



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
**COMMISSION ON WATER RESOURCE MANAGEMENT**  
P.O. BOX 621  
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

March 15, 2022  
Honolulu, Oahu

Hawaiian Turfgrass Inc. and Valley Well Drilling  
APPLICATION FOR WELL CONSTRUCTION, PUMP INSTALLATION,  
AND WATER USE PERMITS  
HTGI WELL (Well No. 3-2501-002), TMK (1) 9-4-003:002, WUP No. 1101  
New Agricultural Use for 0.400 mgd  
Waipahu-Waiawa Ground Water Management Area, O'ahu

APPLICANT AND LANDOWNER (FOR  
WATER USE PERMIT)

Hawaiian Turfgrass Inc.  
P.O. Box 893340  
Mililani, HI 96789

CONTRACTOR (FOR WELL CONSTRUCTION  
AND WATER USE PERMITS)

Valley Well Drilling  
111 Hekili St., Ste. A PMB 2761  
Kailua, HI 96734

SUMMARY OF REQUEST:

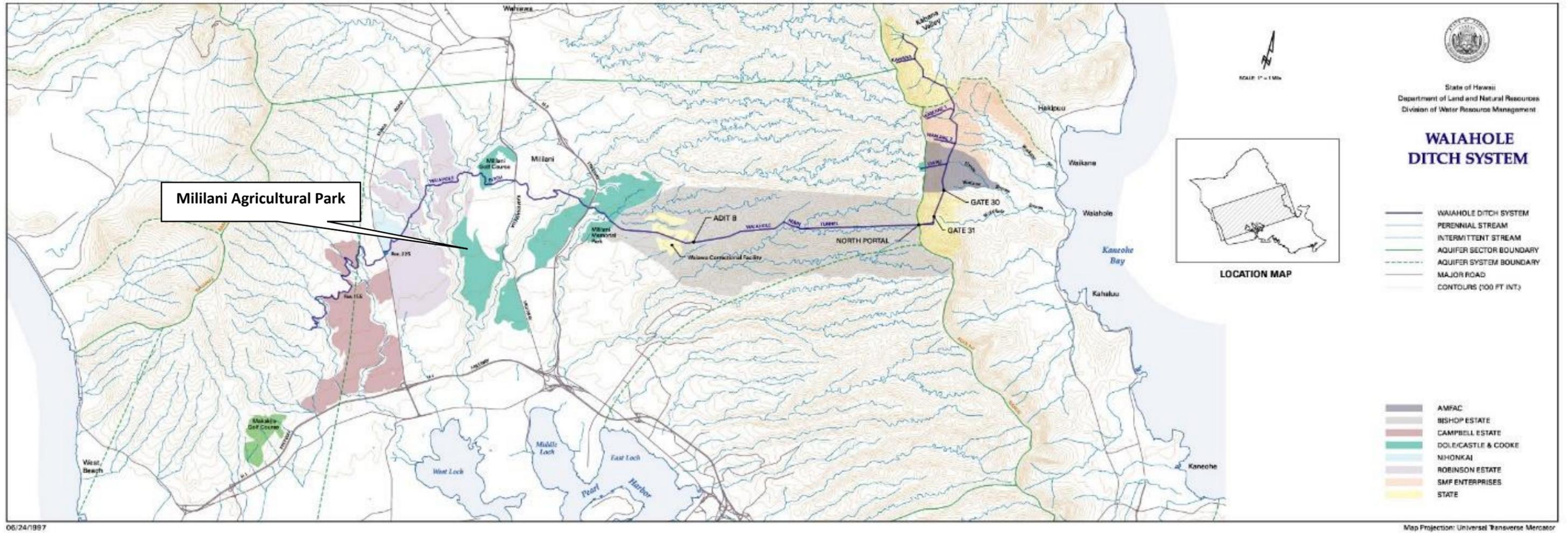
Valley Well Drilling requests approval of well construction and pump installation permits for a proposed well. Hawaiian Turfgrass Inc. (HTGI) requests approval of a water use permit for that well, for an allocation of 0.400 million gallons per day (mgd) of potable basal ground water to irrigate 67.5 acres of turfgrass.

LOCATION MAP: See Exhibit 1

BACKGROUND:

On December 28, 2001, the Commission on Water Resource Management (Commission) issued Waiāhole Ditch Contested Case Hearing Decision and Order 2. As part of this D&O, the Commission granted an allocation for 2.130 mgd to Castle and Cooke (C&C).

The total allocation for C&C was an aggregate of all of the properties that they owned, that were served by the Waiāhole Ditch System. Many of these properties are non-contiguous. The following map shows the different C&C parcels that were granted the total of 2.130 mgd. C&C properties are colored teal/light blue.



06/24/1997

HTGI’s farm is located within the Mililani Agricultural Park (MAP). MAP has one connection to Waiāhole Ditch that supplies the agricultural park. Issuing a single water use permit for C&C made sense at the time, and even one allocation broken out to MAP was acceptable because C&C could manage their total use. However, with the subdivision and sales of MAP to different parties, this is problematic for two reasons: 1) for regulation purposes it’s difficult to assess an individual user that’s in-line within the water distribution system; and 2) the user has no control over outflow from Waiāhole Ditch.

The applicant is requesting approval of well construction and pump installation permits to supply water to his farm, in order to eliminate reliance on the Waiāhole Ditch System and other users that share the system.

On October 27, 2020, the Commission received a completed water use permit application from HTGI. Additional information regarding the source, use, and notification is provided in Exhibit 2.

The public notice (Exhibit 3) for this application was published in the Honolulu Star Advertiser on May 14, 2021 and May 21, 2021.

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

Through the Hawaii Water Plan, the Commission has adopted 105 mgd as the sustainable yield for the Waipahu-Waiawa Aquifer System Area. Individual existing water use permits in this aquifer system area are shown in Exhibit 4. A summary of the current ground water conditions in the aquifer is provided in Table 1:

**Table 1. Waipahu-Waiawa Aquifer System Area**

<u>ITEM</u>	<b>Waipahu-Waiawa Aquifer System Area (mgd)</b>
<b>Sustainable Yield</b>	105
Less: Other Existing Water Use Permits (shown in Exhibit 4)	84.287
Reservation to DHHL	1.358
<b>Subtotal (Current Available Allocation)</b>	19.355
Less: Other Completed Applications	0
Less: This Application	0.400
<b>Subtotal (Potential Available Allocation/Allocation Deficit)</b>	18.955

Based on the above table, there is adequate water to accommodate the requested allocation.

(2) Reasonable-beneficial

Section 174C-3 HRS defines "reasonable-beneficial use" is

*"...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".*

*I. Purpose of Use*

The applicant is requesting the use of potable ground water to irrigate 67.5 acres of turf grass. The Declaration of Policy section, §174C-2(c) HRS, states that the Water Code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for various purposes including agricultural uses.

The Commission has a policy of permitting water for its highest and best use. Using potable ground-water where non-potable water can be used is not in accordance with this policy. However, the current use of Waiāhole ditch water on the Leeward side of O'ahu impacts streams on the Windward side. Therefore, the applicant's use of potable ground-water in lieu of using non-potable water from Waiāhole ditch will allow more water to flow into Windward streams.

*II. Quantity Justification*

The applicant is requesting a total of 0.400 mgd to irrigate 67.5 acres of turf grass. The resulting duty is 5,926 gallons per day per acre.

Staff uses the Irrigation Water Requirement Estimate Decision Support System (IWREDSS Version 2.1) model produced by the University of Hawaii College of Tropical Agriculture and Human Resources (CTAHR) as a "reasonable-beneficial estimate". IWREDSS incorporates data specific to the parcel in question, such as soil properties, synthesizes historical daily rainfall incidence and evapotranspiration averages, ambient temperature; and crop information including root depth and breadth, leaf parameters and typical water requirements; and the proposed method of irrigation, the source of the widest variation in irrigation requirements within IWREDSS. Despite the sensitivity of this model, it cannot necessarily account for the peculiarities of microclimate or for wind effects on irrigation and on evaporation; it also makes certain unspecified assumptions about commercial agriculture such as plant spacing and maturity of crop that may not apply to more intensive or more casual agriculturalists. As any given application can vary from assumed parameters and the acreage may not fall homogeneously within the area's climatic averages, some variation in outcome is expected. IWREDSS gives us a ballpark comparison.

Exhibit 5 shows the results of the IWREDSS program summary for Landscape Turf, perennial growth, irrigated with large gun sprinklers and using deficit irrigation.

As a basis for comparison to the applicant's request, staff uses a 1-in-5 year drought frequency. This amount results in a duty of 5,621 gallons per day per acre, which is less than the requested amount, but still close.

Exhibit 6 shows the total requested amount.

Staff recommends that the Commission approve the requested amount of 0.400 mgd using 5,926 gpd/acre. Alternatively if the Commission wanted to only approve the duty calculated by staff through IWREDSS, the Commission could approve  $5,621 \text{ gpd/acre} \times 67.5 \text{ acres} = 0.379 \text{ mgd}$  total. In the Nā Wai 'Ehā contested case hearing, the Commission permitted 2,500 gallons per acre per day for golf course irrigation. Should the Commission decide to approve this amount, it would be  $2,500 \text{ gallons per acre per day} \times 67.5 \text{ acres} = 0.169 \text{ mgd}$ . However, staff understands the grow-in for turf grass requires more water than maintenance, and as such don't recommend this quantity.

### *III. Efficiency of Use*

The applicant states that its operations are as water efficient as possible because monitoring of groundwater use via the flowmeter will help to find leaks in the irrigation system. Per their application, they will be using sprinklers and large guns and the practice of deficit irrigation for their turf grass. These are traditional and typical irrigation methods for turf grass, and utilization of deficit irrigation is a good practice where the irrigation is not necessarily on a timer, but the operator would irrigate upon plant water demand using soil moisture sensors and professional judgement.

Staff concurs with the applicant's irrigation methods and will continue to work with the applicant to ensure that the irrigation and use of water is and continues to be as efficient as possible.

### *IV. Analysis of Practical Alternatives*

The applicant has addressed the following alternatives to using potable groundwater for non-potable turf grass agricultural use.

*Municipal sources.* The applicant states that no municipal sources are available for agricultural use. The nearest access to BWS water is 4,112 feet away from the front entrance to the Mililani Agricultural Park, and the access road to HTGI's parcel is owned by the Mililani Agricultural Park company. Staff has confirmed this through past field investigations. Therefore, staff agrees that municipal water is not a feasible alternative.

*Wastewater reuse.* The applicant states that no wastewater reuse is available. The Commission has a Central O'ahu Reuse Plan and confirms that there is no wastewater reuse available to the applicant's parcel. The nearest reuse line is on the Kunia side of the gulch and is not accessible from this parcel. Therefore, staff agrees that wastewater reuse is not a feasible alternative.

*Ditch systems.* The applicant currently has access to the Waiāhole Ditch System. The applicant states that the water system from Waiāhole Ditch is owned and delivered by MAP, but MAP has sold fifty percent of the 12" water main system to the applicant's competition. MAP has offered the applicant a 3" water main, but that will not provide the

water that the applicant needs from Waiāhole Ditch. Therefore, staff does not think that Waiāhole Ditch water is a sufficient alternative primary source, but could be a potential back up source.

*Desalinization.* The applicant states that drilling deeper for desalinization is cost prohibitive and the disposal of brine from any desalinization will be dangerous for the potable water aquifer. Staff agrees with this statement and agrees that desalinization is not a feasible alternative.

*Surface water.* The applicant states that the closest available surface water source is Waikele Stream, which is located downgradient of the well site and therefore not readily available. Staff agrees with this assessment that surface water is not a feasible alternative.

Based on the above analysis, it would appear that Waiāhole Ditch is the only viable alternative to using potable groundwater from a new well. However, the applicant states that this is problematic because of access issues to Waiāhole Ditch and that there isn't sufficient quantity to meet their full water demand needs. Additionally, the reduced reliance on Waiāhole Ditch would divert less water from the Waiāhole development tunnels, and would allow more water to be available for return to the streams on the Windward side. Therefore, though Waiāhole Ditch is an alternative, staff is recommending that the Commission approve the use of potable groundwater for the requested allocation.

(3) Interference with other existing legal uses

There are four other wells currently in use within 1 mile of this source (refer to Exhibit 1). The well construction and pump installation permits will require the conductance of pump tests. If any adverse impacts (i.e. interference with other existing legal uses) are observed from the pump test results, including transmissivity and storage values determined in the step drawdown test, staff will reduce the pump capacity allowed until no adverse impacts are observed. Therefore, staff does not anticipate that the final pump capacity will interfere with other existing uses.

(4) Public interest

Public interest is defined under §174C-2 - Declaration of policy, as follows:

*“(c) The state water code shall be liberally interpreted to obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and procreation of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.”*

This application is for agriculture, which follows the liberal interpretation described above. However, adequate provisions made in the second sentence of that paragraph need to be addressed. Generally item (3) above addresses interference with other existing uses attributed to pumping, but further elaboration on the provision to protect traditional and customary Hawaiian rights is addressed in the Ka Pa‘akai analysis below.

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

The proposed agricultural use is consistent with the State AG District and county AG2/F1 zoning.

Normal agency review includes:

- 1) the State's Department of Land and Natural Resources (DLNR) and its State Parks, Aquatic Resources, Historic Preservation, and Land Divisions; the Department of Health (DOH) with its Clean Water, Safe Drinking Water, and Wastewater Branches; the Department of Hawaiian Home Lands (DHHL), and Land Use Commission (LUC); and the Office of Hawaiian Affairs (OHA).
- 2) the Office of the Mayor, Department of Planning and Permitting (DPP) and the Board of Water Supply;

DPP stated that the uses are consistent with the zoning designation. No other comments were received that indicate use inconsistencies.

Based on the above, staff has determined to the best of our ability that this criteria is met.

(6) County land use plans and policies

Again, normal County review includes Office of the Mayor, Department of Planning and Permitting and the Board of Water Supply. No comments or objections have been made.

Based on the above, staff has determined to the best of our ability that this criteria is met.

(7) Interference with Hawaiian home lands rights

All permits are subject to the prior rights of Hawaiian home lands. The Department of Hawaiian Home Lands (DHHL) and the Office of Hawaiian Affairs have reviewed this application and made no comments or objections. Further, standard water use permit conditions 3.g., 6., and 9.f. notify all water use permittees that their permits are subject to and cannot interfere with Hawaiian home land rights.

DHHL has indicated that they don't anticipate impacts to DHHL's water reservation, and this quantity will not deduct from that reservation.

Based on the above, staff has determined to the best of our ability that this criteria is met.

(8) Other issues

*I. Chapter 343 – Environmental Assessment (EA) Compliance*

**EA Triggers**

In accordance with §HRS 343-5(a), the applicant's proposed action does not trigger the need for an EA.

## II. Traditional and Customary Practices

### ***Ka Pa‘akai Analysis***

In *Ka Pa‘akai O Ka‘aina v. Land Use Commission*, the Hawai‘i Supreme Court recognized that the State has an obligation to protect Hawaiian traditional and customary practices to the extent feasible, and that the proponent of an action must show sufficient evidence that these types of practices are protected, if they exist in the location in question. This “Ka Pa‘akai framework” was created by the Court “to help ensure the enforcement of traditional and customary native Hawaiian rights while reasonably accommodating competing private development interests.” The Commission is obligated to conduct a “Ka Pa‘akai analysis” of a proposed action requiring CWRM approval independent of the entity proposing the action. This analysis should be used to inform any decision on the impact of the proposed action on traditional and customary practices.

Consequently, the Court required an assessment of the following:

- (1) “the identity and scope of ‘valued cultural, historical, or natural resources’ in the petition area, including the extent to which traditional and customary native Hawaiian rights are exercised in the petition area;

The applicant states that:

*“The Hawaiian Turfgrass (HTGI) site is located on O‘ahu in the ‘Ewa moku, Waikele ahupua‘a, ‘ili ‘aina Koalipea. The Waikele ahupua‘a had numerous fishponds, lo‘i kalo, and pūnāwai (fresh water spring). Densely populated villages were established in this ahupua‘a due to the abundance of agriculture and marine and water resources. Terraces remains were observed at least 2 miles upstream in the lower valley of Waikele stream in the 1930s by Handy. Two heiau have been located in the Waikele ahupua‘a. Petroglyphs were located in the Waipahu ‘ili. Caves with traditional pre-contact artifacts have been located and recorded.”*

- (2) “the extent to which those resources -- including traditional and customary native Hawaiian rights -- will be affected or impaired by the proposed action;” and

The applicant states that:

*“The Waikele ahupua‘a is quite different in shape than the other O‘ahu ahupua‘a as the upper boundaries do not contain ridge lines or mountain tops. This ahupua‘a instead generally follows plateauland above deep drainages. Due to the abundance of soil, streams and springs, this land was ideal for sugar cane. The O‘ahu Sugar Company raised cane on the majority of land for almost 100 years. The project site has predominantly been used for agriculture. Referencing the Kīpuka database, there are no historical sites within the parcel.*

*The HTGI site is located on a plateau approximately 279 feet above the Waikele stream and about 3 miles from the Pearl Harbor shoreline. There are no bodies of water on the property. The adjacent Waikele stream which is at an approximate elevation of 200’ msl should not be affected by the withdrawal of groundwater at the basal lens of 20’ msl. Pump tests will be performed to predict the aquifer properties and potential impacts to the stream resources.*

*The continuing cultural rights of gathering fish in fishponds, taro farming, gathering marine of resources and farming by using terraces in the Waikele stream is not to be affected by this project due to the water being extracted from the new irrigation well will be the approximate same volume of which the property is currently being provided by the Waiāhole ditch water.*

*Therefore, no impacts to streams or ocean discharge are anticipated, and therefore no impacts on traditional and customary Native Hawaiian rights are anticipated.”*

(3) “the feasible action, if any, to be taken ... to reasonably protect native Hawaiian rights if they are found to exist.”

The applicant states that:

*“Should significant archaeological features be uncovered, construction will be halted and archeological consultation will be sought by the DLNR historical preservation divisions. According to the Hawai’i Ground Water Use Permit conditions, we understand that these conditions apply 3g. “Will not interfere with the rights of the Department of Hawaiian Home Lands as provided in section 221 of the Hawaiian Homes Commission Acts”, 6. “The ground water use authorized here is subject to the requirements of the Hawaiian Homes Commission Act, as amended, if applicable”, 9f. “This permit may be modified by the Commission and the amount of the water initially granted to the permittee may be reduced if the Commission determines it is necessary to meet legal obligations to the Department of Hawaiian Home Lands, if applicable”*

Based on applicant’s statements, staff believes that there will not be an impact to Native Hawaiian traditional and customary practices.

### III. Well Construction and Pump Installation Permits

DEC-ADM92-G0 states that Water Use Permits should be obtained before approval of Well Construction and Pump Installation permits. Though approval of well construction and pump installation permits is delegated to the Chairperson through that Declaratory Ruling, staff typically presents well and pump permit applications that are concurrently submitted with the Water Use Permit applications to the Commission. The reason for this is that assurance that the well is drilled in accordance with the Hawaii Well Construction and Pump Installation Standards (HWCPIS) helps to support the statement of no adverse impacts. Additionally, there is a layer of protection that if a water use permit is not approved, no pump should be installed and CWRM should not issue a pump installation permit. Because the well and pump will be drilled in accordance with the HWCPIS, staff recommends approval of the well construction and pump installation permits.

### IV. Reduction of allocation for Waiāhole Ditch

Currently, administrative modifications need to be done in order to transfer the Waiāhole Ditch water use permits to the individual landowners that purchased the respective properties from Castle and Cooke. While staff feels that this can be done under a separate action, in order to assure that there is no double counting of water, staff is recommending a condition that states that upon completion of the well construction and pump installation, and commencement of pumping, that no water can be withdrawn from Waiāhole Ditch for this applicant. Staff will reduce the allocation at the appropriate time.

RECOMMENDATION:

Staff recommends that the Commission:

- A. Approve the issuance of water use permit no. 01101 to Hawaiian Turfgrass Inc. for the reasonable and beneficial use of 0.400 million gallons per day of fresh potable water for agricultural use from the HTGI (Well No. 3-2501-002), as described in the recommended allocation portion of Exhibit 6, and subject to the standard water use permit conditions listed in Exhibit 7 and the following special conditions:
  - 1. This permit is subject to suspension and/or revocation if the use as described in Exhibit 6 changes. This includes, but is not limited to: type of use, location of use, land use classification changes, or anything that varies from the application.
  - 2. 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.
  - 3. 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.
- B. Approve a well construction permit for the HTGI well (Well No. 3-2501-002) to Valley Well Drilling, subject to the standard well construction permit conditions as described in Exhibit 8.
- C. Approve a pump installation permit for the HTGI well (Well No. 3-2501-002) to Valley Well Drilling, subject to the standard pump installation permit conditions as described in Exhibit 9.
- D. Impose the condition upon Hawaiian Turfgrass Inc. that upon commencement of pumping to supply water from the new well, that they understand that water can no longer be used from Waiāhole Ditch. They must notify staff within 30-days of commencement of pumping, and understand that the allocation for Waiāhole Ditch for their parcel will not be transferred to them from Castle and Cooke’s allocation.

Respectfully submitted,



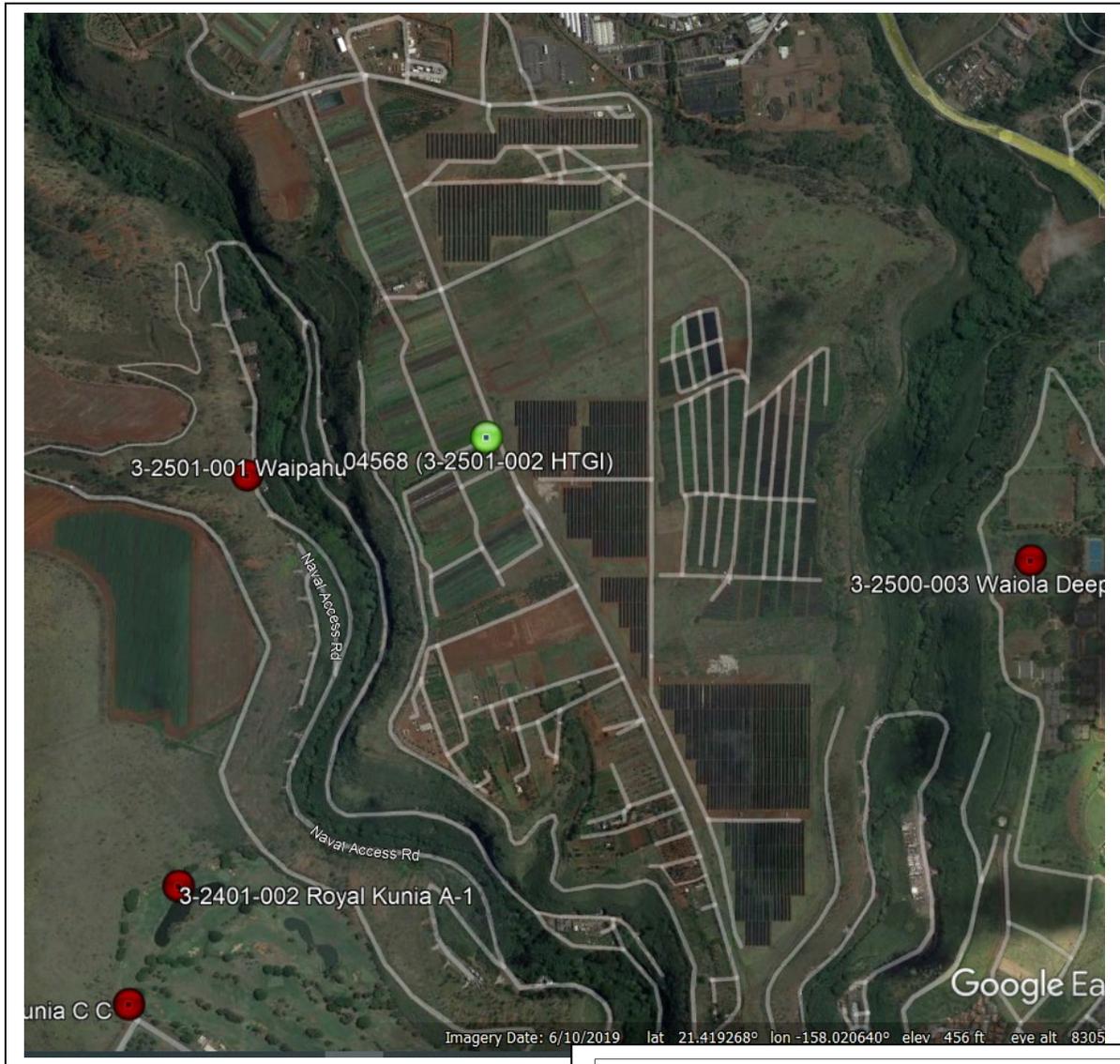
M. KALEO MANUEL  
Deputy Director

- Exhibits:
- 1 (Location Map)
  - 2 (Water Use Permit Detailed Information)
  - 3 (Public Notice)
  - 4 (Existing Water Use Permits and 12-Month Moving Average Withdrawal)
  - 5 (IWREDSS calculations)
  - 6 (Summary of use request and recommended allocations)
  - 7 (Water Use Permit Standard Conditions)
  - 8 (Well Construction Permit Standard Conditions)
  - 9 (Pump Installation Permit Standard Conditions)

APPROVED FOR SUBMITTAL:



SUZANNE D. CASE  
Chairperson



**Well and  
end use site**

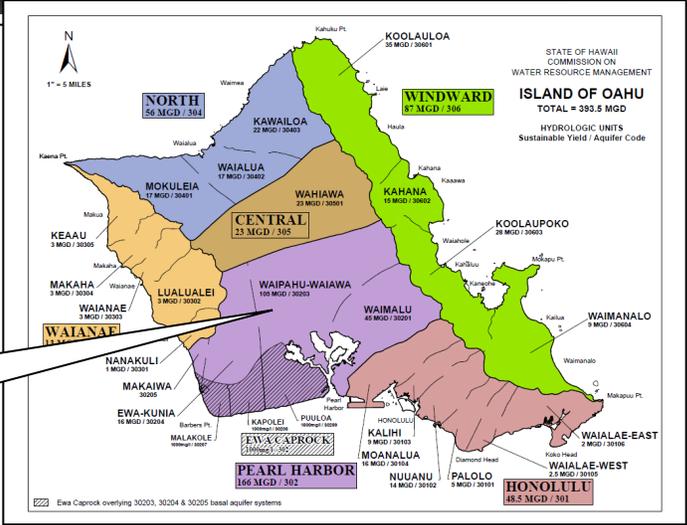
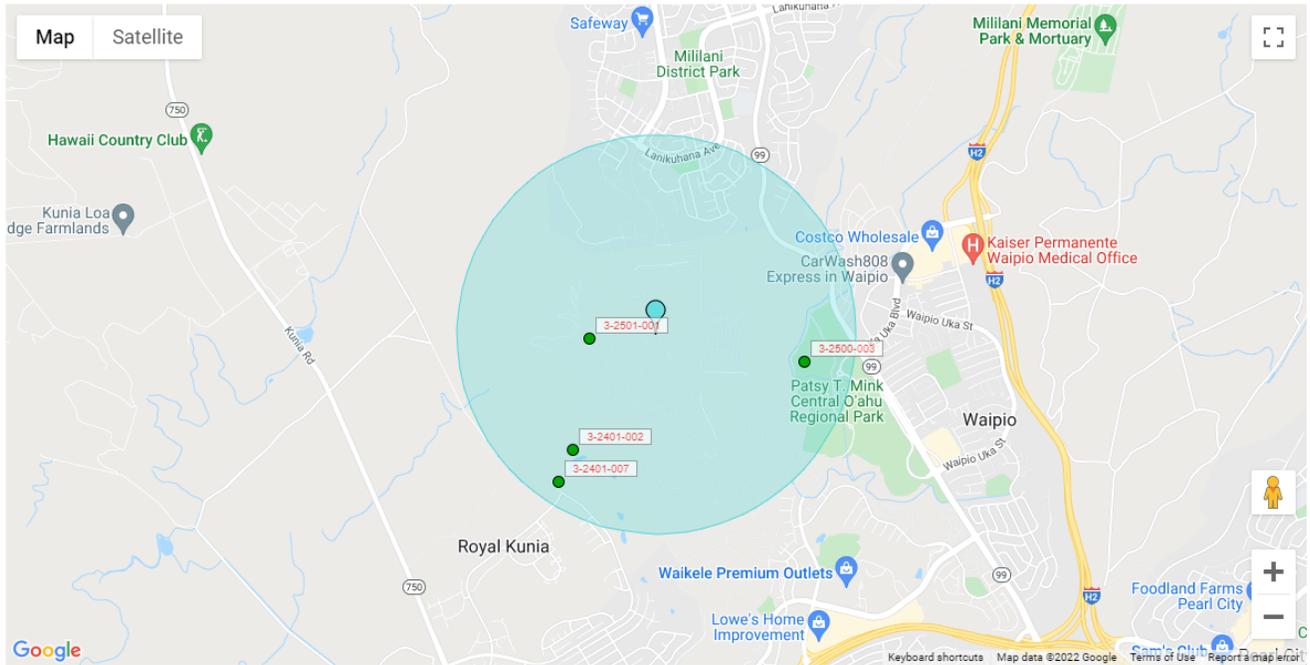


EXHIBIT 1: LOCATION MAP



4 matching results found. Sort By: Well Number

Well Number	Aquifer System	Well Name	Well Owner/Operator	Water Use Reporter	Land Owner	TMK	Use	Year Drilled	Latest 12-MAV	Last Reported Date	Distance (miles)
3-2401-002	30203 Waipahu-Waiawa	Royal Kunia A-1	Royal Kunia Country Club, Inc		JAC Hawaii INC.	(1) 9-4-002.046	OBS	1994			0.74
3-2401-007	30203 Waipahu-Waiawa	Royal Kunia C	Leighton Wong (Royal Kunia Country Club, Inc)	Jared Nomitsu (Royal Kunia Country Club, Inc)	Royal Kunia Country Club, Inc	(1) 9-4-002.046	IRRG	1996	0.403	1/31/2022	0.91
3-2500-003	30203 Waipahu-Waiawa	Waiola Deep Monitor	Honolulu Board of Water Supply, BWS	Nancy Matsumoto (Honolulu Board of Water Supply, BWS)	City and County of Honolulu, C&CH	(1) 9-4-005.075	OBSDM	2000			0.76
3-2501-001	30203 Waipahu-Waiawa	Waipahu	Kipapa Spe LLC		Kipapa Spe LLC	(1) 9-4-003.006	ABNLOS	1910			0.34

Wells within 1-mile of site

**WATER USE PERMIT DETAILED INFORMATION**

**Source Information**

<b>AQUIFER:</b>	Waipahu-Waiawa Aquifer System, Pearl Harbor Sector, Oahu
Sustainable Yield:	105 mgd
Existing Water Use Permits:	84.287 mgd
DHHL Reservation:	1.358 mgd
Available Allocation:	19.355 mgd
Total other pending applications:	0 mgd
This application:	0.400 mgd
 <b>WELL:</b>	HTGI (Well No. 3-2501-002)
Location:	Mililani, Oahu, TMK: (1) 9-4-003:002
Year Drilled:	Not yet drilled
Casing Diameter:	8 in.
<u>Elevations</u> (msl= 0 ft.)	
Water Level (estimated):	10 ft.
Ground:	479 ft.
Bottom of Solid Casing:	-1 ft.
Bottom of Perforated:	-41 ft.
Bottom of Open Hole:	Not applicable
 Total Depth:	520 ft.
Grouted Annulus Depth:	340 ft.
 Pump Capacity	300 gpm

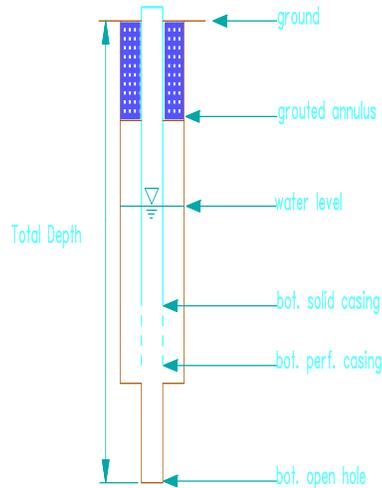


EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION

Use Information

Quantity Requested:	0.400 million gallons per day
New Type of Water Use:	Agricultural use for 67.5 acres of turf grass
Place of Water Use:	TMK: (1) 9-4-003:002
Waipahu-Waiawa Aquifer System	
Current 12-Month Moving Average Withdrawal (See Exhibit 4):	63.088 mgd

Nearby Surrounding Wells and Other Registered Ground Water Use

There are 4 other wells within a mile of the well (see Exhibit 1). Of these 4 wells, 2 are observation wells and one is lost. One well is currently in use – the Royal Kunia C well (State Well No. 3-2401-007).

Public Notice

In accordance with HAR §13-171-17, a public notice was published in the Honolulu Advertiser on May 14 and May 21, 2021 and a copy of the notice was sent to the Office of the Mayor. Copies of the completed application were sent to the Board of Water Supply, Department of Planning and Permitting, Department of Health, Department of Hawaiian Home Lands, Office of Hawaiian Affairs, the various divisions within the Department of Land and Natural Resources, and other interested parties for comments. Written comments and objections to the proposed permit were to be submitted to the Commission by June 4, 2021.

Objections

The public notice specifies that an objector meet the following requirements: (1) state property or other interest in the matter; (2) set forth questions of procedure, fact, law, or policy, to which objections are taken; (3) state all grounds for objections to the proposed permits, (4) provide a copy of the objection letter(s) to the applicant, and (5) submit objections meeting the previous requirements to the Commission by .

To the best of staff's knowledge there are no objectors who have property interest within the Waipahu-Waiawa Aquifer System or who will be directly and immediately affected by the proposed water use.

Briefs in Support

Responses to objections, or briefs in support, regarding the application are required to be filed with the Commission ten (10) days after an objection is filed and, presumably, copies are served to the applicant. No briefs in support were filed with the Commission.



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

APPLICATION FOR GROUND WATER USE PERMIT FOR  
**PROPOSED NEW USE IN A DESIGNATED GROUND WATER**  
**MANAGEMENT AREA**

**FORM GWUPA-N**

Application for New Use  
 Application to Modify WUP No. \_\_\_\_\_

For Official Use Only:

For detailed instructions on filling out this application form completely, refer to the attached instructions. Incomplete applications will not be accepted for processing.

The following must be attached before this application is accepted as complete:

- Portion of 7.5-Minute Series USGS topographic map (scale 1:24,000) with source location labeled and include the name of the quad map.
- Property tax map, showing source location referenced to established property boundaries.
- Photograph(s) of the source(s) and location(s) of proposed end use(s), if applicable.

**APPLICANT INFORMATION**

**Note 1:** In accordance with HRS § 174C-51(1), the landowner shall be the joint applicant in the event this applicant is a lessee, licensee, developer or any person with a terminable interest or estate in the land that is the water source of the permitted water.

1. APPLICANT'S INFORMATION			2. SOURCE LANDOWNER'S INFORMATION		
Name/Company Hawaiian Turfgrass Inc.	Contact Person Sean Fong		Name/Company Hawaiian Turfgrass, Inc.	Contact Person Sean Fong	
Mailing Address P.O. Box 893340 Milani, HI 96789			Mailing Address P.O. Box 893340 Milani, HI 96789		
Phone 371-0627	Fax NA	E-mail hawaiianturfgrass@gmail.com	Phone 371-0527	Fax NA	E-mail hawaiianturfgrass@gmail.com

**SOURCE INFORMATION**

3. ISLAND OAHU	4A. SUSTAINABLE YIELD FOR ITEM 4 106 MGD
4. GROUND WATER MANAGEMENT AREA Waipahu-Waiawa	

5. SOURCE INFORMATION  
 Attach additional sheets, if necessary.

Well Number (if known)	Well Name	Existing or Proposed?	TMK	Flowmeter installed?
	HTGI	Proposed	9 - 4 - 003 : 002	<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input checked="" type="checkbox"/> No
				<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
				<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
				<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
				<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No
				<input type="checkbox"/> Yes, date installed ___ / ___ / ___ <input type="checkbox"/> No

**PROPOSED USE INFORMATION** §§174C-51(4), (5), (6), HRS

6. TOTAL QUANTITY OF WATER REQUESTED: In the space below, enter total from Box M in Item 11 (Table 1) of this application.  
 gallons per day, averaged over 1 year: 400,000

7. PROPOSED USE(S):  Agriculture  Domestic  Industrial  
 Irrigation  Military  Municipal

8. LOCATION OF PROPOSED WATER USE(S): Show the location of the proposed use on the same USGS and TMK maps as the proposed source location. Otherwise, attach similar maps. See Item 11 (Table 1, column B) of this application.

**Note 2:** Signing below indicates that the signatories understand and affirm that the information provided on this application is accurate and true to the best of their knowledge. Further, the signatories understand that: (1) if necessary, further information may be required before the application is considered complete; (2) if a water use permit is granted by the Commission, this permit is subject to any existing legal uses, changes in sustainable yields and instream flow standards, reserved uses as defined by the Commission, and Hawaiian Home Lands' future uses; and (3) the applicant is responsible for paying the public notice fee associated with this application. Additionally, as stated in Note 1, above, HRS § 174C-51(1) the landowner shall be the joint applicant in the event the applicant is a lessee, licensee, developer or any person with a terminable interest or estate in the land that is the water source of the permitted water.

9. APPLICANT  Signature Sean Fong Print Name Date: 9/24/2020	10. SOURCE LANDOWNER/JOINT APPLICANT (if applicable)  Signature Sean Fong Print Name Date: 9/24/2020
---	---

PROPOSED NEW USE OR MODIFIED USE INFORMATION												
11. TABLE 1: LAND USE CONSISTENCY / EFFICIENCY OF USE (Attach additional copies, if necessary.)												
LAND USE CONSISTENCY				EFFICIENCY OF USE								
A	B			C	D	E	F	G	H	I	J	
PURPOSE / WATER USE CATEGORY (Use the instructions for water use activity descriptions.)	TRM FOR PROPOSED LOCATION OF USE ATTACH THE FOLLOWING: • Property tax map showing proposed location of use referenced to established property boundaries. • Photograph of the area of proposed use.			STATE LAND USE DISTRICT	CDUP REQUIRED? Check the appropriate box, and write in the date approved, if applicable.	COUNTY ZONING CODE	ISMAP REQUIRED? Check the appropriate box, and write in the date approved, if applicable.	UNITS OR NET ACREAGE	GAULNET or SPURDICE	QUANTITY OF USE (GPD)	JUSTIFICATION FOR QUANTITY OF WATER REQUESTED (If applicable, attach additional sheets showing how the quantity was calculated.) For irrigation uses, fill in Table 2.	
USES THAT REQUIRE POTABLE (DRINKING) WATER												
					<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No					
					<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No					
					<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No					
					<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No					
TOTAL POTABLE USE										K	GPD	
USES THAT DO NOT REQUIRE POTABLE WATER												
AGROTH	9	4	003	002	AG	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No	AG2 Ft	<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No	67.5	5,926	400,000	See attached spreadsheet of historical use.
						<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No				
						<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No				
						<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No		<input type="checkbox"/> Yes, date approved: / / <input type="checkbox"/> Yes, not approved <input type="checkbox"/> No				
TOTAL NON-POTABLE USE										L	400,000	GPD
TOTAL QUANTITY OF WATER REQUESTED (sum of total potable use and total non-potable use)										M	400,000	GPD
Please explain if there are any limitations (e.g., legal, contractual) on the proposed water use(s) described in Table 1. Ref. HRS § 174C-5(5).												
None												

EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION



**OTHER PERTINENT INFORMATION**

**13. TABLE 3: ALTERNATIVES ANALYSIS**

	A. Analysis of potable alternatives Attach additional sheets if necessary.	B. Analysis of non-potable alternatives Attach additional sheets if necessary.
Municipal sources	None available for agriculture use. The nearest access to county water is 4,112 ft away from the front entrance according to Google Earth. Milliani Ag Park (MAP) owns the common area where we have to access county water. This is not available to us.	None available
Wastewater reuse	NA	None available
Ditch system	NA Our current source of water is from the Waialeale ditch system. The water system is owned and delivered to us by MAP. MAP sold 1/2 the 12" water main as a 3" water main which will not have the volume we need.	None available
Desalination	NA	To drill deeper for desalination is cost prohibitive and also dangerous for the potable water aquifer.
Surface water	NA	The Waialeale stream is downgradient to the well site.
Conservation Measures	NA	Monitoring of groundwater use via the flowmeter will help find leaks in the irrigation system. Ponds will also be built to capture groundwater.
Other (specify)	NA	

**14. PUBLIC INTEREST**

§174C-2(C), HRS states: *The state water code shall be liberally interpreted to [a] obtain maximum beneficial use of the waters of the State for purposes such as domestic uses, aquaculture uses, irrigation and other agricultural uses, power development, and commercial and industrial uses. However, [b] adequate provision shall be made for the protection of traditional and customary Hawaiian rights, the protection and promotion of fish and wildlife, the maintenance of proper ecological balance and scenic beauty, and the preservation and enhancement of waters of the State for municipal uses, public recreation, public water supply, agriculture, and navigation. Such objectives are declared to be in the public interest.*

Explain how the proposed new use(s) in your application are consistent with items [a] and [b] above.

The use of the groundwater for the turfgrass are consistent with the state water code as it will be used for irrigation and other agricultural uses. A search in the OHA Kipuka database listed no historic sites or crown lands. There are no water bodies on the site.

**15. INTERFERENCE WITH THE RIGHTS OF THE DEPARTMENT OF HAWAIIAN HOME LANDS**

Explain how the proposed new use(s) of water will not interfere with the rights of the Department of Hawaiian Home Lands, as provided in section 2 of the Hawaiian Homes Commission Act.

The Department of Hawaiian Home Lands does not have a water reservation listed in its SWPP Final Report dated May 2017 for this aquifer.

**16. INTERFERENCE WITH ANY EXISTING LEGAL USES**

Explain how the proposed new use(s) of water will not interfere with any other existing legal use(s) of water.

There are no other wells near this project site. Pump tests will be performed to see if there will be a major drawdown in the aquifer that serves other well

**17. PUBLIC WATER SYSTEM INFORMATION**

Check the appropriate box or boxes.

- PUC-Regulated Private System /  Non-PUC-Regulated Private System /  Not a Public Water System
- Intended dedication to Honolulu Board of Water Supply or to County of Maui, Department of Water Supply.

**18. CHAPTER 343**

- An Environmental Assessment was completed, and
- An Environmental Impact Statement was required and has been accepted (attach letter of acceptance). Publication date in The Environmental Notice: \_\_\_\_\_
- A Finding of No Significant Impact has been determined (attach letter). Publication date in The Environmental Notice: \_\_\_\_\_

This project proposes:

- |   |  |
|---|--|
| <input type="checkbox"/> Use of state or county lands, or use of state or county funds      | <input type="checkbox"/> A wastewater treatment unit |
| <input type="checkbox"/> Use within a state conservation district                           | <input type="checkbox"/> Waste-to-energy facility    |
| <input type="checkbox"/> Use within a shoreline setback area                                | <input type="checkbox"/> Landfill                    |
| <input type="checkbox"/> Use within a national or Hawaii registered historic site           | <input type="checkbox"/> Oil refinery                |
| <input type="checkbox"/> Use within the Waikiki Special District                            | <input type="checkbox"/> Power-generating facility   |
| <input type="checkbox"/> The construction, expansion or modification of helicopter facility | <input type="checkbox"/> None of the above 11 items  |

**EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION**



Tax Parcel 	Tax Parcel 
<b>Map Title</b> Author: Your Name Date: 9/14/2020	<b>Notes: Notes</b> Powered by ArcGIS Server 10 © City & County of Honolulu, All Rights Reserved, 2020 Note: Data represented on this map is not intended to replace a site survey.

EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION

Date	Meter	Cost / per thousand gal	Meter	Cost / per thousand gal	Meter	Cost / per thousand gal	Daily water usage	Tax	Total Cost	Water Usage for the Year
	120817604	0.836.14	160426806	0.836.14	1600412	0.836.14		0.60%		2018
Jan. 2018	529.4	\$336.24	6,887.20	\$4,374.34	0	\$0.00	239.24	\$23.55	\$4,734.13	130587.921
Feb. 2018	0	\$0.00	4,470.20	\$2,839.27	1	\$0.00	159.69	\$14.20	\$2,854.11	
March 2018	70.52	\$45.04	7,049.03	\$4,477.12	0.891	\$0.51	229.70	\$22.61	\$4,545.28	
April 2018	37.5	\$23.62	6,971.30	\$3,782.61	0.6	\$0.38	200.31	\$19.08	\$3,835.89	
June 2018	916.7	\$518.72	7,796.90	\$4,962.12	496.7	\$309.12	303.21	\$28.90	\$5,808.86	
July 2018	535	\$403.31	10,596.50	\$6,723.91	1,007.60	\$639.97	394.49	\$38.84	\$7,806.03	
Aug. 2018	1,807.70	\$1,148.14	6,676.00	\$4,240.19	1734	\$1,101.33	329.60	\$32.45	\$6,522.11	Increase of water usage from 2018-2019 17,375.91
Oct. 2018	915.82	\$591.67	6,967.73	\$4,419.13	795.39	\$505.18	279.55	\$27.53	\$5,533.51	Increase of water cost from 2018-2019
Nov. 2018	60.09	\$38.11	8,487.40	\$5,390.69	0.71	\$0.45	284.94	\$27.15	\$5,456.46	\$11,090.88
Dec. 2018	0	\$0.00	7,523.06	\$4,779.20	0	\$0.00	242.68	\$23.89	\$4,802.09	
2018 Total	4873.13	\$3,086.11	72,406.40	\$46,987.68	4028.081	\$2,668.94	288.34	\$28.20	\$61,898.47	
Jan. 2019	0	\$0.00	9,152.80	\$5,813.31	0	\$0.00	295.25	\$28.07	\$6,842.88	Water Usage for the Year
Feb. 2019	19.8	\$12.58	5,065.25	\$3,217.15	1.11	\$0.71	181.65	\$18.16	\$3,248.68	2019
March 2019	0	\$0.00	10,245.50	\$6,607.33	0	\$0.00	330.50	\$32.54	\$6,539.87	
April 2019	0.81	\$0.51	9,880.64	\$6,279.59	7.72	\$4.90	329.63	\$31.41	\$6,312.41	
May 2019	0	\$0.00	11,867.56	\$7,631.21	0	\$0.00	382.50	\$37.66	\$7,568.87	
June 2019	150.3	\$95.48	12,975.40	\$8,241.20	427.2	\$271.33	451.76	\$43.04	\$8,651.03	Total Cost of Water Paid
July 2019	0	\$0.00	10,540.94	\$6,694.97	0	\$0.00	340.03	\$33.47	\$6,728.44	2019
Aug. 2019	6.2	\$3.21	12,852.10	\$8,162.88	0.5	\$0.32	414.86	\$40.84	\$8,209.25	
Sept. 2019	5.413	\$3,438.01	7,441.80	\$4,728.58	2,639.90	\$1,676.71	516.49	\$49.21	\$9,890.51	
Oct. 2019	252.6	\$160.44	10,355.20	\$6,677.00	32.3	\$20.52	343.23	\$33.79	\$6,791.75	
Nov. 2019	0	\$0.00	8657.4	\$5,498.68	0	\$0.00	288.68	\$27.49	\$5,526.15	
Dec. 2019	0	\$0.00	8631.7	\$4,212.06	531.5	\$337.58	231.07	\$22.75	\$4,572.39	
YTD 2019	6844.71	\$3,712.21	116,868.50	\$73,467.84	\$848.23	\$2,812.07	342.15	\$387.42	\$78,878.84	
Jan. 2020	0	\$0.00	5733.4	\$3,641.51	0	\$0.00	164.95	\$16.21	\$3,659.72	
Feb. 2020	73.8	\$46.80	4963.3	\$3,162.39	0	\$0.00	173.69	\$16	\$3,215.26	
March 2020	0	\$0.00	5,664.76	\$3,697.95	0	\$0.00	182.73	\$17.99	\$3,615.91	
April 2020	0	\$0.00	10,764.60	\$6,837.03	0	\$0.00	358.83	\$34.19	\$6,871.22	
May 2020	0	\$0.00	12608.3	\$8,008.04	0	\$0.00	406.71	\$40.04	\$8,048.08	
June 2020										
July 2020										
August 2020										
Sept. 2020										
Oct. 2020										
Nov. 2020										
Dec. 2020										
YTD 2020	73.8	\$46.80	38734.38	\$25,208.92	0	\$0.00	281.58	\$28.43	\$26,410.19	

EXHIBIT 2: WATER USE PERMIT DETAILED INFORMATION

State Historic Preservation Division  
**HRS 6E Submittal Form**

Per §6E, Hawai'i Revised Statutes, if the Project requires review by the State Historic Preservation Division (SHPD), please review and fill out this form and submit all requested information to SHPD. Please submit this form and project documentation electronically to:

dlnr.intake.shpd@hawaii.gov

If you are unable to submit electronically, please contact SHPD at (808) 692-8015. Mahalo.

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The submission date of this form is:

**1. APPLICANT (select one)**

Property Owner       Government Agency

**2. AGENCY (select one)**

Planning Department     Department of Public Works     Other (specify): \_\_\_\_\_

Type of Permit Applied For: Well Construction/Pump Installation, Ground Water Use

**3. APPLICANT CONTACT**

3.1) Name: Sean Fong      3.2) Title: Owner

3.3) Street Address: P.O. Box 893340

3.4) County: Miliilani      3.5) State: HI      3.6) Zip Code: 96789

3.7) Phone: (808)371-0527      3.8) Email: hawaiianhurfgrass@gmail.com

**4. PROJECT DATA**

4.1) Permit Number (if applicable): TBD

4.2) TMK [e.g. (3) 1-2-003:004]: (1) 9-4-003:002

4.3) Street Address: No Address

4.4) County: \_\_\_\_\_      4.5) State: HI      4.6) Zip Code: \_\_\_\_\_

4.7) Total Property Acreage: 135

4.8) Project Area (acreage, square feet): 16 square feet

4.9) List any previous SHPD correspondence (LOG Number & DOC Number, if applicable):

LOG NO. NA      DOC NO. NA

**5. PROJECT INFORMATION**

5.1) Does the Project involve a Historic Property? A Historic Property is any building, structure, object,

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district, area, or site, including heiau and underwater site, which is over 50 years old (HRS §6E-2).

Yes  No

5.2) The date(s) of construction for the historic property (building, structure, object, district, area, or site, including heiau and underwater site) is [REDACTED]

5.3) Is the Property listed on the Hawai'i and or National Register of Historic Places? To check: <http://dlnr.hawaii.gov/shpd/>

Yes  No

5.4) Detailed Project Description and Scope of Work:

We would like to drill an irrigation well for our turfgrass business. The well will be approximately 520 feet deep with 8 inch diameter casing that will stick up 2 feet above ground and will have a 4 foot x 4 foot x 4 inch cement pad around the casing.

5.5) Description of previous ground disturbance (e.g. previous grading and grubbing):

The property was former sugar cane.

5.6) Description of proposed ground disturbance (e.g. # of trenches, Length x Width x Depth):

The well will be approximately 520 feet deep with 8 inch diameter casing that will stick up 2 feet above ground and will have a 4 foot x 4 foot x 4 inch cement pad around the casing.

5.7) The Agency shall ensure whether historic properties are present in the project area, and, if so, it shall ensure that these properties are properly identified and inventoried. Identify all known historic properties:

None

5.8) Once a historic property is identified, then an assessment of significance shall occur.

Integrity (check all that apply):

Location  Design  Setting  Materials  Workmanship  Feeling  Association

Criteria (check all that apply):

- a – associated with events that have made an important contribution to the broad patterns of our history
- b – associated with the lives of persons important in our past
- c – embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value
- d – have yielded, or is likely to yield, information important for research on prehistory or history
- e – have an important value to the Native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out or still carried out, at the property or due to associations with traditional beliefs, events, or oral accounts - - these associations being important to the group's history and cultural identity

5.9) The effects or impacts of a project on significant historic properties shall be determined by the agency.

Effect Determination (select one):

- No Historic Properties Affected
- Effect, with Agreed Upon Mitigation Commitments (§6E-42, HRS)
- Effect, with Proposed Mitigation Commitments (§6E-8, HRS)

5.10) This project is (check all that apply, if applicable):

- an activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency;
- carried out with Federal financial assistance; and or
- requiring a Federal permit, license or approval.

If any of these boxes are checked, then the Project may also be subject to compliance with Section 106 of the National Historic Preservation Act (NHPA).

#### 6. PROJECT SUBMITTALS

6.1) Please submit a copy of the Tax Map Key (TMK) map

See attached TMK map.

6.2) Please submit a copy of the property map showing the project area and indicate if the project area is smaller than the property area. Please see the attached aerial picture showing the complete TMK, area of turfgress and well site marked by the X.

6.3) Please submit a permit set of drawings. A permit set is a set of drawings prepared and signed by a licensed architect or engineer and is at least 65% complete.

6.4) Are you submitting a survey?

- Yes  No

Specify Survey:

6.5) Did SHPD request the survey?

- Yes  No

If 'Yes', then please provide the date, SHPD LOG NO, and DOC NO:

Date: LOG NO. DOC NO.

6.6) SURVEY REVIEW FEES. Fee for Review of Reports and Plans (§§13-275-4 and 284-4). A filing fee will be charged for all reports and plans submitted to our office for review. Please go to:

[The Submittal Filing Fee Form is located on the Forms page](#)

A check payable to the [Hawaii Historic Preservation Special Fund](#) should accompany all reports or plans submitted.

6.7) Please submit color photos/images of the Historic Property (any building, structure, object, district, area, or site, including heiau and underwater site) that will be affected by the Project.

NA

The following are the minimum number and type of color photographs required:

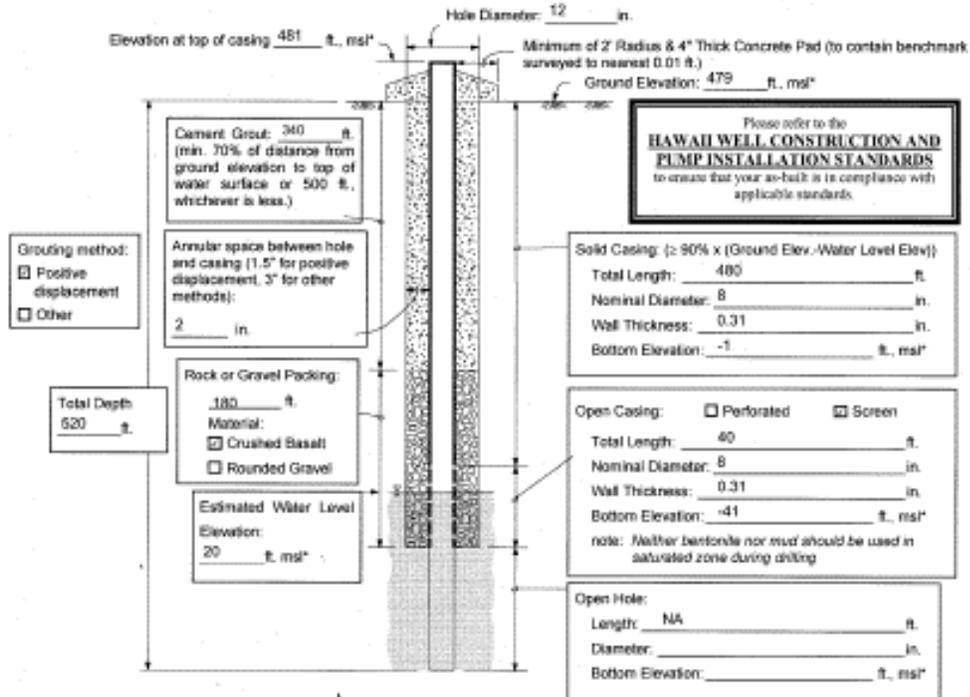
Quantity	Description
1-2	Street view(s) of the resource and surrounding area
1-2	Over view of exterior work area
1	exterior photo of the North elevation (if applicable)
1	exterior photo of the South elevation (if applicable)
1	exterior photo of the East elevation (if applicable)
1	exterior photo of the West elevation (if applicable)
1-2	interior photos(s) of areas affected (if applicable)

CHECKLIST

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- SHPD FORM 6E (this form)
- PROJECT SUBMITTALS (any requested documentation for items 6.1 - 6.7 of this form)
- FILING FEE FORM (if applicable)

**PROPOSED WELL SECTION** (Please attach schematic if different from diagram provided below. Also, if this proposed well is a dug well, attach a grading plan with cross section profiles showing existing and finished grades.)



\* The approximate elevation must be referenced to mean sea level (msl) at the time of application filing. Final elevations of well components shall be submitted in the Well Completion/Well Abandonment reports and referenced to a benchmark which has been established by a surveyor licensed by the State.

For non-salt water Basal Wells - bottom elevation of well should not be deeper than 1/4 of aquifer thickness or,

$$\text{Bottom Elevation of Well Limit} = \left( \text{Water Elevation} - \frac{1}{4} \times \frac{\text{Water Level Elevation}}{1} \right)$$

Example: Estimated = 2 ft. Water Level Elev. → Bottom Elevation of Well Limit =  $\left( 2 - \frac{1}{4} \times 2 \right) = -18.5 \text{ ft.}$

Note: Unless a variance is requested and approved, if the well is greater than 1/4 of the theoretical aquifer thickness, the well may have to be backfilled to bring the depth into compliance.

**Solid Casing Material:**

Carbon Steel: compliant with (check one or more):  ANSIAWWA C200  API Spec. 5L  ASTM A53  ASTM A139

And compliant with (check one or more):  ASTM A242 (or A806)  Type E  Type S  Grade B  Other

Stainless Steel: (check one):  ASTM A409 (production wells)  ASTM A312 (monitor wells)

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)  Schedule 40  Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):  Schedule 40  Schedule 80  Schedule 120

Thermoset Plastic: (check one)

- Filament Wound Resin Pipe conforming to ASTM D2996
- Centrifugally Cast Resin Pipe conforming to ASTM D2997
- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

**Open Casing Material:**

Carbon Steel: compliant with (check one or more):  ANSIAWWA C200  API Spec. 5L  ASTM A53  ASTM A139

And compliant with (check one or more):  ASTM A242 (or A806)  Type E  Type S  Grade B  Other

Stainless Steel: (check one):  ASTM A409 (production wells)  ASTM A312 (monitor wells)

ABS Plastic conforming to ASTM F480 and ASTM D1527: (check one)  Schedule 40  Schedule 80

PVC Plastic conforming to ASTM F480 and (ASTM D1785 or ASTM D2241): (check one):  Schedule 40  Schedule 80  Schedule 120

Thermoset Plastic: (check one)

- Filament Wound Resin Pipe conforming to ASTM D2996
- Centrifugally Cast Resin Pipe conforming to ASTM D2997
- Reinforced Plastic Mortar Pressure Pipe conforming to ASTM D3517
- Glass Fiber Reinforced Resin Pressure Pipe conforming to AWWA C950
- PTFE Fluorocarbon Tubing conforming to ASTM D3296
- FEP Fluorocarbon Tubing conforming to ASTM D3296

**PUBLIC NOTICE**

Application for Water Use Permit  
Waipahu-Waiawa Ground Water Management Area, Oahu

The Commission on Water Resource Management received the following Ground Water Use Permit Application. Public Notice is given pursuant to Hawaii Administrative Rules, Section 13-171, "Designation and Regulation of Water Management Areas."

GWUPA No. 01101 HTGI well (Well No. 3-2501-002)

Full application link: <https://dlnr.hawaii.gov/cwrm/newsevents/notices>

Applicant: Hawaiian Turfgrass Inc.  
P.O. Box 893340  
Mililani, HI 96789

Landowner: Hawaiian Turfgrass Inc.  
P.O. Box 893340  
Mililani, HI 96789

Date Application Filed as Complete: April 12, 2021

Hydrologic Unit / Aquifer System Area: Waipahu-Waiawa System, Pearl Harbor Sector, Oahu

Water Source

Well No.	Well Name	Tax Map Key	Aquifer System Area
3-2501-002	HTGI	(1) 9-4-003:002	Waipahu-Waiawa System, Pearl Harbor Sector, Oahu

Quantity Requested: 0.4 million gallons per day.

Proposed Use: Agriculture

End Use

New/Existing	Description	Place of Water Use	Qty of Use (GPD)
New	Irrigation 87.5 acres turfgrass	at Tax Map Key: (1) 9-4-003:002	400,005

Written objections or comments on this 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 must (1) state the 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 June 4, 2021. Objections must be sent to 1) the Commission on Water Resource Management, P.O. Box 821, Honolulu, Hawaii 96809 and 2) the applicant at the above address.

COMMISSION ON WATER RESOURCE MANAGEMENT



M. KALEO MANUEL, Deputy Director for  
SUZANNE D. CASE, Chairperson

Dated: Apr 30, 2021

Publish in: Honolulu Star Advertiser issues of May 14, 2021 and May 21, 2021



**Report Parameters**

WUP Type: Water Use Permit, Administrative Modification, Reservation, Transfer, CWRM Decision and Orders, Court Orders, Other  
 Island: Oahu  
 Applicant: All  
 Well # Prefix: All  
 Date: All  
 Issued Date: All  
 Date Accepted: All  
 Aquifer Sector: All  
 Aquifer: 30203 Waipahu-Waiawa  
 Source or End Use TMK: All  
 Aquifer Type: Alluvial, Basal, Dike, Perched, Not Specified  
 Water Quality: Fresh, Brackish, Potable, Non-Potable, Not Specified  
 Not Salt  
 Proposed Use: All

WUP - Water Use Permit, 12-MAV - 12 month moving average, Diff - WUP-12-MAV, mgd - million gallons per day

**Island of Oahu**

**Aquifer System Ground Water Management Area: 30203 Waipahu-Waiawa**

**Sustainable Yield (mgd): 105**

Wup No	Approved	Permittee	Well No	Well Name	WUP (mgd)	12-MAV (mgd)	Diff (mgd)	Date Last Reported
00057	07/11/1985	Hawaii Pacific District Church of the Nazarene	3-2358-049	Pearl City	0.003	0.000	0.003	11/30/2021
00058	07/11/1985	Honolulu Board of Water Supply, BWS	3-2400-001	Waipahu I P2	6.000	5.543	0.457	12/31/2021
			3-2400-002	Waipahu I P1		0.000		12/31/2021
			3-2400-003	Waipahu I P4		0.000		12/31/2021
			3-2400-004	Waipahu I P3		0.000		12/31/2021
00073	03/27/1987	Honolulu Board of Water Supply, BWS	3-2557-003	Pearl City III	0.500	0.253	0.247	12/31/2021
00084	05/17/1989	Harris Rug & Carpet Cleaners	3-2201-014	Pearl Harbor	0.003	0.000	0.003	12/31/1992
00090	05/17/1989	Al S. & Rose R. Watanabe	3-2300-011	Waipahu	0.680	0.706	-0.026	06/30/1983
00091	05/17/1989	Al S. & Rose R. Watanabe	3-2300-020	Waipahu	0.400			05/31/1967
00092	05/17/1989	Honolulu Board of Water Supply, BWS	3-2301-034	Hoaeae P1	6.610	6.759	-0.149	12/31/2021
			3-2301-035	Hoaeae P2		0.000		12/31/2021
			3-2301-036	Hoaeae P4		0.000		12/31/2021
			3-2301-037	Hoaeae P3		0.000		12/31/2021
			3-2301-038	Hoaeae P5		0.000		12/31/2021
			3-2301-039	Hoaeae P6		0.000		12/31/2021
00108	05/17/1989	Dorothy Yoshimura	3-2459-021	Waipahu	0.006	0.002	0.004	06/30/1993
00111	05/17/1989	Navy Public Works Center	3-2558-010	Waiawa Shaft	14.977	15.156	-0.179	01/31/2022
00456	12/18/1996	Tadahiro Abe	3-2202-002	Honoulluli	0.009			10/12/2021
00495	08/26/1998	Tadao Abe	3-2201-002	Honoulluli	0.002			
00500	08/26/1998	Gary Takiguchi (Takiguchi Family)	3-2201-002	Honoulluli	0.019			
00566	06/02/1993	Department of Hawaiian Home Lands, Oahu (Main) DHHL		RESERVATION	1.358			
00573	12/19/2001	KENNETH SIMON	3-2358-035	Pearl City	0.040	0.000	-0.018	01/31/2022
			3-2358-044	Pearl City		0.058		01/31/2022
00574	12/19/2000	KENNETH SIMON	3-2358-036	Pearl City	0.004	0.000	0.004	01/31/2022
00575	06/05/1996	ROYAL KUNIA CC	3-2401-007	Royal Kunia C C	0.600	0.403	0.197	01/31/2022
00582	11/08/2000	Honolulu Board of Water Supply, BWS	3-2402-001	Kunila II P1	2.710	2.034	0.676	12/31/2021
			3-2402-002	Kunila II P2		0.000		12/31/2021

**EXHIBIT 4: EXISTING WATER USE PERMITS  
AND 12-MONTH MOVING AVERAGE WITHDRAWAL**



**Report Parameters**

WUP Type: Water Use Permit, Administrative Modification, Reservation, Transfer, CWRM Decision and Orders, Court Orders, Other

**Island of Oahu**

**Aquifer System Ground Water Management Area: 30203 Waipahu-Waiawa**

**Sustainable Yield (mgd): 105**

Wup No	Approved	Permittee	Well No	Well Name	WUP (mgd)	12-MAV (mgd)	Diff (mgd)	Date Last Reported
			3-2402-003	Kunla II P3		0.000		12/31/2021
			3-2402-005	Kunla II P4		0.000		12/31/2021
00585	04/18/2001	C&C Honolulu Dept. of Enterprise Services	3-2201-003	EP 2	0.000	0.000	0.000	01/31/2022
			3-2201-004	EP 2		0.000		01/31/2022
			3-2201-007	EP 2		0.000		01/31/2022
00587	04/24/2001	Honolulu Board of Water Supply, BWS	3-2500-001	Walplo Hts II-1	1.000	0.335	0.665	12/31/2021
			3-2500-002	Walplo Hts II-2		0.000		12/31/2021
00597	08/22/1986	Honolulu Board of Water Supply, BWS	3-2400-005	Walpahu II-1	2.100	2.255	-0.155	12/31/2021
			3-2400-006	Walpahu II-2		0.000		12/31/2021
			3-2400-008	Walpahu II-3		0.000		12/31/2021
			3-2400-014	Walpahu II-4		0.000		12/31/2021
00608	06/21/2000	Honolulu Board of Water Supply, BWS	3-2400-009	Walpahu III-1	3.029	3.094	-0.065	12/31/2021
			3-2400-010	Walpahu III-2		0.000		12/31/2021
			3-2400-011	Walpahu III-3		0.000		12/31/2021
			3-2400-012	Walpahu III-5		0.000		12/31/2021
			3-2400-013	Walpahu III-4		0.000		12/31/2021
00626	12/18/2002	Pearl City Community Church	3-2359-010	Trias	0.005	0.000	0.005	04/04/2005
00627	09/18/2002	U.S. FISH & WILDLIFE	3-2359-019	PHNWR 1	0.180	0.000	0.180	04/30/2018
00642	07/19/1989	KIPAPA ACRES ASSOC OF OWNERS	3-2600-002	Kipapa Gulch	0.100	0.018	0.082	02/01/2022
00692	10/25/2005	Walawa Development, LLC	3-2658-007	GENTRY WAIAWA 1	0.524			
00693	10/25/2005	Walawa Development, LLC	3-2658-008	GENTRY WAIAWA 2	0.458			
00742	12/18/1996	MARK H. ORTIZ	3-2202-001	Honoulluli	0.003	0.000	0.003	12/31/2020
00744	06/02/1993	Honolulu Board of Water Supply, BWS	3-2600-003	Milliani III-7	1.250	0.644	0.606	12/31/2021
			3-2600-004	Milliani III-8		0.000		12/31/2021
00745	07/28/1993	Honolulu Board of Water Supply, BWS	3-2858-001	Milliani IV-9	2.022	2.156	-0.134	12/31/2021
			3-2858-002	Milliani IV-10		0.000		12/31/2021
			3-2858-003	Milliani IV-11		0.000		12/31/2021
			3-2858-004	Milliani IV-12		0.000		12/31/2021
00749	03/21/2007	Taba Farm, Inc	3-2358-021	Pearl City	0.864	0.316	-0.639	01/31/2022
			3-2358-022	Pearl City		0.316		01/31/2022
			3-2358-026	Pearl City		0.192		01/31/2022
			3-2358-029	Pearl City		0.679		01/31/2022
00761	03/07/2006	Honolulu Board of Water Supply, BWS	3-2301-044	Walpahu IV-2	3.000	2.782	0.218	12/31/2021
			3-2301-045	Walpahu IV-3		0.000		12/31/2021
			3-2301-046	Walpahu IV-1		0.000		12/31/2021
			3-2301-047	Walpahu IV-4		0.000		12/31/2021
00762	05/17/1989	Honolulu Board of Water Supply, BWS	3-2302-001	Kunla I P1	5.000	2.868	2.132	12/31/2021

**EXHIBIT 4: EXISTING WATER USE PERMITS  
AND 12-MONTH MOVING AVERAGE WITHDRAWAL**



**Report Parameters**

WUP Type: Water Use Permit, Administrative Modification, Reservation, Transfer, CWRM Decision and Orders, Court Orders, Other

**Island of Oahu**

**Aquifer System Ground Water Management Area: 30203 Waipahu-Waiawa**

**Sustainable Yield (mgd): 105**

Wup No	Approved	Permittee	Well No	Well Name	WUP (mgd)	12-MAV (mgd)	Diff (mgd)	Date Last Reported
			3-2302-002	Kunla I P2		0.000		12/31/2021
			3-2302-003	Kunla I P3		0.000		12/31/2021
			3-2302-004	Kunla I P4		0.000		12/31/2021
00764	03/07/2006	Honolulu Board of Water Supply, BWS	3-2202-021	BWS Ewa Shaft	7.661	0.000	7.661	12/31/2021
00767	10/18/2006	Robinson Kunla Land LLC	3-2602-003	Robinson No. 1	0.100	0.064	0.036	10/30/2021
00805	01/26/2000	D.R. Horton - Schuler Homes LLC	3-2102-002	EP 18 South Battery	7.969	0.428	4.949	02/04/2022
			3-2102-004	EP 18 South Battery		0.000		02/04/2022
			3-2102-005	EP 18 South Battery		0.000		02/04/2022
			3-2102-006	EP 18 South Battery		0.000		02/04/2022
			3-2102-007	EP 18 South Battery		0.000		02/04/2022
			3-2102-008	EP 18 South Battery		0.000		02/04/2022
			3-2102-009	EP 18 South Battery		0.000		02/04/2022
			3-2102-010	EP 18 South Battery		0.000		02/04/2022
			3-2102-011	EP 18 South Battery		0.000		02/04/2022
			3-2102-012	EP 18 South Battery		0.000		02/04/2022
			3-2102-013	EP 18 South Battery		0.000		02/04/2022
			3-2102-014	EP 18 South Battery		0.000		02/04/2022
			3-2102-015	EP 18 South Battery		0.000		02/04/2022
			3-2102-016	EP 18 South Battery		0.000		02/04/2022
			3-2102-017	EP 18 South Battery		0.000		02/04/2022
			3-2102-018	EP 18 South Battery		0.000		02/04/2022
			3-2102-019	EP 18 South Battery		0.000		02/04/2022
			3-2102-020	EP 18 South Battery		0.000		02/04/2022
			3-2102-021	EP 18 South Battery		0.000		02/04/2022
			3-2102-022	EP 18 South Battery		0.000		02/04/2022
			3-2202-003	EP 18 North Battery		1.712		02/04/2022
			3-2202-004	EP 18 North Battery		0.000		02/04/2022
			3-2202-005	EP 18 North Battery		0.000		02/04/2022
			3-2202-006	EP 18 North Battery		0.000		02/04/2022
			3-2202-007	EP 18 North Battery		0.000		02/04/2022
			3-2202-008	EP 18 North Battery		0.000		02/04/2022
			3-2202-009	EP 18 North Battery		0.000		02/04/2022
			3-2202-010	EP 18 North Battery		0.000		02/04/2022
			3-2202-011	EP 18 North Battery		0.000		02/04/2022
			3-2202-012	EP 18 North Battery		0.000		02/04/2022
			3-2202-013	EP 18 North Battery		0.000		02/04/2022
			3-2202-014	EP 18 North Battery		0.000		02/04/2022
			3-2202-015	EP 18 Mid Battery		0.880		02/04/2022
			3-2202-016	EP 18 Mid Battery		0.000		02/04/2022
			3-2202-017	EP 18 Mid Battery		0.000		02/04/2022
			3-2202-018	EP 18 Mid Battery		0.000		02/04/2022
			3-2202-019	EP 18 Mid Battery		0.000		02/04/2022

**EXHIBIT 4: EXISTING WATER USE PERMITS  
AND 12-MONTH MOVING AVERAGE WITHDRAWAL**



Report Parameters

WUP Type: Water Use Permit, Administrative Modification, Reservation, Transfer, CWRM Decision and Orders, Court Orders, Other

Island of Oahu

Aquifer System Ground Water Management Area: 30203 Waipahu-Waiawa

Sustainable Yield (mgd): 105

Wup No	Approved	Permittee	Well No	Well Name	WUP (mgd)	12-MAV (mgd)	Diff (mgd)	Date Last Reported
			3-2202-020	EP 18 Mid Battery		0.000		02/04/2022
00806	01/02/2007	Honolulu Board of Water Supply, BWS	3-2401-004	Kunla III-1	3.050	1.914	1.136	12/31/2021
			3-2401-005	Kunla III-2		0.000		12/31/2021
			3-2401-006	Kunla III-3		0.000		12/31/2021
00814	05/17/1989	Roman Catholic Church in the State of Hawaii	3-2101-001	Honoulluli	0.110	0.000	0.110	01/31/2022
00832	08/29/2008	Honolulu Board of Water Supply, BWS	3-2458-001	Pearl City Shaft	1.000	0.926	0.074	12/31/2021
00833	08/29/2008	Honolulu Board of Water Supply, BWS	3-2458-003	Pearl City I-1	1.150	0.808	0.342	12/31/2021
			3-2458-004	Pearl City I-2		0.000		12/31/2021
00834	08/29/2008	Honolulu Board of Water Supply, BWS	3-2457-001	Pearl City II-1	1.500	1.119	0.381	12/31/2021
			3-2457-002	Pearl City II-2		0.000		12/31/2021
			3-2457-003	Pearl City II-3		0.000		12/31/2021
00835	08/29/2008	Honolulu Board of Water Supply, BWS	3-2459-019	Waiplo Hts P-2	0.500	1.548	-1.048	12/31/2021
			3-2459-020	Waiplo Heights P-1		0.000		12/31/2021
00836	08/29/2008	Honolulu Board of Water Supply, BWS	3-2459-023	Waiplo Hts. I-1	0.500	0.376	0.124	12/31/2021
			3-2459-024	Waiplo Hts. I-2		0.000		12/31/2021
00837	08/29/2008	Honolulu Board of Water Supply, BWS	3-2659-002	Waiplo Hts III-2	1.250	1.188	0.062	12/31/2021
			3-2659-003	Waiplo Hts III-1		0.000		12/31/2021
00838	08/29/2008	Honolulu Board of Water Supply, BWS	3-2800-001	Milliani I P1	2.670	1.766	0.904	12/31/2021
			3-2800-002	Milliani I P2		0.000		12/31/2021
			3-2800-003	Milliani I P3		0.000		12/31/2021
			3-2800-004	Milliani I P4		0.000		12/31/2021
00839	08/29/2008	Honolulu Board of Water Supply, BWS	3-2859-001	Milliani II P5	1.590	0.000	1.590	12/31/2021
			3-2859-002	Milliani II P6		0.000		12/31/2021
00840	08/29/2008	Honolulu Board of Water Supply, BWS	3-2458-005	Manana 1	0.700	0.301	0.399	12/31/2021
00902	01/26/2000	Hoban E&C USA, Inc.	3-2301-001	Waipahu WP1	0.950	2.972	-2.460	03/31/1995
			3-2301-002	Waipahu WP1				
			3-2301-003	Waipahu WP1				
			3-2301-004	Waipahu WP1				
			3-2301-005	Waipahu WP1		0.438		10/31/2021
			3-2301-006	Waipahu WP1				
			3-2301-007	Waipahu WP1				
			3-2301-008	Waipahu WP1				
			3-2301-009	Waipahu WP1				
			3-2301-010	Waipahu WP1				
00966	07/28/1993	Kamehameha Schools, KS	3-2659-004	Waiawa 575Ft-2	0.300	0.000	0.300	01/31/2022

EXHIBIT 4: EXISTING WATER USE PERMITS AND 12-MONTH MOVING AVERAGE WITHDRAWAL

# IWREDSS Results Summary

Total Parcel Area in Acres: 134.800

<b>Drought Frequency:</b>	<b>1 in 2 years</b>	<b>1 in 5 years (recommended)</b>	<b>1 in 10 years</b>	<b>1 in 20 years</b>
Inches per acre:	67.084	75.555	79.474	82.482
gpd/acre:	4,991	5,621	5,912	6,136
Total Parcel Mgd:	0.673	0.758	0.797	0.827

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## 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 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. An approved flowmeter(s) need not 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).
- 11. This permit shall be subject to the Commission's periodic review of the **Waipahu-Waiawa** Aquifer System Area'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 Area, or relevant modified aquifer(s), is reduced.
- 12. 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.

- 13. The use(s) authorized by law and by this permit do not constitute ownership rights.
- 14. 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.
- 15. 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.
- 16. 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.

17. 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.
18. Special conditions in the attached cover transmittal letter are incorporated herein by reference.
19. 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.

## STANDARD WELL CONSTRUCTION PERMIT CONDITIONS

1. The Chairperson of the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work authorized by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
3. The well construction permit shall be for construction and testing of the well only. The permittee shall coordinate with the Chairperson and conduct a pumping test in accordance with the HWCPIS (the latest pump test worksheet can be obtained by contacting Commission staff or at <http://files.hawaii.gov/dlnr/cwrp/forms/APTR.pdf>). The permittee shall submit to the Chairperson the test results as a basis for supporting an application to install a permanent pump. No permanent pump may be installed until a pump installation permit is approved and issued by the Chairperson. No withdrawal of water shall be made for purposes other than testing without a Certificate of Pump Installation Completion. The permitted pump capacity described on the pump installation permit **may be reduced** in the event that the pump test does not support the capacity.
4. In basal ground water, the depth of the well may not exceed one-fourth (1/4) of the theoretical thickness (41 times initial head) of the basal ground water unless otherwise authorized by the Chairperson. If it can be shown that the well does not tap basal ground water then this condition may be waived after consultation with and acceptance by Commission staff. However, in no instance can the well be drilled deeper than one-half (1/2) of the theoretical thickness without Commission approval.
5. 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.
6. In the event that historically significant remains such as artifacts, burials or concentrations of shells or charcoal are encountered during construction, the permittee shall stop work and immediately contact the Department of Land and Natural Resources' State Historic Preservation Division. Work may recommence only after written concurrence by the State Historic Preservation Division.
7. 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.
8. The Well Completion Report Part I shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit <http://files.hawaii.gov/dlnr/cwrp/forms/WCR1.pdf> for current form).
9. The permittee shall comply with all applicable laws, rules, and ordinances; non-compliance may be grounds for revocation of this permit.
10. The well construction permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
11. If the HWCPIS are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
12. Any variances from the HWCPIS shall be approved by the Chairperson prior to invoking the variance.
13. 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 Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.

14. If the well is not to be used it must be properly capped. If the well is to be abandoned during the course of the project then the permittee must apply for a well abandonment permit in accordance with §13-168-12(f), HAR, prior to any well sealing or plugging work.
15. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
16. This permit shall apply to the location shown on the application only. If the well is to be relocated, the permittee shall apply for a new well construction/pump installation permit in accordance with §13-168-12(f), HAR.
17. Special conditions in the attached cover transmittal letter are incorporated herein by reference.

## STANDARD PUMP INSTALLATION PERMIT CONDITIONS

1. The Chairperson to the Commission on Water Resource Management (Commission), P.O. Box 621, Honolulu, HI 96809, shall be notified, in writing, at least two (2) weeks before any work covered by this permit commences and staff shall be allowed to inspect installation activities in accordance with §13-168-15, Hawaii Administrative Rules (HAR).
2. No withdrawal of water shall be made other than for testing until a Certificate of Pump Installation Completion has been issued by the Commission.
3. This permit shall be prominently displayed, or made available, at the site of construction work until work is completed.
4. The pump installation permit shall be for installation of a gpm rated capacity, or less, pump in the well. This permanent capacity may be reduced in the event that the pump test data does not support the capacity.
5. A water-level measurement access shall be permanently installed, in a manner acceptable to the Chairperson, to accurately record water levels.
6. The permittee shall install an approved meter or other appropriate means for measuring and reporting withdrawals and appropriate devices or means for measuring chlorides and temperature at the well head.
7. Well Completion Report Part II shall be submitted to the Chairperson within sixty (60) days after completion of work (please contact staff or visit <http://files.hawaii.gov/dlnr/cwrp/forms/WCR2.pdf> for current form).
8. The permittee, well operator, and/or well owner shall comply with all applicable laws, rules, and ordinances, and non-compliance may be grounds for revocation of this permit.
9. The pump installation permit application and, if relevant, any related staff submittal approved by the Commission are incorporated into this permit by reference.
10. If the HWCPIs are not followed and as a consequence water is wasted or contaminated, a lien on the property may result.
11. Any variances from the HWCPIs shall be approved by the Chairperson **prior** to invoking the variance.
12. 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 Chairperson upon a showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Chairperson no later than the date the permit expires.
13. The permittee, its successors, and assigns shall indemnify, defend, and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, or death arising out of any act or omission of the applicant, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit.
14. Special conditions in the attached cover transmittal letter are incorporated herein by reference.