized to service the Ultimate Development only.

   a. **CASE I:** Meet maximum day rate for 24 hours with no inflow.

      Required capacity = 499,350 gallons.
b. CASE II: Meet MAX DAY + FIRE FLOW for duration of fire, reservoir 3/4 full at start, credit for inflow from pumps, one maximum size pump out of service. Required capacity = 291,483.3 gallons.

Recommendation: Since CASE I results in the larger required reservoir capacity a tank with a 499,350 gallon capacity is required. Under this constraint, a 0.5 MG reservoir should satisfy the needs of the Ultimate Development.
DETERMINATION OF RESERVOIR SIZE: PROPOSED "228"

CASE I: Meet maximum day rate for 24 hours with no inflow.

<table>
<thead>
<tr>
<th>ZONE</th>
<th>DRAW PT</th>
<th>MAX DAY FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 4-A Apartment</td>
<td>24</td>
<td>54,000</td>
</tr>
<tr>
<td>Japanese Church and School</td>
<td>25</td>
<td>86,400</td>
</tr>
<tr>
<td>Unit 4-B</td>
<td>26</td>
<td>16,500</td>
</tr>
<tr>
<td>Unit 4-C</td>
<td>30</td>
<td>34,500</td>
</tr>
<tr>
<td>Unit 4-D</td>
<td>36</td>
<td>21,750</td>
</tr>
<tr>
<td>Residential</td>
<td>37</td>
<td>30,000</td>
</tr>
<tr>
<td>Residential</td>
<td>41</td>
<td>18,750</td>
</tr>
<tr>
<td>Residential</td>
<td>42</td>
<td>75,000</td>
</tr>
<tr>
<td>Residential</td>
<td>43</td>
<td>22,500</td>
</tr>
<tr>
<td>Apartment</td>
<td>60</td>
<td>103,200</td>
</tr>
<tr>
<td>Civic Center</td>
<td>61</td>
<td>30,150</td>
</tr>
</tbody>
</table>

REQUIRED CAPACITY 499,350 gallons

Note: Refer to succeeding draw point form for calculation of MAX DAY FLOWS.

CASE II: Meet MAX DAY + FIRE FLOW for duration of fire, reservoir 3/4 full at start, credit for inflow from pumps, one maximum size pump out of service.

Critical fire flow = 2000 gpm @ Civic Center (PT 61), for 2 hrs.

Demand:

MAX DAY 499,350 gallons x 2 hours/24 hours = 41,612.5
FIRE FLOW 2000 gpm x 120 minutes = 240,000.0

TOTAL DEMAND 281,612.5 gal.
RESERVOIR CAPACITY (no inflow) = 281,612.5/.75 = 375,483.3 gal

Inflow:
Two 700 gpm deepwell pumps, one out of service.
TOTAL INFLOW 700 gpm x 120 minutes = 84,000

Capacity:
Reservoir capacity (no inflow) = 375,483.3
Inflow (2 hours, 1 pump out of service) = -84,000
REQUIRED CAPACITY 291,483.3 gal.

Based on these calculations, CASE I results in the larger required reservoir size, which in this case is 499,350 gallon capacity.
(PLEASE KEEP IN FRONT OF FILE)

EP 2  File 2201-03, 04, 07

WATER USE DECLARATION  FILE CROSS REFERENCES

OSCO, Campbell Estate, City & County of Honolulu

DECLARANT

all filed for the declaration

RE:

as of Oct 20, 1995 not inspected yet

SEE OTHER RELATED DECLARATIONS:

Oahu Sugar Co

Campbell Estate
Hon. Parks & Rec

Well actually used for irrigation of West Loch Golf Course (e.g.)
Mr. Manabu Tagomori, Deputy Director  
Commission on Water Resources Management  
Department of Land and Natural Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813  

Dear Mr. Tagomori:

Subject: Declaration of Private Well Use  
at West Loch Golf Course (TMK 9-1 and 9-4)  

This is in response to your letter of April 18, 1990 requesting additional data regarding the size and capacity of the pump for the West Loch Golf Course well EP-2.

The following information is submitted.

The well for West Loch Golf Course was installed by Oahu Sugar Company in the early 1900s. It is located in the golf course mauka of the new Fort Weaver Road, near the hospital complex.

The size and capacity of the pump are:

Allis Chalmers Model 130  
2,300 gallons per minute at 130 feet total dynamic head  
1,770 revolutions per minute  
100 horsepower

The Water Resources Commission has imposed an allowable pumping limit of 500,000 gallons per day on this well.

The water from this well is pumped into two reservoirs which in turn furnishes irrigation water for the 143-acre golf course, the common areas of West Loch Housing Community, and the proposed West Loch Park on Hoaeae Peninsula.
Mr. Manabu Tagomori, Deputy Director
Page 2
May 24, 1990

It has been determined that 500,000 gallons per day limit on this well will eventually have to be augmented by a second well to be drilled in the same area. The water quality is considered good, but it would probably have to be treated to be considered potable.

The West Loch Housing will receive its allotment from Honolulu Board of Water Supply sources.

If there are further questions, you may contact Donald Griffin of the Executive Policy Planning Unit at

Sincerely,

WALTER M. OZAWA, Director

WMO:js

cc: Board of Water Supply
The City and County of Honolulu Dept. of Parks and Recreation is proposing to develop a 197-acre, 18-hole municipal golf course and a 39-acre linear shoreline park in the West Loch area of Ewa. The linear shoreline park fronts the West Loch of Pearl Harbor. The golf course is divided by the Ft. Weaver bypass road and will be connected by a golf cart underpass at the existing highway bridge. It will be located on lands identified as TMK: 9-1-17:por. 6; 9-1-20:por. 4, 19; 9-1-21:15, por. 16, por. 17, 21, por. 25; and 9-1-22:por. 2, por. 4, por. 5, 06-11, por. 13. In addition to the golf course, other facilities will include an approx. 6,400 sq. ft. clubhouse, an 8,400 sq. ft. "butler" type maintenance building which will accommodate 15 workers, a driving range and a turf farm. The major objective of the 39-acre linear park is that it will provide public access to the shoreline. The park will be located on lands identified as TMK: 9-1-17:por. 4, por. 9, 14 and por. 18. It will feature passive recreational facilities such as jogging and bike paths, as well as benches, landscaping, and interpretive displays, along the shore. Existing piers that extend into West Loch will be restored. By prior agreement with the U.S. Navy, no boating or swimming will be allowed. Existing fish ponds within the shoreline zone will be cleared and maintained as one of the park's features.

This EIS is also available for review at the Ewa Beach Community-School Library.
On October 19, 1994, well construction/pump installation and water use permits were approved for the Department of Housing and Community Development (DHCD) to construct three (3) new wells at Village Park subdivision (Kunia III, Well Nos. 2301-40 to 42) to supply potable water for the existing and new Ewa Villages. From the mapped location and project description, it appears that the proposed wells are the Kunia III wells. For clarity, it would be helpful if the report identified the state well numbers that have been established by the Commission.

The potable needs for the existing Ewa Village (0.7 mgd) are covered under the water use permit for Kunia III; an additional 1.27 mgd from Kunia III has been allocated for new Ewa Villages. However, the Commission ruled that issuance of the permits would be conditioned on completion of the EA/EIS process and a negative declaration on the final EA was anticipated.

One concern is the proximity of other large withdrawals proposed by DHCD. DHCD has pending applications to modify and use EP 2 (Well Nos. 2201-03, 04, 07). They have also applied for permits for a new backup well at this site. EP 2 is located near the intersection of Kunia Road and Farrington Hwy., which is about 1.5 miles makai from Kunia III. The proposed withdrawal at EP 2 for nonpotable needs for West Loch and Ewa Villages is 3.5 mgd. The proposed withdrawal at EP 2 and the new well site totals 8 mgd, which may cause the wells to interfere with each other.

Another concern is the sustainable yield and water availability. The sustainable yield for Waipahu-Waiaawa Aquifer System is 119 mgd. Current allocations total 116.334 mgd. The water use permits for Oahu Sugar Company wells have been transferred to Campbell Estate, but these are subject to review in 1995. The Commission may reduce some of the allocations to former Oahu Sugar Company wells as a result of this review.

Overall, the subject report does not adequately describe the above issues related to water resources for the project and the fact that an EA may also be needed for EP 2 for the nonpotable needs of the project.
TITLE OF PROJECT: Off-Site Water System for Ewa Development Projects

LOCATION: ISLAND: Oahu
DISTRICT: Ewa
TAX MAP KEY: 1st Div., 9-01-01, 05, 10, - 12 - 17 to 21, 25 & 28
9-02-01 & 9-4-137

PLEASE CHECK THE FOLLOWING CATEGORIES:

Type of Action: AGENCY X APPLICANT

Applicable State or Federal Statute:
- Chapter 343, HRS
- Chapter 205A, HRS
- NEPA (Federal Actions Only)

Type of Document:
- Draft Environmental Assessment (Negative Declaration anticipated)
- Draft EIS
- NEPA NOP
- Final Environmental Assessment (Negative Declaration)
- Final EIS
- NEPA Draft EIS
- Final Environmental Assessment (EIS Preparation Notice)
- NEPA FONSI
- NEPA Final EIS

Type of Revision (if applicable):
- Revised
- Supplemental
- Addendum
- Other (please explain)

Prior to general distribution, please submit to OEQC: 4 copies of the Draft EA, Final EA (Negative Declaration or EIS Preparation Notice), 4 copies of the Draft EIS or Final EIS (For Draft and Final EISs an additional copy is mailed to OEQC.)

PROPOSING AGENCY OR APPLICANT SHOULD SUBMIT COPIES OF THE DOCUMENTS TO THE APPROVING AGENCY OR ACCEPTING AUTHORITY PRIOR TO SUBMITTING COPIES TO OEQC.

APPROVING AGENCY OR ACCEPTING AUTHORITY:
Planning Dept. City & County of Honolulu
650 S. King Street, 8th Floor
Honolulu, HI 96813-3017

CONTACT: Ms. Cheryl Soon, Ch. Planning Officer PHONE:

PROPOSING AGENCY OR APPLICANT:
Dept. of Housing & Community Development
650 S. King Street
Honolulu, HI 96813

CONTACT: Mr. John Reid PHONE:

CONSULTANT: Environmental Communications
P.O. Box 536
Honolulu, HI 96809

CONTACT: Fred Rodriguez PHONE:

COMMENT PERIOD END DATE: August 8, 1995
Dear Reviewer:

Attached for your review and comment is the:

DRAFT ENVIRONMENTAL ASSESSMENT
FINAL ENVIRONMENTAL ASSESSMENT
XX ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE
DRAFT ENVIRONMENTAL IMPACT STATEMENT
FINAL ENVIRONMENTAL IMPACT STATEMENT

which was prepared pursuant to the National Environmental Protection Agency (NEPA) requirements and/or the EIS law (Chapter 343, Hawaii Revised Statutes (HRS) and the EIS Rules (Administrative Rules, Title 11, Chapter 200, State Department of Health).

We are requesting your comments and areas of concern on this proposed project within the 30 day requirement. If we do not hear from your agency or group, we will assume that you have no comments on the proposed action.

Title of Project: Off-Site Water System - Ewa Development Projects

Location: Island: Oahu District: Ewa

Tax Map Key: 9-1-01, 05,07,10,12,17 to 21, 25 & 28. 9-4-02 & 9-4-137

Action: Agency: XX Applicant: ________________

Accepting Authority: Planning Department, City & County of Honolulu

Address: 650 S. King Street
Honolulu, HI 96813

Contact: Ms. Cheryl Soon, Ch.Planning Officer

Proposing Agency or Applicant: Dept. of Housing & Community Development

Address: 650 S. King Street
Honolulu, HI 96813

Phone#: ___________________________

Consultant: Environmental Communications

Address: P.O. Box 536

Contact: F. J. Rodriguez Phone#: ___________________________
ENVIRONMENTAL IMPACT STATEMENT
PREPARATION NOTICE
CHAPTER 343, HAWAII REVISED STATUTES
FOR
OFF-SITE WATER SYSTEM FOR
EWA DEVELOPMENT PROJECTS

Tax Map Key: 1st Div., 9-1-01, - 05, - 07, - 10, - 12, - 17 To
-21, - 25 & -28
9-4-02 & 9-4-137

FOR
Department Of Housing &
Community Development
City & County Of Honolulu

WITH
THE BOARD OF WATER SUPPLY

BY

Engineers Surveyors Hawaii, Inc.
Building No. 6, Suite No. 1
1020 Auahi Street
Honolulu HI 96814

And
Environmental Communications

JULY 1995
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>II. GENERAL DESCRIPTION OF THE ACTION'S CHARACTERISTICS</td>
<td>3</td>
</tr>
<tr>
<td>A. INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>B. TECHNICAL CHARACTERISTICS</td>
<td>3</td>
</tr>
<tr>
<td>C. SOCIO-ECONOMIC CHARACTERISTICS</td>
<td>3</td>
</tr>
<tr>
<td>D. ENVIRONMENTAL CHARACTERISTICS</td>
<td>4</td>
</tr>
<tr>
<td>E. FUNDING AND PHASING</td>
<td>4</td>
</tr>
<tr>
<td>III. THE AFFECTED ENVIRONMENT</td>
<td>5</td>
</tr>
<tr>
<td>A. GEOGRAPHICAL CHARACTERISTICS</td>
<td>5</td>
</tr>
<tr>
<td>B. HYDROLOGICAL CHARACTERISTICS</td>
<td>5</td>
</tr>
<tr>
<td>C. BIOLOGICAL CHARACTERISTICS</td>
<td>5</td>
</tr>
<tr>
<td>D. SERVICE FACILITIES</td>
<td>6</td>
</tr>
<tr>
<td>E. ARCHAEOLOGICAL SITES</td>
<td>6</td>
</tr>
<tr>
<td>F. AESTHETICS AND VISUAL CHARACTERISTICS</td>
<td>5</td>
</tr>
<tr>
<td>G. RELATIONSHIP TO EXISTING LAND USE, POLICIES, PLANS, AND CONTROLS</td>
<td>6</td>
</tr>
<tr>
<td>IV. SUMMARY OF MAJOR IMPACTS AND MITIGATION MEASURES</td>
<td>7</td>
</tr>
</tbody>
</table>
V. ALTERNATIVES CONSIDERED
   A. DO-NOTHING ALTERNATIVE

VI. DETERMINATION, FINDINGS AND REASONS SUPPORTING DETERMINATION

VII. LIST OF AGENCIES CONSULTED DURING THE PREPARATION OF THE ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

VIII. LIST OF PREPARERS

LIST OF FIGURES

FIGURE

1  Location Map
2  Project Site Plan
3  State Land Use District Boundary Map
SUMMARY

Chapter 343, Hawaii Revised Statutes (HRS)
Environmental Impact Statement
Preparation Notice
For
Department of Housing & Community Development
City & County of Honolulu

July, 1995

APPLICANT: Department of Housing & Community Development, with Board of Water Supply City & County of Honolulu

APPROVING AGENCY: Planning Department City & County of Honolulu

PROJECT NAME: Off-Site Water System - Ewa Development Projects

PROJECT LOCATION: Ewa, Oahu, Hawaii
Tax Map Key: 9-1-01, -05, -07, -10, -12, -17 to-21, -25 & -28, 9-4-02 & 9-4-137 (See Figure 1).

STATE LAND USE DESIGNATION: Agriculture; Urban

COUNTY DEVELOPMENT PLAN DESIGNATION: Land Use Map: Parks & Recreation; Agriculture Public Facilities Map: Park (Private Funding); No time schedule; PW - Potable Water

COUNTY ZONING: Agriculture

LANDOWNER: City & County of Honolulu Department of Parks & Recreation State of Hawaii, Dept. of Transportation Estate of James Campbell - (Easement to BWS)

LIST OF PERMITS REQUIRED: Well Construction - State Department of Land and Natural Resources (DLNR)
Water Use - State DLNR
County Grading - City Department of Public Works (DPW)
Noise Variance; NPDES
Dev. Plan Pub. Fac. Map
(Well Symbol 6 years) -

State Department of Health (SDOH)
/City - DPW
City Planning Dept.

Off-Site Water System
- Ewa Development Projects

July, 1995
Figure 1

PROJECT VICINITY MAP

OFF-SITE WATER SYSTEM
EW A DEVELOPMENT PROJECTS
GENERAL DESCRIPTION OF THE ACTION'S CHARACTERISTICS

A. INTRODUCTION

The Department of Housing & Community Development, City & County of Honolulu (DHCD) in cooperation with the Honolulu Board of Water Supply (BWS), is developing the Off-Site Water System Improvements necessary to serve: 1) the existing and proposed Ewa Development housing projects, and 2) the future needs of the BWS in Ewa, Oahu, Hawaii. The Plan will be initiated with the potable water source development in the Ewa-Waipahu area. The source development consists of drilling three exploratory wells to determine if adequate yield is available for future potable water requirements. A sustainable capacity of 4.5 million gallons per day (MGD) is the objective of the exploratory drilling. The exploratory wells will demonstrate the ability to provide the desired volume of water, leading to the next phase which is the subject of this EISPN. The planning and design for the source facility, storage reservoirs, and transmission lines will be reviewed in this EISPN document.

B. TECHNICAL CHARACTERISTICS

The DHCD in conjunction with the BWS, is proposing to design and build additions to a water system to provide potable quality drinking water to the various planned communities in the Ewa Plains. (See Figure 2). The system will consist of the following proposed improvements:

1. Well Pump Station Site Improvements (to be located in a City & County of Honolulu park site on Heahea Street in the Royal Kunia Subdivision, TMK: 9-4-137: 138)
   a. 3 - 1050 gallons per minute (GPM) submersible well pumps;
   b. 1 - 100,000 gallon glass lined steel overflow tank with a spillway elevation of 332.5' is required for the three well pumps.

2. Transmission Main (Well Site to Reservoir)

   a. A 16" pipeline will be required from the well pump station through Royal Kunia and Village Park subdivision roads and Kunia Road to the existing Kunia 228.0’ 1.5 MG reservoir site.

3. Reservoir Site Improvements (to be located adjacent to the existing 228.0’ Reservoir in open State lands north of existing Kunia Road).
Figure 2 LOCATION MAP
OFF-SITE WATER SYSTEM
EW A DEVELOPMENT PROJECTS
a. Planning is under way to design a 1.5 MG reservoir tank adjacent to the existing BWS 3.0 MG reservoir tank north of Kunia Road. Also under consideration is the design and installation of a Granular Activated Carbon (GAC) water treatment plant adjacent to the proposed 1.5 MG reservoir. This facility will be included should the water quality test results dictate a need for the treatment plant.

4. Transmission Main (Reservoir to Service Areas)

a. A 16” pipeline from Farrington Highway to Puuloa Road would fulfill DHCD’s requirements to serve its planned projects.

b. In anticipation of the future service areas in Ewa Beach, the DHCD in conjunction with the BWS, will participate in the transmission main size increase from 16” to 42”.

c. A 36” pipeline from Farrington Highway (near the Farrington Booster Pump Station) will traverse along a plantation road, thence along Mango Tree Road and finally along Fort Weaver Road to Papipi Road to serve both DHCD’s projects and BWS future service areas.

These planned system improvements are required to provide service adequate to meet both the potable drinking water requirements for the residential, commercial, parks, schools, churches, and other public facility uses. Also, the required fire flow demands will need to be provided in the system development. A second requirement for the water system will be demands by future development and use of the Barbers Point Naval Air Station. In total, both development water demand requirements could reach upwards of 30 million gallons per day (MGD).

C. SOCIO-ECONOMIC CHARACTERISTICS

The initial scope of the recently completed Environmental Assessment (E.A.) for the Exploratory Wells was to determine by drilling the exploratory wells whether or not there was adequate sustainable yield and potable quality. The need to provide approximately 4.5 MGD was the primary purpose of the exploratory wells. Upon final determination of acceptable quality and yield, the next phase will be source facility, storage, and transmission design.
D. ENVIRONMENTAL CHARACTERISTICS

The proposed water system is on sites and an alignment that will for the most part, stay within BWS rights-of-way, an existing City Park Site, and other public rights-of-ways. There is one portion of the alignment that will require access via an easement through fallowed cane lands. The existing easement is granted to the BWS from The Estate of James Campbell.

E. FUNDING AND PHASING

This off-site water system project will be designed and constructed in several phases over a period of approximately 3-5 years. Preliminary cost estimate for the proposed projects is approximately $19.9 million dollars. The costs are subject to change upon completion of the design plans, availability of funding, and water demand requirements. Government costs will be primarily for the overall potable water development program and will be funded by City DHCD, BWS, as well as other agencies and developers. These costs will be reimbursed by users at a later date. With the successful development of the water source and with the required sustainable yield, future increments will consist of:

- final source facility development;
- storage (reservoir design and construction);
- and transmission lines.
III. THE AFFECTED ENVIRONMENT

A. GEOGRAPHICAL CHARACTERISTICS

The project site is located in the Ewa Judicial District. The major population center nearest the well drilling site is the town of Waipahu. The well facility is to be located on City & County Parks Department lands in the Royal Kunia residential subdivision. The planned transmission main from source to storage facilities will be constructed within Public road rights-of-way and connection will be at the intersection of Kunia Road North and Interstate Highway H-1 where a second storage reservoir is proposed. The distribution transmission main will connect to an existing water main at Farrington Highway and cross through a cane field, continue along existing Fort Weaver Road and terminate at Papipi Road in Ewa Town.

The soils underlying the project alignment are basically from lava flows from the Koolau volcanic shield. These soils are classified as Molokai Silty Clay Loam 3-7% slope, (MuB); Molokai Silty Clay Loam, 7 to 15 percent slopes (MuC); Waipahu Silty Clay 0-2% slopes, (WkA), and Waipahu Silty Clay, 3 - 8% slopes (WkB) and Honouliuli Clay 0-2% slopes, and Honouliuli Clay 2-6% slopes according to the "Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii" produced in 1972 by the U.S. Department of Agriculture, Soil Conservation Service. In general, these soils occur on well drained areas on coastal plains. Runoff is slow to moderate, and the erosion hazard is slight to moderate. Primary use is for sugar cane, pasture, and homesites. Annual rainfall amounts to 20 to 25 inches, most of which occurs between November and April. Natural vegetation consists of kiawe, ilima, uhaloa, feather fingergrass, and buffel grass.

The area’s primary economic activity has been agriculture, predominantly sugar cane production. At the present time, sugar cultivation has ceased with the closure of Oahu Sugar Company (OSCO). Lands under lease to OSCO from Campbell Estate have been or are being re-designated to Urban/Residential use. The major transition from Agriculture to Urban-Residential has created the need for utilities such as potable water, etc.

B. HYDROLOGICAL CHARACTERISTICS

The project site is entirely in the Agricultural District and Residential R-5 zoned lands. The Flood Hazard Zone designation is "D" area of undetermined flood hazards. The balance of the area is in active urban residential use and as such, employs designed, constructed, and operating drainage systems that comply with County drainage
standards. For the undeveloped portions of the proposed system alignment, the erosion controls and surface runoff hazards will be designed to comply with the applicable Federal, State, and City codes.

C. BIOLOGICAL CHARACTERISTICS

There are no indigenous species of flora or fauna on the proposed project alignment; this is due to the historic use of the lands for agriculture, and the present urban residential land use. Any flora or fauna species found on the property are exotic or introduced species.

D. SERVICE FACILITIES

The nature of the proposed water system precludes the demand for urban services, i.e. water, sewer, police, fire protection, electrical and telephone services since it is one of the component items.

E. ARCHAEOLOGICAL SITES

Because the proposed project alignment is located in or adjacent to existing agricultural lands and established urban residential roadway systems, it is unlikely that historic sites are present. In the event that the minimal site clearing required uncovers any sites, the Historic Preservation Division of the Department of Land and Natural Resources will be notified and all construction work will be halted until a determination has been made of the site's value.

F. AESTHETICS AND VISUAL CHARACTERISTICS

Adverse long term visual or aesthetic impacts will be limited to the temporary impacts associated with the construction phase. On completion, the water transmission mains alignment will be below grade. The source facility will be an aboveground structure within a City Park site with bordering landscaping to provide aesthetic compatibility with the planned park facilities. The storage reservoir will be a single structure above grade. The site for the storage facility is within State lands north of existing Kunia Road. There is an existing reservoir at this location, and the second reservoir will provide storage for potable water to serve the immediate needs of DHCD projects in the Ewa Plains. Additional lands will need to be acquired from the State for the second storage facility. A neutral color scheme will be used so that the additional reservoir will not be obtrusive.
G. RELATIONSHIP TO EXISTING LAND USE, POLICIES, PLANS, AND CONTROLS

1. All construction is taking place within the Agricultural and Urban Districts as indicated on the State Land Use District Boundary maps. (See Figure 3)

2. The County Zoning is Agriculture and Residential.

3. The Public Facilities Land Use Map designation is for Parks & Recreation and Potable Water, while the Public Facilities Land Use Map is for Park (Private Funding) No time schedule.
Figure 3  STATE LAND USE DISTRICT BOUNDARY MAP

OFF-SITE WATER SYSTEM
EW A DEVELOPMENT PROJECTS
IV. SUMMARY OF MAJOR IMPACTS AND MITIGATION MEASURES

The proposed action will result in significant commitments to land use policy changes. Any impacts resulting from the subject action will be temporary construction activities related to the actual project. The proposed action will provide the necessary infrastructure to lands designated for Urban/Residential land uses. The following impacts have been evaluated:

1. Stream flow and environment: The well site is within an established urban residential area (Proposed park site) and as such, is not adjacent to a stream. The closest stream is the Waikele Stream, and impacts to the stream flow will not be a factor since the well drilling and the stream's elevation are not similar. For the storage reservoir at the Kunia Road Intersection and the transmission line system, there will be no adverse impacts to the Waikele Stream from their development.

2. Noise: There will be a noticeable increase in noise levels during the daily construction process. This noise will be a temporary intrusion on the residential community noise standards established by the Department of Health. Daily construction hours will be monitored in terms of noise impacts from the construction related machinery, and also the potential impacts from traffic that may be temporarily delayed during the AM and PM peak travel times.

3. Traffic: Traffic impacts will result from the construction phase of this proposed project. Delays attributed to the queuing of vehicles affected by the excavation of the transmission lines will result in noise levels increasing, as well as impacts to air quality. Normal construction work hours of 7:00 a.m. to 3:30 p.m. may be revised at the discretion of the contractor to minimize traffic delays. This may however, extend the period of construction and increase costs.

3. Dust and Erosion Control: In view of the clearing, grubbing, trenching and grading of the project alignment, adequate mitigation of the fugitive dust will need to be provided. Erosion control should also be considered since the alignment site may be exposed for lengthy time periods. Erosion control measures will be implemented as a requirement of the NPDES system. The general contractor will be required to employ Best Management Practices (BMP) to prevent suspended solids from entering existing drainage systems. The supporting mitigation measures of the BMP will be required in the final drawings for implementation by the general contractors. This is to insure that the State Water Quality standards are maintained.
V. ALTERNATIVES CONSIDERED

A. DO-NOTHING ALTERNATIVE

The City & County of Honolulu has experienced phenomenal urban growth in the past decade and consequently, the demands for potable quality water will soon exceed the ability of the BWS to provide potable water. Unfulfilled, the approved land uses in the Ewa Plains for housing and other urban land uses will not be completed.

B. ALTERNATIVE SITES

1. Well Field Sites: At the present time, the BWS has not determined the acceptability of the well field at the Village Park location. Final decisions to search for additional source development sites will not be made until confirmation that the desired quantity of daily sustainable yield can be met at this site.

2. Storage Reservoir Site: Availability of government owned lands with a sufficient and compatible elevation to permit gravity flow was the key consideration of selecting the Kunia Intersection location. There is an existing reservoir at that location, and there is sufficient space for a second storage facility. Future expansion will probably require further site selection study.

3. Transmission/Distribution System: The design of the transmission system was conditioned by the topographic elevations and location of the Fort Weaver Road. Further, the ability to work within existing government rights-of-way eliminated land acquisition delays. The BWS has obtained the easement from the Campbell Estate for the alignment of the transmission line through the fallowed OSCO lands.

C. ALTERNATIVE ACTIONS

The potential availability of windward agricultural water due to the close down of Oahu Sugar Company will provide the State Commission of Water Resource Management, Department of Land and Natural Resources, certain options to make water available to the Board of Water Supply. It is premature to consider this option, but it can be considered in long term future planning for water source development. Competing demands for this Windward water source has resulted in creating a future uncertainty as to the final use of the windward water source.
VI. DETERMINATION, FINDINGS AND REASONS SUPPORTING DETERMINATION

After completing an assessment of the potential environmental effects of the proposed off-site water system for the Ewa Development Projects and consulting with other governmental agencies, it has been determined that an Environmental Impact Statement (EIS) is required.

1. The proposed action consists of a significant planning and construction project for future potable water demand based on increased urbanization. The increased demand for potable quality water has resulted in competing uses for water availability on Oahu.

2. Permanent degradation of existing ambient air and noise quality levels in the Ewa Plains is not anticipated from this proposed project. During the actual construction process, there will be adverse impacts from air pollution and noise resulting from the actual site work, but these will not be permanent and the contractor will be required to maintain or adhere to the State Department of Health Air Quality and Community Noise Standards.

3. There are no known endangered species of animal or plants within the project sites.

4. There are no known natural, historic, or archaeological sites within the project sites. If sites are uncovered during the construction phases, the State Historic Preservation Office of the Department of Land and Natural Resources will be notified immediately with all work stopping. Upon determination of the find's value, then work may proceed.

5. The project is consistent with the Department’s plans for water development master planning for the Ewa Plains. Further, the BWS has future commitments to the Barbers Point Naval Air Station land uses and other adjacent lands. This has resulted in the need to plan and design water systems at this early point for planning purposes.

6. This project, if successful as planned, will provide the County with the necessary capability to allow continued residential and commercial development of the Ewa Plains. The applicant will comply with applicable statutes, ordinances, and rules of the Federal, State, and County governments during the actual construction phase.
VII. LIST OF AGENCIES TO BE CONSULTED IN THE PREPARATION OF THE ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE.

**ORGANIZATIONS AND AGENCIES:**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Date of Consultation</th>
<th>Date Comment Received</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State of Hawaii</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Gregory Pai, Director Office of State Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. James J. Nakatani, Director Department of Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Michael Wilson, Chair State Dept. of Land &amp; Natural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. John T. Harrison Environmental Center, UH-Manoa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Kazu Hayashida, Director State Dept. of Transportation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Seiji F. Naya, Director Department of Business, Economic Development and Tourism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Sam Callejo, Comptroller Department of Accounting &amp; General Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Edward V. Richardson, Director Department of Defense</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Kali Watson, Chairman Department of Hawaiian Home Lands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Mits Shito, Executive Director Housing Finance and Development Corp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Herman M. Aizawa, Superintendent Department of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mr. Don Hibbard State Historic Preservation Division Department of Land and Natural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director Water Resources Research Center University of Hawaii - Manoa</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Off-Site Water System - Ewa Development Projects

July, 1995
City & County of Honolulu
Ms. Cheryl Soon, Chief Planning Officer
Dept. of General Planning

Mr. Patrick Onishi, Director
Dept. of Land Utilization

Mr. Kenneth Sprague, Ch.Engr.
Dept. of Public Works

Mr. Charles A. Swanson, Director
Dept. of Trans. Services

Mr. Michael S. Nakamura, Chief
Honolulu Police Department

Mr. Anthony J. Lopez, Jr., Chief
Honolulu Fire Department

Mr. Raymond H. Sato, Manager and Chief Engineer
Board of Water Supply

Ms. Dona Hanaike, Director
Dept. of Parks & Recreation

Waipahu Neighborhood Board # 22

Ewa Neighborhood Board No. 23

The Estate of James Campbell
Planning Department

Off-Site Water System
- Ewa Development Projects

July, 1995
VIII. LIST OF PREPARERS

Engineers Surveyors Hawaii, Inc.
Project Management

Akinaka & Associates
Engineering Design Consultants

Environmental Communications.
Environmental document Preparer
Ms. Rae M. Loui, Deputy Director  
Commission on Water Resource Management  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 631  
Honolulu, Hawaii 96809

Dear Ms. Loui:


Thank you for the opportunity to comment on this application. We have no objection to the permit to construct a standby well at EP-2. We return the cover letter form accordingly marked.

If you have any questions, please contact Herbert Minakami at [redacted]

Very truly yours,

-Raymond H. Sato  
Manager and Chief Engineer
Mr. Raymond Sato  
Manager and Chief Engineer  
Honolulu Board of Water Supply  
630 Beretania Street  
Honolulu, Hawaii 96843

Dear Mr. Sato:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by AUG 11, 1995.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [contact information redacted].

Sincerely,

RAE M. LOUI  
Deputy Director

Response:  
(XX) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: Herbert H. Minakami

Signed: FOR RAYMOND H. SATO  
Manager and Chief Engineer

Phone: [redacted]  
Date: 9/17/95
COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

APPLICATION FOR PERMIT
- Well Construction or Pump Installation

Instructions: Please print in ink or type and send completed application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96822. Application must be accompanied by a non-refundable filing fee of $25.00 payable to the Dept. of Land and Natural Resources. The Commission may not accept incomplete applications. For assistance, call the Regulation Branch at 808-586-0225.

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   a) WELL OWNER
      Dept. of Housing & Community Dev.
      Firm/Name: City & County of Honolulu
      Contact Person: Randy Wong
      Address: 601 S. King Street, 5th Floor
      Honolulu, HI 96813
   b) LANDOWNER
      Dept. of Housing & Community Dev.
      Firm/Name: City & County of Honolulu
      Contact Person: Randy Wong
      Address: 601 S. King Street, 5th Floor
      Honolulu, HI 96813
   c) CONTRACTOR
      Firm/Name: [Unknown at this time.]
      Pht: [Contractor's C-67 License No.]
      Address: [Unknown at this time.]

2. WELL LOCATION/NAME: West Loch Island Oahu
   Address: Honolulu, Oahu, Hawaii
   Tax Map Key: 9-1-17 (per.)
   (Attach a USGS map, scale 1" to 2000, and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   - Drill New Well
   - Alter Location
   - Modify Existing Well
   - Pedestal
   - Install New Pump
   - Replace Pump
   - Modify Pump
   * Be sure to complete and submit well abandonment report upon completion of work.
   (b) WELL TYPE:
   - Dug
   - Bored
   - Driven
   - Drilled
   - Pedestal
   - Is this well a part of a battery of wells? Yes No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   - Rated Pump Capacity: 1500 gallons per minute/each (3 pumps)
   - Pump Type:
     - Deep Well Turbine
     - Submersible
     - Centrifugal
   - Motor:
     - Deep Well
     - Rotary
     - Centrifugal
   - Reciprocating
   - Gas
   - Electric, rated horsepower of

5. PROPOSED USE:
   - Municipal (including hotels, stores, etc.)
   - Military
   - Domestic (individual, non-commercial water use)
   - Irrigation (crop)
   - Industrial
   - Other (explain)
   - State Land Use District
   - Urban
   - Agriculture
   - Rural
   - Conservation
   - County Zoning (describe)
   (If more space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 3.5 million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
      - Flow-meter
      - Open-pipe
      - Orifice Plate
      - War

7. PENDING ACTIONS:
   - Code
   - SMA
   - EIS
   - EA
   - NONE
   - Other (explain)

8. REMARKS, EXPLANATIONS:
   - The proposed use will be irrigation for common landscaping, parks and golf courses at the City's affordable housing projects of West Loch and Eva Villages.

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resources Management, the permit is to be effective within two (2) years of the approval date. In addition, the contractor shall submit to the Commission a well completion report and abandonment report, or both, within 30 days of completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that approval of the proposed pump does not constitute a determination of corrective water depth and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

City & County of Honolulu
Well Owner: [Unknown]
Contractor: [Unknown]
Signature: [Unknown]
Date: [Unknown]

City & County of Honolulu
Landowner: [Unknown]
Signature: [Unknown]
Date: [Unknown]

For Official Use Only:
Date Received:
Date Accepted:
Field Checked By:
Date:

Longitude: [Unknown]
Latitude: [Unknown]
Aquifer System Name: [Unknown]
State Well No.: [Unknown]
The proposed plan is to use the EP2 wells (2201-03, 04 and 07) and create a new well at the site for BACK-UP purposes (since the EP2 wells are very old). New pumps will be installed over the existing wells. The pump capacity would be 1400 gpm, 250 Hp. The section of the proposed BACK-UP well is shown below:

### 9. PROPOSED WELL SECTION

- **Elevation at top of casing:** 42 ft, mat.
- **Ground Elevation:** 40 ft, mat.
- **Cement Grout:** 100 ft.
- **Rock Packing:** N/A.
- **Hole Diameter:** 18 in.
- **Total Depth:** 250 ft.

#### Solid Casing:
- **Material:** Steel ASTM A-53
- **Length:** 100 ft.
- **Diameter:** 14 in.
- **Wall thickness:** 3/8 in.

#### Casing:
- **Material:** N/A
- **Length:** N/A
- **Diameter:** N/A
- **Wall thickness:** N/A
- **Openings:** 3/8 in. sq. in./ft.

#### Open Hole:
- **Length:** 150 ft.
- **Diameter:** 13 in.

---

*Approximate elevation at time of filing application. Ground elevation above mean sea level (mat) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment report.*
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWA VILLAGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahikho Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:por. 39, 69</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td>Totals for Ewa Villages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,043,820</td>
<td></td>
</tr>
<tr>
<td>WEST LOCH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td></td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td></td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td></td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td></td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td></td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td></td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1</td>
<td>160.00</td>
<td></td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17</td>
<td>R-5</td>
<td>3.40</td>
<td></td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td></td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td>Totals for West Loch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>213.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,508,900</td>
<td></td>
</tr>
<tr>
<td>Total for Ewa Villages + West Loch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>497.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,552,720</td>
<td></td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
June 29, 1995

Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Charley Ice

Dear Ms. Loui:

Subject: Clarification of Applications for Water Use Permit and Well Construction/Pump Installation Permit West Loch EP 2 (Well Nos. 2201-03, 04, 07) Waipahu-Waiawa Groundwater Management Area, Oahu

Thank you for your letter of June 23, 1995 to Mr. Randy Wong at the City Department of Housing and Community Development. We apologize for the inconvenience caused by our failure to provide the requested information and hope this letter will clarify the City’s requests.

The completed system proposes the continued use of the existing battery of wells (2201-03, 04 and 07). These wells are connected via a common manifold to a single pump (EP 2). The existing EP 2 pump would be replaced with two (2) new pumps to increase capacity. In addition, a new well and pump is proposed in the golf course, approximately 50 feet from the existing wells, for back-up purposes since the existing wells are very old and are suspected to be in poor condition.

The two (2) new replacement pumps for EP 2 would be each be centrifugal units rated at 1400 gpm. The new back-up pump would be a vertical turbine unit, also with a rated pump capacity of 1400 gpm.

The proposed well section in Item 9 of the permit application reflects the new back-up well. Sections for the existing wells (2201-03, 04 and 07) would not be altered. Thus far, we were unsuccessful in locating record drawings that show the current well sections.
We appreciate your consideration of our application. Please call me at 642-1113 if you have any questions.

Very truly yours,

[Signature]

Greg H. Hiyakumoto
Senior Civil Engineer

cc: Avis Kamimura, DHCD
CHECKLIST

Type of Permit: ☑ Well Construction  _ Pump Installation  _ Water Use Required

Well Name  EP 2 Battery  No. 2001-
Applicant  Honolulu DHCD  Island  O'ahu
Consultant  R.M. Town  Landowner  Same

Appl Recd  29 June 95  +90 days  27 Sep 95
Mapped/#  ?  Logcomp  29 July 95  Logbk  29 July 95
Acknwlgmt  JUL 27 1995  Ch 343 pau
Fee Depos  _  Tent CWRM Action  13 Sep 95

Copies Sent for Review  Sent  Comments Recd
DoH/ Drink Water  JUL 27 1995
Wastewater  JUL 27 1995
Hist. Preserv  JUL 27 1995
Aquat Res  JUL 27 1995
OHA  JUL 27 1995
DHHL  JUL 27 1995
Honolulu BWS  JUL 27 1995
 Maui DoW  
Kauai DoW  
Hawaii DoW  
PW  
SCLDF  JUL 27 1995
Com: Wai'alea M.B  JUL 27 1995
 Ewa M.B.  JUL 27 1995

Bulletin  _  to Agenda  _  Submittal  _  CWRM  _  to Appl  _  Permit/Notice to Appl  _

Attachments:
- application
- map
- ltr 29 June 95
Hiyakumoto to Leui
TO: Honorable Kali Watson, Director
Department of Hawaiian Home Lands
Honorable Clayton H.W. Hee, Chairman and Trustee At Large
Office of Hawaiian Affairs

FROM: Michael D. Wilson, Chairperson
Commission on Water Resource Management

SUBJECT: Well Construction Permit Application

Please review the following permit applications pursuant to your area of concern and submit your comments to us by AUG 11 1995.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [redacted].

Response:
- [X] We have no objections
- ( ) Not subject to our regulatory authority and permit
- ( ) Comments attached
- ( ) Additional information requested
- ( ) Extended review period requested

Contact Person: [redacted]
Signed: [redacted]
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
919 Ala Moana Blvd., 3rd Floor  
Honolulu, Hawaii 96814  

Attn: Mr. William Wong  

Dear Mr. Arizumi:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by ___AUG 11 1995________.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [Redacted].

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

Response:

- [ ] We have no objections
- [X] Not subject to our regulatory authority and permit
- [ ] Comments attached
- [ ] Additional information requested
- [ ] Extended review period requested

Contact Person: Bill Wong  
Signed: Bill Wong  
Phone: [Redacted]  
Date: 7/31/95
TO: Dr. Don Hibbard, Director  
   Historic Preservation Program  
   Mr. William Devick  
   Division of Aquatic Resources  

FROM: Rae M. Loui, Deputy Director  
   Commission on Water Resource Management  

SUBJECT: Well Construction Permit Application  

Please review the following permit applications pursuant to your area of concern and submit your comments to us by AUG 1 1995.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [blank].

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested  

Contact Person: William Devick  
Phone: [blank]  
Signed: [Signature]  
Date: 7-27-95
**APPLICATION FOR PERMIT**

**[COMMISSION ON WATER RESOURCE MANAGEMENT]**

**Department of Land and Natural Resources**

---

**1. APPLICANT:** (may be a, b, or c, but all must be filled in)

(a) **WELL OWNER**
- Department of Housing & Community Dev.
- City & County of Honolulu
- Address: 650 S. King Street, 5th Floor

(b) **LANDOWNER**
- Department of Housing & Community Dev.
- City & County of Honolulu
- Address: 650 S. King Street, 5th Floor

(c) **CONTRACTOR**
- Firm/Name: Unknown at this time.
- Ph.: _______
- Contractor's C-67 License No.: _______
- Address: _______

---

**2. WELL LOCATION/NAME:** West Loch Island Oahu

- Address: Honolulu, Oahu, Hawaii
- Tax Map Key: 9-1-17 (per.)

(Attach a USGS map, scale 1"=2000, and a property tax map showing well location referenced to established property boundaries.)

---

**3. (a) PROPOSED WORK:**
- Dig New Well
- Alter Location
- Modify Existing Well
- Radial
- Install New Pump
- Replace Pump
- Modify Pump

- Be sure to complete and submit well abandonment report upon completion of work.

- Method of Flow Measurement: Open-Can

---

**4. PROPOSED PUMP INFORMATION:**
- Rated Pump Capacity: 1400 gallons per minute (3 pumps)
- Motor: Gas
- Submersible
- Centrifugal
- Rotary
- Impulse
- Diesel, rated horsepower of _______

---

**5. PROPOSED USE:**
- Municipal (including hotels, stores, etc.)
- Domestic (individual, noncommercial water users)
- Irrigation (crop)
- Rural
- Conservation
- Industrial
- Military

**County Zoning (designate)**
- Urban
- Agriculture

---

**6. (a) PROPOSED AMOUNT OF WITHDRAWAL:** 3.5 million gallons per day

---

**7. PENDING ACTIONS:**
- CDUA
- SMA
- SIT
- EA
- NONE
- Other (explain)

---

**8. REMARKS, EXPLANATIONS:** The proposed use will be irrigation for common landscaping, parks and golf courses at the City's affordable housing projects of West Loch and Eva Villages.

---

**NOTE:** Signatures below indicate that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be done within two (2) years of the approved date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days of completion dates of the permitted work. The applicant also understands that monthly water use reports shall be submitted to the Commission. The applicant further understands that upon the proposed work shall not constitute a determination of cumulative water rights and shall not guarantee the pump capacity or future use upon the permitted pump capacity.

---

**City & County of Honolulu**

<table>
<thead>
<tr>
<th>Well Owner</th>
<th>Landowner</th>
<th>Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Housing &amp; Community Dev.</td>
<td>Dept. of Housing &amp; Community Dev.</td>
<td>Landowner Dept. of Housing &amp; Community Dev.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>Signature</th>
<th>Signature</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
</table>

For Official Use Only:
- Date Received: _______
- Date Approved: _______
- Field Checked By: _______
- Date: _______
- Longitude: _______
- Aquifer System Name: _______
- State Well No.: _______

6/2417 WC
The proposed plan is to use the EP2 wells (2201-03, 04 and 07) and create a new well at the site for BACK-UP purposes (since the EP2 wells are very old). New pumps will be installed over the existing wells. The pump capacity would be 1400 gpm, 250 Hp. The section of the proposed BACK-UP well is shown below:

9. PROPOSED WELL SECTION

Elevation at top of casing: 42 ± ft, mas

Casing Group: 100 ft

Rock Packing: N/A

Hole Diameter: 18 in.

Total Depth: 250 ft

Ground Elevation: 40 ± ft, mas*

Solid Casing:
- Material: Steel API A-53
- Length: 100 ft
- Diameter: 14 in.
- Wall thickness: 3/8 in.

Casing: □ Perforated □ Screen
- Material
- Length: N/A
- Diameter
- Wall thickness
- Openings: __________ sq. in./A.F.

Open Hole:
- Length: 150 ft
- Diameter: 13 in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (mas) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
### TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

Revised 5/11/95

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td></td>
<td>2,043,820</td>
<td></td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td></td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td></td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td></td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td></td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td></td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1</td>
<td>160.00</td>
<td></td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17</td>
<td>R-5</td>
<td>3.40</td>
<td></td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td></td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td>213.6</td>
<td></td>
<td>1,508,900</td>
<td></td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td>497.92</td>
<td></td>
<td>3,552,720</td>
<td></td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
June 29, 1995

Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Charley Ice

Dear Ms. Loui:

Subject: Clarification of Applications for Water Use Permit and Well Construction/Pump Installation Permit
West Loch EP 2 (Well Nos. 2201-03, 04, 07)
Waipahu-Waiawa Groundwater Management Area, Oahu

Thank you for your letter of June 23, 1995 to Mr. Randy Wong at the City Department of Housing and Community Development. We apologize for the inconvenience caused by our failure to provide the requested information and hope this letter will clarify the City's requests.

The completed system proposes the continued use of the existing battery of wells (2201-03, 04 and 07). These wells are connected via a common manifold to a single pump (EP 2). The existing EP 2 pump would be replaced with two (2) new pumps to increase capacity. In addition, a new well and pump is proposed in the golf course, approximately 50 feet from the existing wells, for back-up purposes since the existing wells are very old and are suspected to be in poor condition.

The two (2) new replacement pumps for EP 2 would be each be centrifugal units rated at 1400 gpm. The new back-up pump would be a vertical turbine unit, also with a rated pump capacity of 1400 gpm.

The proposed well section in Item 9 of the permit application reflects the new back-up well. Sections for the existing wells (2201-03, 04 and 07) would not be altered. Thus far, we were unsuccessful in locating record drawings that show the current well sections.
Ms. Rae M. Loui  
Commission on Water Resource Management  
Page 2

We appreciate your consideration of our application. Please call me at ☑️ if you have any questions.

Very truly yours,

Greg H. Hiyakumoto  
Senior Civil Engineer

cc: Avis Kamimura, DHCD
August 11, 1995

MEMORANDUM

TO: Rae M. Loui, Deputy Director
   Commission on Water Resource Management

FROM: Don Hibbard, Administrator
       Historic Preservation Division

SUBJECT: Application for Well Construction Permit, for City and County Department of Housing & Community Development, Ewa Ground Water Management Area, O‘ahu for Well No. 2201-15 Honouliuli, ‘Ewa, O‘ahu
          TMK: 9-1-17

Thank you for the opportunity to review this project. A review of our records shows that there are no known historic sites at this parcel. This area was in sugar cane cultivation for many years. Because sugar cane cultivation would have destroyed any historic sites that might have been present, we believe that this project will have "no effect" on historic sites.

EJ:jk
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
919 Ala Moana Blvd., 3rd Floor  
Honolulu, Hawaii 96814  

Attn: Mr. Dennis Tulang  

Dear Mr. Arizumi:  

Well Construction Permit Application  

Please review the following permit application pursuant to your area of concern and submit your comments to us by AUG 11 1995.  

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [contact information redacted].  

Sincerely,  

RAE M. LOUI  
Deputy Director  

Response:  

☑ We have no objections  
☐ Not subject to our regulatory authority and permit  
☐ Comments attached  
☐ Additional information requested  
☐ Extended review period requested  

Contact Person: Lori N. Kajiwara  
Signed: [signature]  
Phone: [redacted]  
Date: 8-3-95
Mr. Randy Wong  
City and County of Honolulu  
Department of Housing and Community Development  
650 S. King Street, 5th Floor  
Honolulu, Hawaii 96813

Dear Mr. Wong:

We have received your application for a permit to construct EP2 Battery Well (Well No. 2201-15) at Honouliuli, Oahu (TMK 9-1-17 (por)).

We are circulating the application for agency and public review, and will thereafter make recommendations to the Commission.

Should you have any questions, please call the Commission on Water Resources Management staff at

Sincerely,

RAE M. LOUI
Deputy Director
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
919 Ala Moana Blvd., 3rd Floor  
Honolulu, Hawaii 96814  

Attn: Mr. Dennis Tulang  

Dear Mr. Arizumi:  

Well Construction Permit Application  

Please review the following permit application pursuant to your area of concern and submit your comments to us by AUG 1, 1995.  

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [ ////// ]  

Sincerely,  

Rae M. Loui  
Deputy Director  

Response:  

( ) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested  

Contact Person: ___________________________ Phone: ______________  
Signed: ________________________________ Date: ______________
Mr. Thomas Arizumi, Chief  
Environmental Management Division  
State Department of Health  
919 Ala Moana Blvd., 3rd Floor  
Honolulu, Hawaii  96814  

Attn: Mr. William Wong  

Dear Mr. Arizumi:  

Well Construction Permit Application  

Please review the following permit application pursuant to your area of concern and submit your comments to us by AUG 11, 1995.  

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [ ]  

Sincerely,  

[Signature]  
RAE M. LOUI  
Deputy Director  

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested  

Contact Person: ___________________________ Phone: ___________________  

Signed: ___________________________ Date: ___________________
TO: Honorable Kali Watson, Director  
Department of Hawaiian Home Lands  
Honorable Clayton H.W. Hee, Chairman and Trustee At Large  
Office of Hawaiian Affairs  
FROM: Michael D. Wilson, Chairperson  
Commission on Water Resource Management  
SUBJECT: Well Construction Permit Application

Please review the following permit applications pursuant to your area of concern and submit your comments to us by **AUG 11 1995**.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [Contact Person].

Enc.

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: [Contact Person]  
Phone: [Phone]  
Signed: [Signed]  
Date: [Date]
State of Hawaii  
Department of Land and Natural Resources  
COMMISSION ON WATER RESOURCE MANAGEMENT  
Honolulu, Hawaii  

TO: Dr. Don Hibbard, Director  
   Historic Preservation Program  

Mr. William Devick  
Division of Aquatic Resources  

FROM: Rae M. Loui, Deputy Director  
      Commission on Water Resource Management  

SUBJECT: Well Construction Permit Application  

Please review the following permit applications pursuant to your area of concern and submit your comments to us by AUG 1 1995.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at ____________.

CI:ss  
Enc.  

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: ________________________________ Phone: ________________

Signed: ________________________________ Date: ____________________
Ms. Marjorie Ziegler  
Sierra Club Legal Defense Fund, Inc.  
223 South King Street, Suite 400  
Honolulu, Hawaii 96813

Dear Ms. Ziegler:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by AUG 11 1995.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [blank].

Sincerely,

RAE M. LOUI  
Deputy Director

Response:

- [ ] We have no objections
- [ ] Not subject to our regulatory authority and permit
- [ ] Comments attached
- [ ] Additional information requested
- [ ] Extended review period requested

Contact Person: ___________________________  Phone: ________________

Signed: ___________________________  Date: ________________
Mr. Raymond Sato
Manager and Chief Engineer
Honolulu Board of Water Supply
630 Beretania Street
Honolulu, Hawaii 96843

Dear Mr. Sato:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by __________________________.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at __________________________.

Sincerely,

[Signature]

RAE M. LOUI
Deputy Director

Response:

( ) We have no objections
( ) Not subject to our regulatory authority and permit
( ) Comments attached
( ) Additional information requested
( ) Extended review period requested

Contact Person: ___________________________ Phone: ___________________________

Signed: ___________________________ Date: ___________________________
Mr. Calvin Kawamoto  
Waipahu Neighborhood Board No. 22  
P.O. Box 576  
Waipahu, Hawaii 96797

Dear Mr. Kawamoto:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by **AUG 11 1995**.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [______].

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

Response:

- We have no objections
- Not subject to our regulatory authority and permit
- Comments attached
- Additional information requested
- Extended review period requested

Contact Person: __________________________  Phone: __________________

Signed: ___________________________  Date: _______________
Mr. David Gilbert  
Ewa Neighborhood Board No. 23  
P.O. Box 1633  
Pearl City, Hawaii 96782

Dear Mr. Gilbert:

Well Construction Permit Application

Please review the following permit application pursuant to your area of concern and submit your comments to us by **AUG 11 1995**.

<table>
<thead>
<tr>
<th>Island</th>
<th>Well Name</th>
<th>Well No.</th>
<th>Application Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oahu</td>
<td>EP2 Well</td>
<td>2201-15</td>
<td>Well Construction</td>
</tr>
</tbody>
</table>

Should you have any questions, please contact the Commission on Water Resource Management staff at [redacted].

Sincerely,

[Signature]

RAE M. LOUI  
Deputy Director

Response:  
( ) We have no objections  
( ) Not subject to our regulatory authority and permit  
( ) Comments attached  
( ) Additional information requested  
( ) Extended review period requested

Contact Person: _______________________________  
Phone: __________________

Signed: _______________________________  
Date: ______________________
APPLICATION FOR PERMIT

COMMISSION ON WATER RESOURCE MANAGEMENT
Department of Land and Natural Resources

[FORM WAS PRINTED ON BOTH SIDES OF PAPER."

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER: Dept. of Housing & Community Dev.
      Firm/Name: City of Honolulu
      Contact Person: Randy Wong
      Address: 650 S. King Street, 5th Floor
      Honolulu, HI 96813
   (b) LANDOWNER: Dept. of Housing & Community Dev.
      Firm/Name: City of Honolulu
      Contact Person: Randy Wong
      Address: 650 S. King Street, 5th Floor
      Honolulu, HI 96813
   (c) CONTRACTOR: Unknown at this time.
      Firm/Name:
      Address:
      Contractor's C-67 License No.

2. WELL LOCATION/NAME: West Loch
   Island: Oahu
   Address: Honolulu, Oahu, Hawaii
   Tax Map Key: 9-1-17 (par)
   (Attach a USGS map, scale 1" = 2000, and a property tax map showing well location referenced to established property boundaries.)

3. (a) PROPOSED WORK:
   • Drill New Well
   • Modify Existing Well
   • Replace Pump
   • Install New Pump
   • Be sure to complete and submit Well abandonment report upon completion of work.
   (b) WELL TYPE:
   • Casing
   • Screen
   • Drilled
   Is this well a part of a battery of wells? □ Yes □ No
   (Briefly describe and fill in the diagram on the back of this form.)

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: 180 gallons per minute (3 pumps)
   Pump Types:
   • Deep Well Turbine
   • Propeller
   • Submersible
   • Displacement
   • Centrifugal
   • Impulse
   Motor:
   • Diesel
   • Gas
   • Electric, rated horsepower of 250e

5. PROPOSED USE:
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water use)
   □ Industrial
   □ Irrigation (crop)
   □ State Land Use District
   □ Urban
   □ Agricultural
   □ Rural
   □ Conservation
   □ Other (explain) (If space is needed, continue below under remarks, explanations.)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 3.5 million gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   □ Flowmeter
   □ Open Pipe
   □ Other
   □ None
   □ Other (explain)

7. PENDING ACTIONS:
   □ CDUA
   □ SMA
   □ RIA
   □ Other
   □ None
   □ Other (explain)

8. REMARKS, EXPLANATIONS:
   The proposed use will be irrigation for common landscaping, parks and golf courses at the City's affordable housing projects of West Loch and Ewa Villages.
   (If more space is needed, continue on back.

NOTE: Signing below indicates that the applicant understands that, if the permit is granted, it is subject to the conditions established by the Commission. The permit is effective for one year from the date of issuance. The applicant further understands that upon the expiration of the permit the applicant is required to submit a final report indicating the location and condition of the well and shall be submitted to the Commission. The applicant further understands that upon the expiration of the permit the applicant is required to submit a final report indicating the location and condition of the well and shall be submitted to the Commission.
The proposed plan is to use the EP2 wells (2201-03, 04 and 07) and create a new well at the
site for BACK-UP purposes (since the EP2 wells are very old). New pumps will be installed over the
existing wells. The pump capacity would be 1400 gpm, 250 Hp. The section of the proposed
BACK-UP well is shown below:

### 8. PROPOSED WELL SECTION

- **Elevation at top of casing:**
  - 42 ft, msl.
  - **Hole Diameter:** 18 in.

- **Rock Packing:** N/A ran.

- **Total Depth:** 250 ran.

- **Casing:**
  - Material: Steel ASTM A-53
  - Length: 100 ran.
  - Diameter: 14 in.
  - Wall thickness: 3/8 in.
  - Openings: sq. in./l.f.

- **Open Hole:**
  - Length: 150 ran.
  - Diameter: 13 in.

---

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.*
TABLE 1. MULTIPLE TMKs TO USE REQUESTED WATER

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EWA VILLAGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahlko Regional Park</td>
<td>9-1-17:por. 46, 47, 48, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>6,500</td>
<td>3,900</td>
<td>100%</td>
</tr>
<tr>
<td>North—South Road</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WEST LOCH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td></td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:7</td>
<td>A-1</td>
<td>3.50</td>
<td></td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td></td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td></td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td></td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td></td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1</td>
<td>160.00</td>
<td></td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-17</td>
<td>R-5</td>
<td>3.40</td>
<td></td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td></td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
June 29, 1995

Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Charley Ice

Dear Ms. Loui:

Subject: Clarification of Applications for Water Use Permit and
Well Construction/Pump Installation Permit
West Loch EP 2 (Well Nos. 2201-03, 04, 07)
Waipahu-Waiawa Groundwater Management Area, Oahu

Thank you for your letter of June 23, 1995 to Mr. Randy Wong at the City Department of Housing and Community Development. We apologize for the inconvenience caused by our failure to provide the requested information and hope this letter will clarify the City’s requests.

The completed system proposes the continued use of the existing battery of wells (2201-03, 04 and 07). These wells are connected via a common manifold to a single pump (EP 2). The existing EP 2 pump would be replaced with two (2) new pumps to increase capacity. In addition, a new well and pump is proposed in the golf course, approximately 50 feet from the existing wells, for back-up purposes since the existing wells are very old and are suspected to be in poor condition.

The two (2) new replacement pumps for EP 2 would be each be centrifugal units rated at 1400 gpm. The new back-up pump would be a vertical turbine unit, also with a rated pump capacity of 1400 gpm.

The proposed well section in Item 9 of the permit application reflects the new back-up well. Sections for the existing wells (2201-03, 04 and 07) would not be altered. Thus far, we were unsuccessful in locating record drawings that show the current well sections.
Ms. Rae M. Loui  
Commission on Water Resource Management  
Page 2

We appreciate your consideration of our application. Please call me at [REDACTED] if you have any questions.

Very truly yours,

Greg H. Hiyakumoto  
Senior Civil Engineer

cc: Avis Kamimura, DHCD
June 29, 1995

Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Charley Ice

Dear Ms. Loui:

Subject: Clarification of Applications for Water Use Permit and Well Construction/Pump Installation Permit
West Loch EP 2 (Well Nos. 2201-03, 04, 07)
Waipahu-Waiawa Groundwater Management Area, Oahu

Thank you for your letter of June 23, 1995 to Mr. Randy Wong at the City Department of Housing and Community Development. We apologize for the inconvenience caused by our failure to provide the requested information and hope this letter will clarify the City’s requests.

The completed system proposes the continued use of the existing battery of wells (2201-03, 04 and 07). These wells are connected via a common manifold to a single pump (EP 2). The existing EP 2 pump would be replaced with two (2) new pumps to increase capacity. In addition, a new well and pump is proposed in the golf course, approximately 50 feet from the existing wells, for back-up purposes since the existing wells are very old and are suspected to be in poor condition.

The two (2) new replacement pumps for EP 2 would be each be centrifugal units rated at 1400 gpm. The new back-up pump would be a vertical turbine unit, also with a rated pump capacity of 1400 gpm.

The proposed well section in Item 9 of the permit application reflects the new back-up well. Sections for the existing wells (2201-03, 04 and 07) would not be altered. Thus far, we were unsuccessful in locating record drawings that show the current well sections.
Ms. Rae M. Loui  
Commission on Water Resource Management  
Page 2

We appreciate your consideration of our application. Please call me at [REDACTED] if you have any questions.

Very truly yours,

[Signature]
Greg H. Hiyakumoto  
Senior Civil Engineer

cc: Avis Kamimura, DHCD
Mr. Randy Wong  
City and County of Honolulu  
Department of Housing and Community Development  
650 South King Street, 5th Floor  
Honolulu, Hawaii 96813  

Dear Mr. Wong:  

Well Construction/Pump Installation Permit Applications  
West Loch EP-2 Wells (Well Nos. 2201-03, 04, 07)  

We received a renewed application as captioned above, through R.M. Towill Corporation, with some additional map information as requested in a letter of February 9, 1995. The application does not, unfortunately, respond to our request for information specific to each well in the battery at EP-2.  

Before commencing to process the application, we request clarification as to which wells require construction, new pump installation, or pump replacement, as all three of these actions have been indicated on the application. Please be advised that the wells are of different depths, requiring sectional drawings accurate for each.  

The application refers to three existing wells (Well Nos. 2201-03, 04, 07). "Well construction" refers to new wells; is a new (fourth) well being proposed? Are existing wells being modified? Are unused wells having pumps installed, or are existing pumps being replaced? Is an existing well being abandoned or sealed?  

If you have any questions, please contact Charley Ice at  

Sincerely,  

RAE M. LOUI  
Deputy Director

Cl:ss
May 11, 1995

Ms. Rae M. Loui, Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Lenore Nakama

Dear Ms. Loui:

Subject: Applications for Water Use Permit and
Well Construction/Pump Installation Permit
EP2 (Well Nos. 2201-03, 04, 07)
Waipahu-Waiawa Groundwater Management Area, Oahu

On behalf of the City Department of Housing and Community Development (DHCD), we are pleased to submit a revised application for Well Construction/Pump Installation Permit and supplemental county zoning information for the Water Use Permit as requested in your letter of February 9, 1995.

Please contact Avis Kamimura of DHCD at (808) 586-8000 or me at (808) 586-8001 if you have any questions. Thank you for your consideration of these applications.

Very truly yours,

Greg H. Hiyakumoto
Senior Civil Engineer

cc: Avis Kamimura, DHCD
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. APPLICANT: (may be a, b, or c, but all must be filled in)</td>
<td></td>
</tr>
<tr>
<td>(a) WELL OWNER</td>
<td>City &amp; County of Honolulu</td>
</tr>
<tr>
<td>Contact Person</td>
<td>Randy Wong</td>
</tr>
<tr>
<td>Address</td>
<td>150 S. King Street, 5th Floor</td>
</tr>
<tr>
<td>(b) LANDOWNER</td>
<td>City &amp; County of Honolulu</td>
</tr>
<tr>
<td>Contact Person</td>
<td>Randy Wong</td>
</tr>
<tr>
<td>Address</td>
<td>150 S. King Street, 5th Floor</td>
</tr>
<tr>
<td>(c) CONTRACTOR</td>
<td>Unknown at this time.</td>
</tr>
<tr>
<td>2. WELL LOCATION/NAME:</td>
<td>West Loch</td>
</tr>
<tr>
<td>Address</td>
<td>Honolulu, Oahu, Hawaii</td>
</tr>
<tr>
<td>3. (a) PROPOSED WORK:</td>
<td></td>
</tr>
<tr>
<td>Drill New Well</td>
<td></td>
</tr>
<tr>
<td>* Alter Location</td>
<td></td>
</tr>
<tr>
<td>Modify Existing Well</td>
<td></td>
</tr>
<tr>
<td>Redrill</td>
<td></td>
</tr>
<tr>
<td>Install New Pump</td>
<td></td>
</tr>
<tr>
<td>* Be sure to complete and submit well abandonment report upon completion of work.</td>
<td></td>
</tr>
<tr>
<td>Replace Pump</td>
<td></td>
</tr>
<tr>
<td>Modify Pump</td>
<td></td>
</tr>
<tr>
<td>(b) WELL TYPE:</td>
<td></td>
</tr>
<tr>
<td>Dug</td>
<td></td>
</tr>
<tr>
<td>Bored</td>
<td></td>
</tr>
<tr>
<td>Driven</td>
<td></td>
</tr>
<tr>
<td>Drilled</td>
<td></td>
</tr>
<tr>
<td>Radial</td>
<td></td>
</tr>
<tr>
<td>Is this well part of a battery of wells?</td>
<td>Yes</td>
</tr>
<tr>
<td>(Briefly describe and fill in the diagram on the back of this form.)</td>
<td></td>
</tr>
<tr>
<td>4. PROPOSED PUMP INFORMATION:</td>
<td></td>
</tr>
<tr>
<td>Rated Pump Capacity:</td>
<td>1400 gallons per minute /each (3 pumps)</td>
</tr>
<tr>
<td>Pump Type:</td>
<td></td>
</tr>
<tr>
<td>Deep Well Turbine</td>
<td></td>
</tr>
<tr>
<td>Submersible</td>
<td></td>
</tr>
<tr>
<td>Centrifugal</td>
<td></td>
</tr>
<tr>
<td>Rotary</td>
<td></td>
</tr>
<tr>
<td>Rotation-Displacement</td>
<td></td>
</tr>
<tr>
<td>Rotary-Gear</td>
<td></td>
</tr>
<tr>
<td>Propeller</td>
<td></td>
</tr>
<tr>
<td>Reciprocating Impulse</td>
<td></td>
</tr>
<tr>
<td>Motor:</td>
<td></td>
</tr>
<tr>
<td>Diesel</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td></td>
</tr>
<tr>
<td>Electric, rated horsepower of 250+</td>
<td></td>
</tr>
<tr>
<td>5. PROPOSED USE:</td>
<td></td>
</tr>
<tr>
<td>Municipal (including hotels, stores, etc.)</td>
<td>Military</td>
</tr>
<tr>
<td>Domestic (individual, noncommercial water sys.)</td>
<td>Industrial</td>
</tr>
<tr>
<td>Irrigation (crop)</td>
<td>Other (explain)</td>
</tr>
<tr>
<td>State Land Use District:</td>
<td>Urban</td>
</tr>
<tr>
<td>County Zoning (describe)</td>
<td>Agriculture</td>
</tr>
<tr>
<td>6. (a) PROPOSED AMOUNT OF WITHDRAWAL:</td>
<td>3.5 million gallons per day</td>
</tr>
<tr>
<td>(b) METHOD OF FLOW MEASUREMENT:</td>
<td>Flow-meter</td>
</tr>
<tr>
<td>Open-pipe</td>
<td>Orifice Plate</td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>7. PENDING ACTIONS:</td>
<td>CDUA</td>
</tr>
<tr>
<td>SMA</td>
<td>EIS</td>
</tr>
<tr>
<td>EA</td>
<td>NONE</td>
</tr>
<tr>
<td>Other (explain)</td>
<td></td>
</tr>
<tr>
<td>8. REMARKS, EXPLANATIONS:</td>
<td>The proposed use will be irrigation for common landscaping, parks and golf courses at the City's affordable housing projects of West Loch and Ewa Villages.</td>
</tr>
</tbody>
</table>
The proposed plan is to use the EP2 wells (2201-03, 04 and 07) and create a new well at the site for BACK-UP purposes (since the EP2 wells are very old). New pumps will be installed over the existing wells. The pump capacity would be 1400 gpm, 250 Hp. The section of the proposed BACK-UP well is shown below:

9. PROPOSED WELL SECTION

- Elevation at top of casing: 42 ± ft., msl.
- Cement Grout: 100 ft.
- Rock Packing: N/A ft.
- Hole Diameter: 18 in.
- Total Depth: 250 ft.
- Ground Elevation: 40 ± ft., msl.

<table>
<thead>
<tr>
<th>Solid Casing: Steel ASTM A-53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
</tr>
<tr>
<td>Length                     100 ft.</td>
</tr>
<tr>
<td>Diameter                   14 in.</td>
</tr>
<tr>
<td>Wall thickness             3/8 in.</td>
</tr>
</tbody>
</table>

- Casing: [ ] Perforated [ ] Screen
  | Material |
  | Length   |
  | Diameter |
  | Wall thickness |
  | Openings  |
  | Hole Diameter |
  | Length     |
  | Diameter   |

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tax Map Key</th>
<th>Current County Zoning Code</th>
<th>acre</th>
<th>Approx. gpd/acre</th>
<th>Total gpd</th>
<th>% of Total to be Used Over Next 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>EWA VILLAGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa Mahiko Regional Park</td>
<td>9-1-17:por. 46, 47, 49, 51, 67</td>
<td>R-5*</td>
<td>15.30</td>
<td>6,268</td>
<td>95,900</td>
<td>100%</td>
</tr>
<tr>
<td>Village Green</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>3.50</td>
<td>6,400</td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 39, 68</td>
<td>B-1</td>
<td>4.00</td>
<td>6,400</td>
<td>25,600</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>9-1-17:por. 39, 68</td>
<td>A-1</td>
<td>24.50</td>
<td>6,392</td>
<td>156,600</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;G&quot;</td>
<td>9-1-17:por. 49</td>
<td>R-5</td>
<td>0.70</td>
<td>6,429</td>
<td>4,500</td>
<td>100%</td>
</tr>
<tr>
<td>Ewa Railroad R/W</td>
<td>9-1-17:3, 49</td>
<td>none</td>
<td>4.10</td>
<td>6,390</td>
<td>26,200</td>
<td>100%</td>
</tr>
<tr>
<td>Renton Road</td>
<td>9-1-17:por. 4, 49</td>
<td>none</td>
<td>4.40</td>
<td>6,409</td>
<td>28,200</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Maintenance Bldg</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>AG-1*</td>
<td>0.60</td>
<td>6,500</td>
<td>3900</td>
<td>100%</td>
</tr>
<tr>
<td>North-South Road</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 39, 68</td>
<td>none</td>
<td>9.50</td>
<td>6,389</td>
<td>60,700</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;A&quot;</td>
<td>9-1-16:por. 46, 47, 48, 54, 55</td>
<td>R-5</td>
<td>0.50</td>
<td>6,600</td>
<td>3,300</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-16:por. 46, 47, 48, 54, 55, 9-1-17:por. 4, 36, 37, 38</td>
<td>AG-1*</td>
<td>206.00</td>
<td>7,500</td>
<td>1,545,000</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Clubhouse</td>
<td>9-1-17:por. 4</td>
<td>AG-1*</td>
<td>2.20</td>
<td>6,318</td>
<td>13,900</td>
<td>100%</td>
</tr>
<tr>
<td>Subdivision &quot;B&quot;</td>
<td>9-1-17:por. 4</td>
<td>R-5</td>
<td>0.02</td>
<td>6,000</td>
<td>120</td>
<td>100%</td>
</tr>
<tr>
<td>Elementary School</td>
<td>9-1-17:2</td>
<td>R-5</td>
<td>9.00</td>
<td>6,389</td>
<td>57,500</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for Ewa Villages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>284.32</td>
<td>2,043,820</td>
</tr>
<tr>
<td>WEST LOCH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>9-1-17:por. 66</td>
<td>B-1</td>
<td>4.00</td>
<td></td>
<td>17,900</td>
<td>100%</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>9-1-17:17</td>
<td>A-1</td>
<td>3.50</td>
<td></td>
<td>22,400</td>
<td>100%</td>
</tr>
<tr>
<td>Church/School</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>1.40</td>
<td></td>
<td>9,000</td>
<td>100%</td>
</tr>
<tr>
<td>District Park</td>
<td>9-1-17:por. 66</td>
<td>R-5</td>
<td>14.60</td>
<td></td>
<td>93,300</td>
<td>100%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>por. 9-1-1-66</td>
<td>A-1</td>
<td>4.10</td>
<td></td>
<td>26,400</td>
<td>100%</td>
</tr>
<tr>
<td>Fairways Subdivision</td>
<td>por. 9-1-1-62, 63, 64, 65, 66</td>
<td>R-5</td>
<td>18.00</td>
<td></td>
<td>88,700</td>
<td>100%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>9-1-17:por. 6, 60, 64, 65</td>
<td>AG-1</td>
<td>160.00</td>
<td></td>
<td>1,200,000</td>
<td>100%</td>
</tr>
<tr>
<td>Estates Subdivision</td>
<td>9-1-1-17</td>
<td>R-5</td>
<td>3.40</td>
<td></td>
<td>21,800</td>
<td>100%</td>
</tr>
<tr>
<td>Shoreline Park</td>
<td>9-1-17:por. 6, 8, 14</td>
<td>R-5</td>
<td>4.60</td>
<td></td>
<td>29,400</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Totals for West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>213.6</td>
<td>1,508,900</td>
</tr>
<tr>
<td><strong>Total for Ewa Villages + West Loch</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>497.92</td>
<td>3,552,720</td>
</tr>
</tbody>
</table>

* City Council Resolution 93-01, authorizing exemption to permit uses in these zones.
APPLICATION FOR PERMIT

1. APPLICANT: (may be a, b, or c, but all must be filled in)
   (a) WELL OWNER
   Dept. of Housing & Community Dev.
   Firm/Name: City & County of Honolulu
   Address: 650 S. King Street, 5th Floor
   Honolulu, HI 96813
   Contractor’s C-57 License No.
   (b) LANDOWNER
   Dept. of Housing & Community Dev.
   Firm/Name: City & County of Honolulu
   Address: 650 S. King Street, 5th Floor
   Honolulu, HI 96813
   Contractor’s C-57 License No.

2. WELL
   Island: Oahu
   Tex Map Key:
   showing well location referenced to established property boundaries.

3. (a) WELLS or EP 2 pumping: 220
   (b) WELL
   Gra Hyyakamo
   Ram Tday #421183
   EP 2 - DHCD

4. PROPOSED PUMP INFORMATION:
   Rated Pump Capacity: 1300
   gallons per minute / each
   (3 pumps)

5. PROPOSED USE:
   □ Municipal (including hotels, stores, etc.)
   □ Domestic (individual, noncommercial water sys.)
   □ Irrigation (crop)
   □ Other (explain)
   State Land Use District:
   □ Urban □ Agriculture □ Rural □ Conservation
   County Zoning (describe)

6. (a) PROPOSED AMOUNT OF WITHDRAWAL: 3.5 million
   gallons per day
   (b) METHOD OF FLOW MEASUREMENT:
   □ Flow-meter □ Open-pipe □ Orifice Plate □ Well

7. PENDING ACTIONS:
   □ CDUA □ SMA □ EIS □ EA □ NONE □ Other (explain)

8. REMARKS, EXPLANATIONS:
   The proposed use will be irrigation for common landscaping, parks and
golf courses at the City’s affordable housing projects of West Loch and Ewa Villages.

NOTE: Signing below indicates that the applicant understands that, if the permit requested is granted by the Commission on Water Resource Management, the proposed work is to be done within 3 years of the approved date. In addition, the contractor shall submit to the Commission a well completion report, well abandonment report, or both, within 30 days of completion date of the permitted work. The applicant also understands that monthly water use data shall be submitted to the Commission. The applicant further understands that any proposed permit shall not constitute a determination of correlative water rights and shall not guarantee the pump capacity or future use up to the permitted pump capacity.

Well Owner: (Contact: Kenny Wong)
Landowner: (Contact: Randy Wong)
Contractor: unknown

Signature: ____________________________
Date: Nov 1-5-1994

For Official Use Only:
Date Received ____________________________
Date Accepted ____________________________
Field Checked By ____________________________

Length of Time ____________________________
Water System Name ____________________________
State Well No. ____________________________
Remarks, Explanations (cont'd):

9. PROPOSED WELL SECTION

Elevation at top of casing
42 ± ft., msl.

Cement Grout: 100 ft.

Rock Packing: N/A ft.

Hole Diameter: 18 in.

Total Depth: 250 ft.

Ground Elevation: 40 ± ft., msl*

Solid Casing:
Material: Steel ASTM A-53
Length: 100 ft.
Diameter: 14 in.
Wall thickness: 3/8 in.

Casing:
Perforated
Screen

Material: N/A
Length: N/A ft.
Diameter: N/A in.
Wall thickness: N/A in.
Openings: sq. in./L.F.

Open Hole:
Length: 150 ft.
Diameter: 13 in.

*Approximate elevation at time of filing application. Ground elevation above mean sea level (msl) by a surveyor licensed by the State must be submitted at start of construction. Final elevations of well components shall be submitted in the well completion/well abandonment reports.