

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843



November 5, 1999

JEREMY HARRIS, Mayor

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice-Chairman
JAN M.L.Y. AMIII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

Ms. Genevieve Salmonson
Office of Environmental Quality Control
State Office Tower, Suite 702
235 South Beretania Street
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Finding of No Significant Impact for the Board of Water Supply's
Proposed Waihee 265 Reservoir Slope and Drainage Improvements Project

The Board of Water Supply has reviewed the comments received during the public comment period which began on August 8, 1999. We have determined that the environmental impacts of this project have been adequately addressed as discussed in the final environmental assessment (EA) and are therefore, issuing a finding of no significant impact. We request that the proposed project be published as finding of no significant impact in the next Office of Environmental Quality Control (OEQC) Bulletin. ✓

Attached are the completed OEQC bulletin publication form and four (4) copies of the final EA for your review.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

Attachments

cc: Glenn Koyama, Belt Collins Hawaii

OEQC
QUALITY CONTROL
RECEIVED
'99 NOV 26 AM 10:08

DEC 8 1999

FILE COPY

1999-12-08-0A-~~FEA~~-

FINAL ENVIRONMENTAL ASSESSMENT

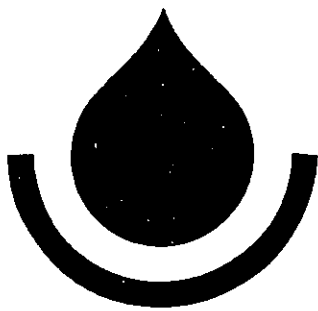
② SLOPE AND DRAINAGE IMPROVEMENTS
① WAIHEE 265 RESERVOIR
Board of Water Supply

Waihee, Koolaupoko, Oahu, Hawaii

RECEIVED

99 NOV 26 AIO:08

OFFICE OF
QUALITY CONTROL



Board of Water Supply
City and County of Honolulu

FINAL ENVIRONMENTAL ASSESSMENT

**SLOPE AND DRAINAGE IMPROVEMENTS
WAIHEE 265 RESERVOIR
Board of Water Supply**

Waihee, Koolaupoko, Oahu, Hawaii

October 22, 1999

Proposing Agency:

**Board of Water Supply
City and County of Honolulu**

Consultant:

**Belt Collins Hawaii Ltd.
Honolulu, Hawaii**

TABLE OF CONTENT

I.	PURPOSE	1
II.	PROPOSING AGENCY	1
III.	ACCEPTING AUTHORITY	1
IV.	CONSULTED AGENCIES, COMMUNITY ORGANIZATIONS AND NEIGHBORS	1
	Agencies (For Preliminary Consultation)	1
	Community Groups and Individuals (For Preliminary Consultation) ..	4
	Agencies (For 30-Day Public Comment Period)	4
	Community Groups and Individuals (For 30-Day Public Comment Period)	5
V.	PROPOSED ACTION	5
	Background and Statement of Objective	5
	Description of the Proposed Action	7
	Development Schedule	7
	Development Cost	11
VI.	DESCRIPTION OF THE AFFECTED ENVIRONMENT	11
	Existing Land Use	11
	Land Tenure	11
	Topography and Drainage	12
	Soils	13
	Climate	13
	Hydrology	16
	Flora	16
	Fauna	16
	Noise Impact	16
	Air Quality	16
	Archaeological and Cultural Sites	17
	Natural Hazards	17
	Scenic Views	18
	Socio-Economic	18
VII.	INFRASTRUCTURE	19
	Circulation and Traffic	19
	Water	19
	Sewer	20
	Electricity	20
	Telephone	20
	Solid Waste	20
	Public Facilities and Services	21

VIII.	PUBLIC LAND USE POLICIES	21
	Federal Permit	21
	State Land Use District	21
	State Functional Plans	21
	State Environmental Policy	22
	State Department of Land and Natural Resources	22
	Hawaii Coastal Zone Management Program	22
	City General Plan	24
	City Development Plan	24
	City Zoning	25
	Summary of Required Permits and Approvals	25
IX.	SUMMARY OF MAJOR IMPACTS AND PROPOSED MITIGATION MEASURES	25
	Construction Impacts	25
	Mitigation Measures for Construction Impacts	25
	Traffic Impacts	26
	Mitigation Measures for Traffic Impacts	26
	Long-Term Impacts	26
	Mitigation Measures for the Long-Term Impacts	27
X.	ALTERNATIVES CONSIDERED	27
	No Action	27
	Alternative Site	27
	Alternative Design	27
XI.	IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES	28
XII.	DETERMINATION	28
XIII.	FINDINGS AND REASONS SUPPORTING THE DETERMINATION	29
XIV.	PUBLIC COMMENTS AND BWS RESPONSES	30
XV.	REFERENCES	

APPENDIX

- A. Letters Received During Early Consultation Period
- B. Owners and Neighbors of Mahakea Road (TMK 4-7-47: 34)

LIST OF FIGURES

Fig. No.	Figure	Page
1.	Location Map	2
2.	Site Location and Tax Map Key Map	3
3.	Existing Site Conditions	6
4.	Recommended Cut Slope Improvements	8
5.	Site Profile	9
6.	Drainage Improvements on Northern Slope	10
7.	Existing Drainage Areas on Northern Slope	14
8.	Proposed Drainage Areas on Northern Slope	15

I. PURPOSE

This document has been prepared in compliance with Chapter 343, Hawaii Revised Statutes (HRS), and Chapter 200, Title 11, Hawaii Administrative Rules (HAR), for the proposed slope and drainage improvements at the Board of Water Supply's existing Waihee 265 Reservoir site. The property, which is located on Puu Kolo Ridge between Waihee and Kaalaea Valleys in Koolaupoko, Oahu (see Figure 1), is comprised of 1.4 acres and is identified by Tax Map Key (TMK) as 4-7-47: 13 (see Figure 2). Its elevation is approximately 245 feet, and its distance from Kamehameha Highway and the shoreline is approximately 4,000 feet. The proposed action also involves two other parcels identified as TMK 4-7-07: 5 and 4-7-33: 36.

II. PROPOSING AGENCY

The proposing agency is the Board of Water Supply (BWS), City and County of Honolulu.

III. ACCEPTING AUTHORITY

The accepting authority is the BWS of the City and County of Honolulu.

IV. CONSULTED AGENCIES, COMMUNITY ORGANIZATIONS AND NEIGHBORS

The following agencies, community groups and individuals were requested written input and comment on the proposed action during the project's early consultation period. Copies of responding letters are included in Appendix A of this document.

Agencies

Federal:

U.S. Department of the Army, Corps of Engineers
U.S. Fish and Wildlife Service

State of Hawaii:

Department of Land and Natural Resources, Land Division
Department of Land and Natural Resources, State Historic
Preservation Division

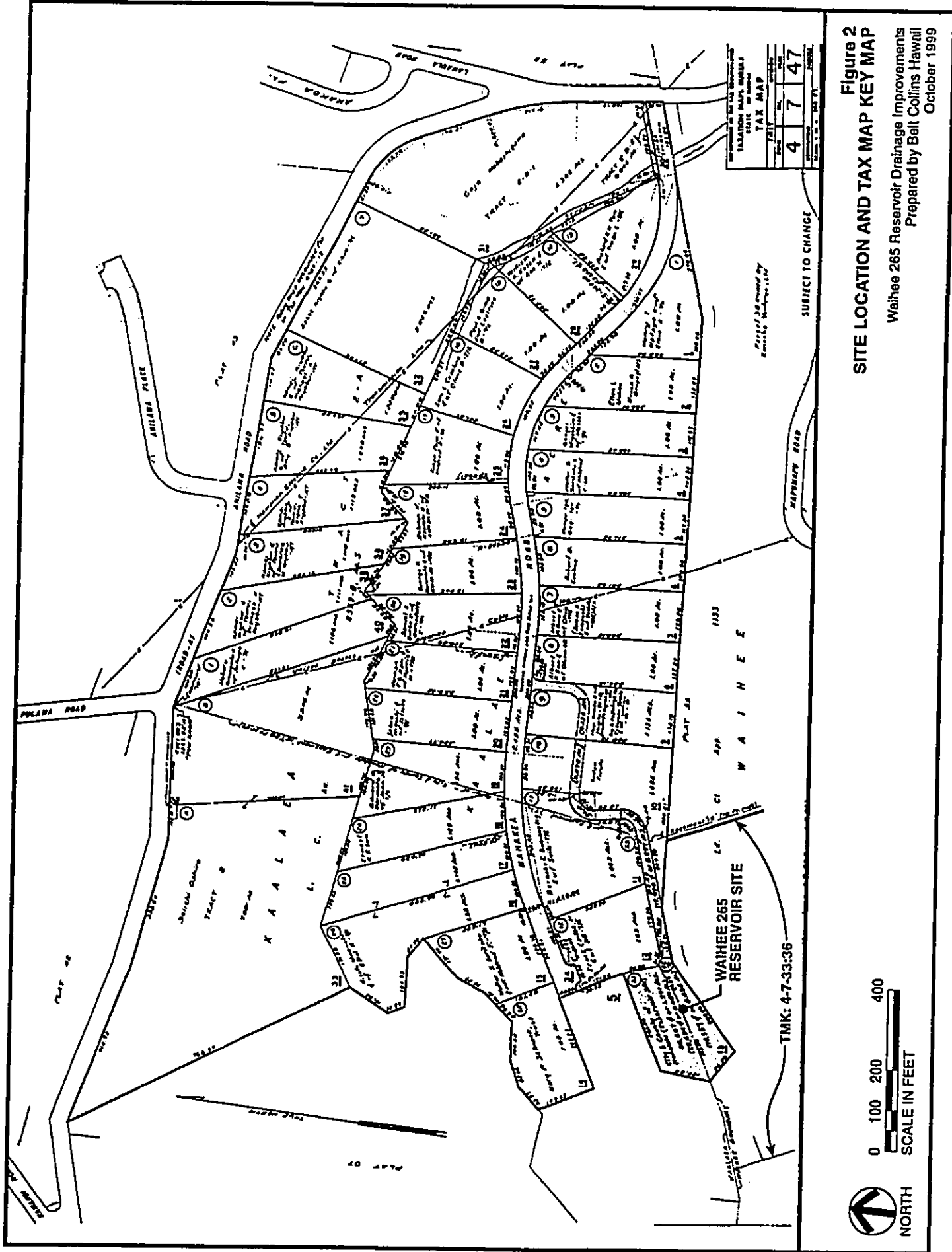


Figure 2
SITE LOCATION AND TAX MAP KEY MAP
 Waihee 265 Reservoir Drainage Improvements
 Prepared by Belt Collins Hawaii
 October 1999

City and County of Honolulu:
Department of Planning and Permitting
Department of Facility Maintenance

Community Groups and Individuals

Community Organizations:
Sierra Club, Hawaii Chapter
Nature Conservancy

Owners of Adjacent Properties:
Mr. and Mrs. Thomas T. Tanouye
Mr. and Mrs. Glenn K. Takarishi
Mr. and Mrs. Seiko Shimabukuro

The following agencies, community groups and individuals will be requested comments on the project's Draft Environmental Assessment during the 30-day public review period.

Agencies

Federal

U.S. Fish and Wildlife Service
U.S. Natural Resources Conservation Service

State of Hawaii

Department of Business Economic Development
& Tourism, Planning Office
Department of Health
Department of Land and Natural Resources, Land Division
Department of Land and Natural Resources, State Historic
Preservation Division
Office of Environmental Quality Control
Office of Hawaiian Affairs

City and County of Honolulu

Department of Design and Construction
Department of Environmental Services
Department of Facility Management
Department of Planning and Permitting
Fire Department

Utilities

Hawaiian Electric Co Inc.

Library

Hawaii State Library
Kaneohe Public Library

Community Groups and Individuals

Organizations

Kahaluu Neighborhood Board No. 29

Elected Officials

Councilmember Steve Holmes
State Representative Colleen Meyer
State Senator Bob Nakata

Owners of Adjacent Properties

Mr. and Mrs. Thomas T. Tanouye
Mr. and Mrs. Glenn K. Takanishi
Mr. and Mrs. Seiko Shimabukuro

**Owners and Neighbors of Mahakea Road
(See Appendix B)**

V. PROPOSED ACTION

Background and Statement of Objective

Waihee 265 Reservoir was constructed in the 1950s to serve as a storage tank for the water distribution system in Waihee and Kaalaea. Because of the steepness of the terrain, the tank was placed on a small site. A steep cut was necessary to reduce the amount of grading for the property and minimize the amount of land required for the reservoir and its appurtenance (see Figure 3).

Over the years, however, heavy rains have contributed and have had a cumulative effect on the stability of the site, particularly on the large cut slope behind the reservoir and on the northern slope below the storage tank. With a 0.5:1 gradient and unprotected surface, the cut slope was experiencing erosion and land slippage problems. Runoff from the northern slope currently flows into an eroding swale and onto private property. The BWS, thus, is proposing remedial action that would stabilize or improve the deteriorating condition of the cut slope and drainage swale.

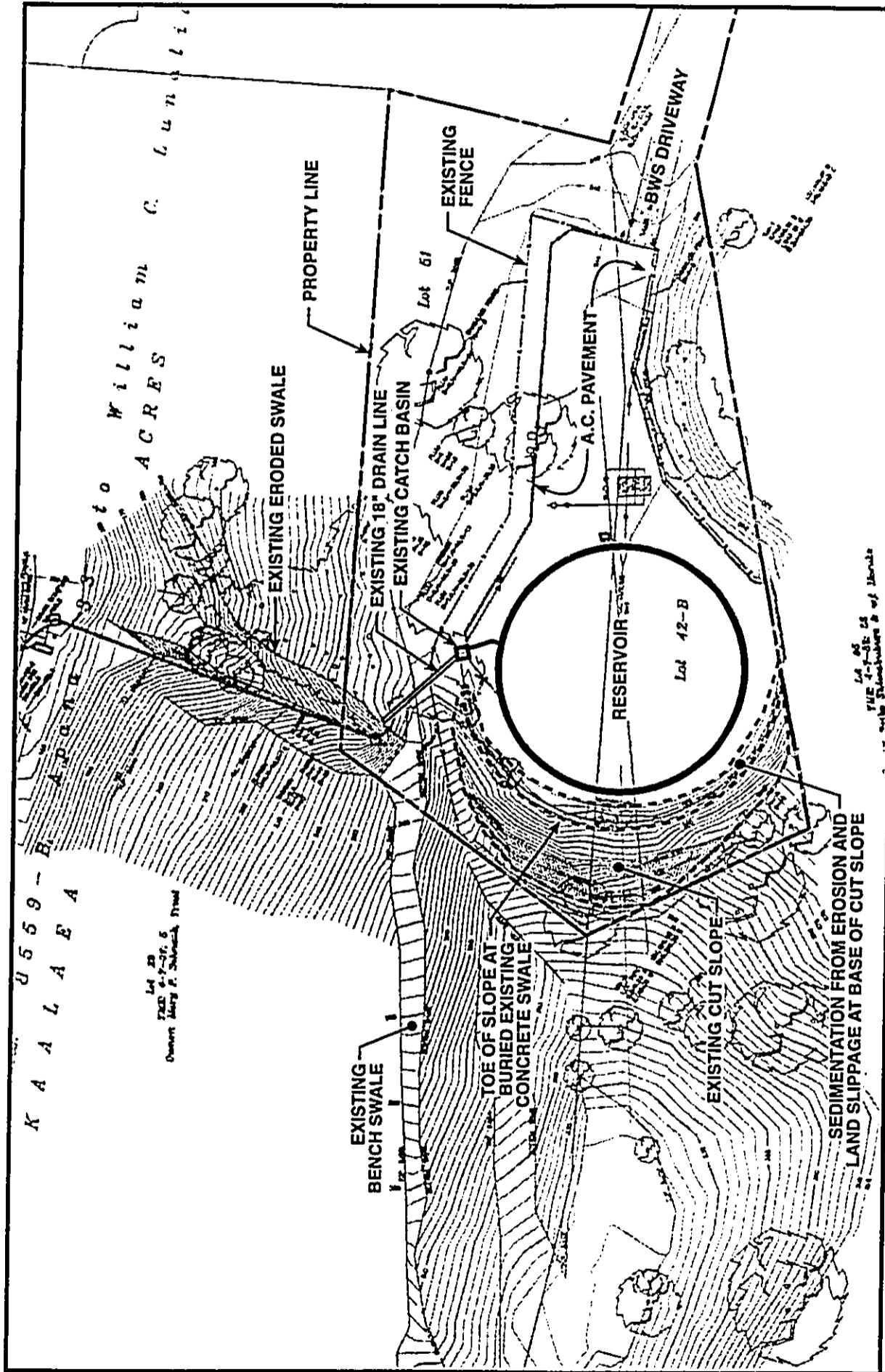
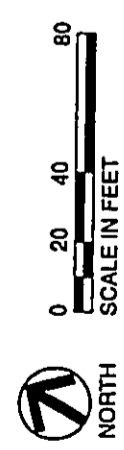


Figure 3
EXISTING SITE CONDITIONS
 Waihee 265 Reservoir Drainage Improvements
 Prepared by Belt Collins Hawaii
 October 1999



Description of the Proposed Action

The BWS is proposing to stabilize the cut slope by reducing the gradient on the bank from 0.5:1 to 1:1 which is more suitable for large areas and recommended by the project's geotechnical engineer (see Figures 4 & 5). The reduced slope will help to minimize the potential of erosion and land slippage. Stabilization will be further enhanced by the installation of an erosion control mat and planting of groundcover. This would be better suited on 1:1 slope than on 0.5:1 slope. Hydro mulch, a cementitious gypsum based bonded fiber matrix product, mixed with seeds of annual rye grass and Australian carpet grass will be first applied to the slope. A permanent erosion control mat will then be installed over the hydro mulched slope to limit the seed and soil movement in the area.

Reducing the steepness of the cut slope will require approximately 4,000 cubic yards of excavation, particularly on the upper portion of the graded area. Horizontally, approximately 10,000 sq. ft. of land will be used. It is anticipated that two private properties will be affected by the expanded slope. Owners of these properties have been contacted and informed of the proposed improvements.

Erosion on the northern side of the reservoir will require remedial treatment (see Figure 6). An existing drainage bench will be repaired and partially improved to create a grassed swale, and a new drainage system, designed to replace an existing drainage course, will be installed consisting of a concrete rubble masonry (crm) apron connected to a crm swale, an 18" diameter underground reinforced concrete pipe (rcp) and a second crm swale. The outlet from this system will be at a natural drainageway located approximately 340 feet from the reservoir. The natural drainageway currently follows a course through the makai lands of Kaalaea and Waihee.

There are two existing drainage inlets located adjacent to a private driveway that crosses the proposed drainage system at about its midpoint. These inlets currently receive runoff from the hillside above the adjoining private residence. When the new drainage system is installed, these inlets will be connected to the system.

Development Schedule

Construction is preliminary scheduled to beginning in early 2000. Completion is expected to occur approximately six months after construction commences.

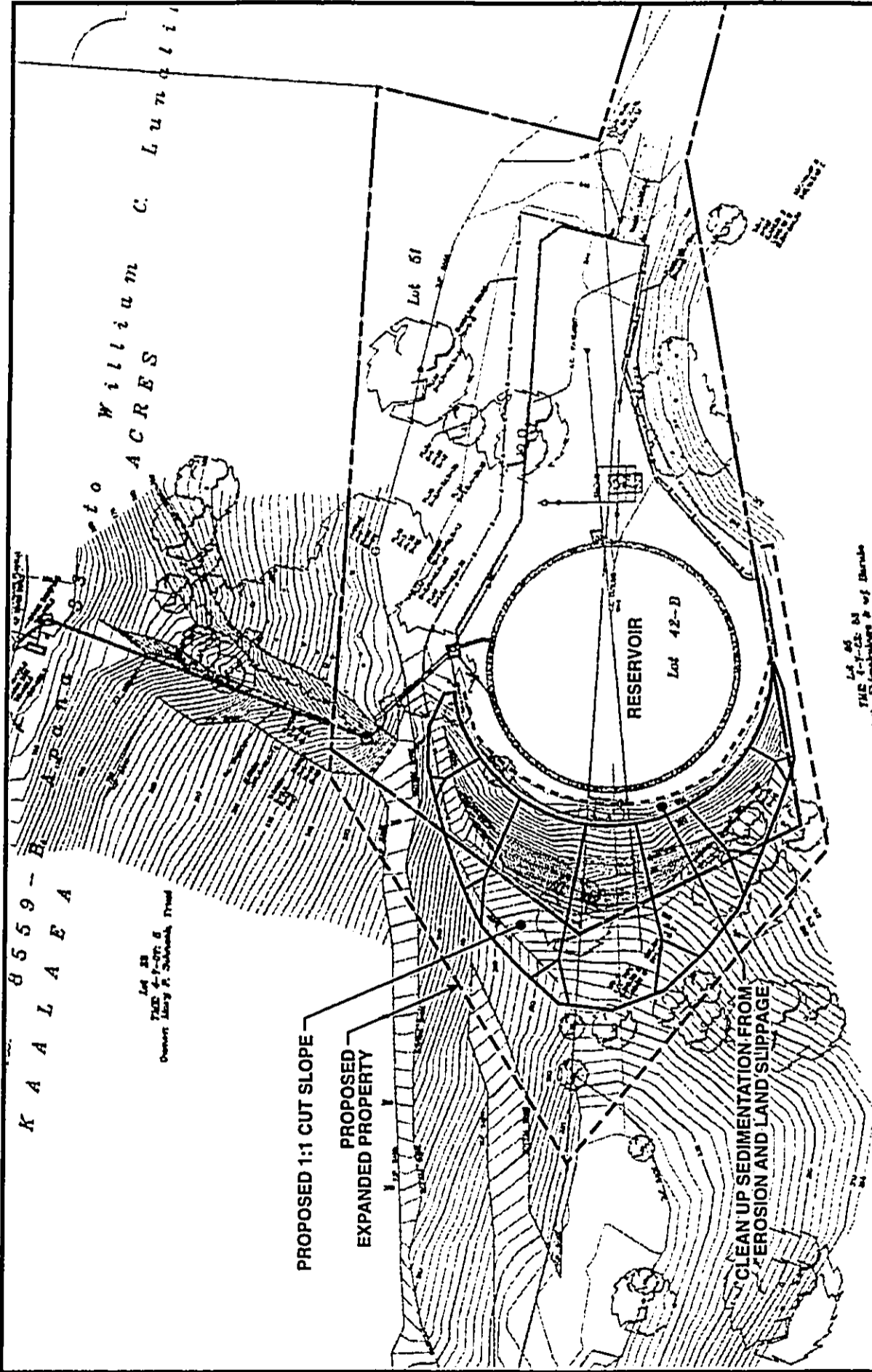
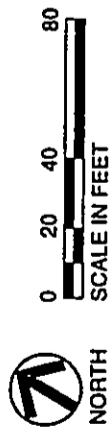
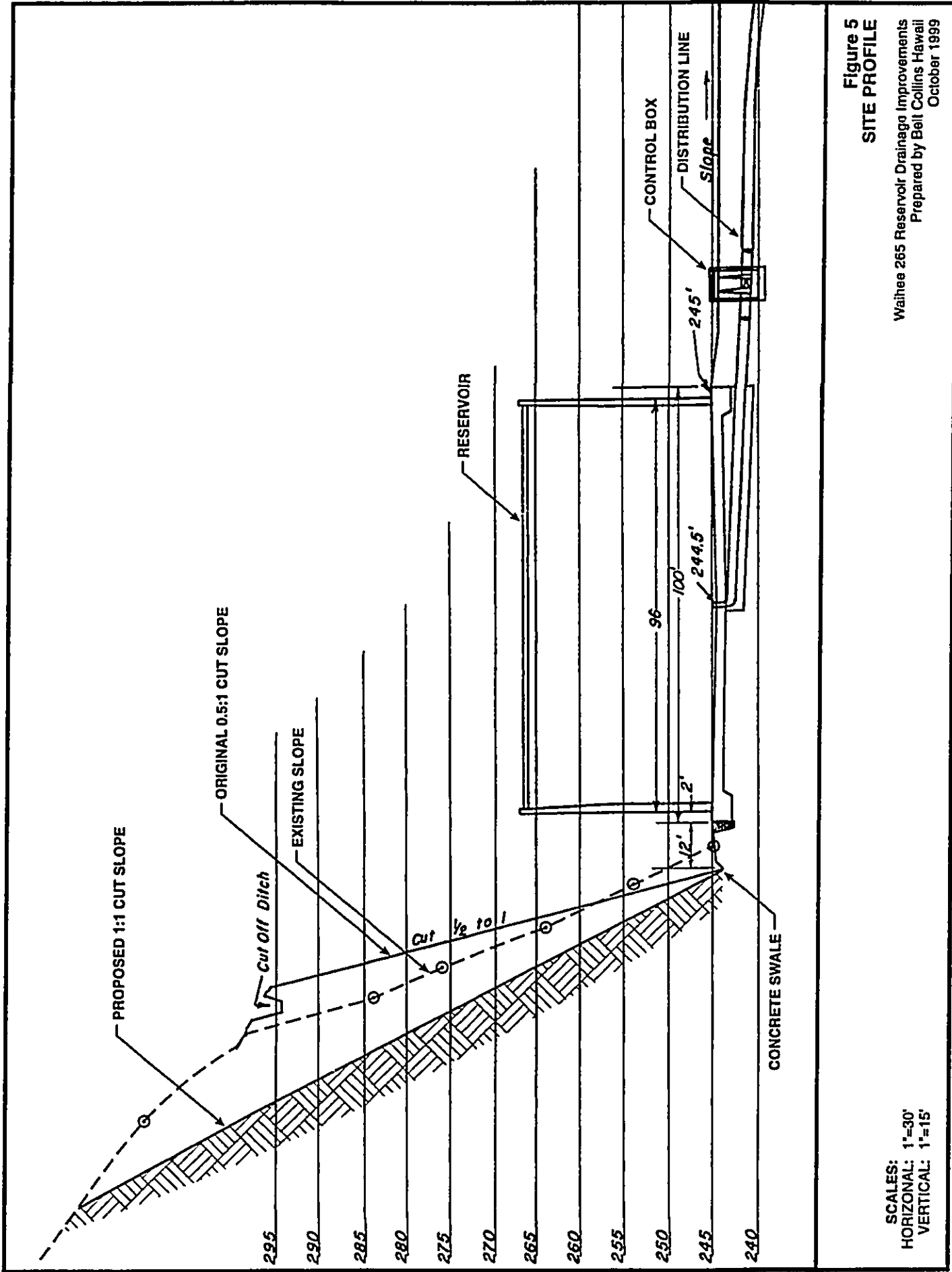


Figure 4
RECOMMENDED CUT SLOPE IMPROVEMENTS

Wahee 265 Reservoir Drainage Improvements
Prepared by Belt Collins Hawaii
October 1999





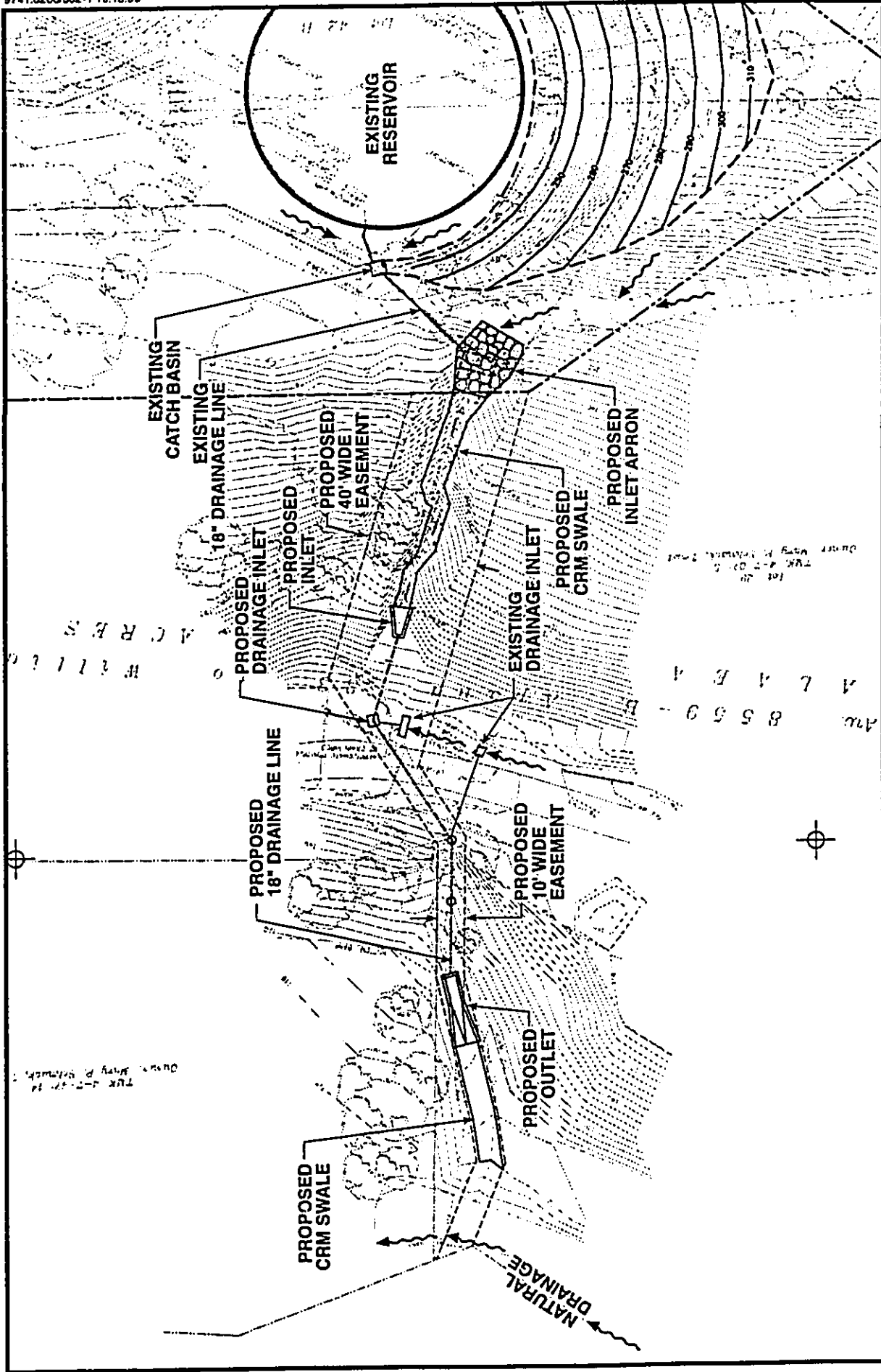


Figure 6
DRAINAGE IMPROVEMENTS ON NORTHERN SLOPE

Waihee 265 Reservoir Drainage Improvements
Prepared by Bolt Collins Hawaii
October 1999

Development Cost

The estimated cost of construction is approximately \$373,000. This estimate is based on 1998 dollars and is for the construction element of the project. Engineering and design costs are not included.

VI. DESCRIPTION OF THE AFFECTED ENVIRONMENT

Existing Land Use

The project site is located on a ridge above Kaalaea Acres, a rural residential area of 1-acre parcels. A number of homes are located below the reservoir. Around the remainder of the site are undeveloped lands that comprise the ridge line and flanks of Puu Kolo.

Access to the property is via a 1,000-foot long driveway from Mahakea Road. It crosses two private lots via an access easement.

Within the site, BWS operates a one-million gallon concrete reservoir. There are a paved area for access around the reservoir and a parking area for maintenance vehicles. On the perimeter of the site is a 6' high chain link fence topped with three strands of barb wire. A gate and pad lock secures the property.

Land Tenure

The Waihee reservoir site is a 1.4-acre parcel owned by the City and County of Honolulu. Access to the site is via a 1,000-foot long driveway from Mahakea Road, a private right-of-way serving a number of residential properties. Approximately 370 feet of the initial segment of the driveway traverses two private properties; one owned by Tamayo Kotomori and the other by Tanya Tagami. The remainder of the driveway is located in a roadway parcel that is part of the reservoir property.

There are three parcels located adjacent to the property that will be affected by the proposed improvements. Above the reservoir are Parcel 5 of Tax Map Key 4-7-07, owned by Mr. and Mrs. Thomas T. Tanouye, and Parcel 36 of TMK 4-7-33, owned by Mr. and Mrs. Seiko Shimabukuro. A portion of these parcels must be acquired to accommodate the expanded slope area. Preliminary estimates show approximately 5,000 sq. ft. of Parcel 5 and 5,950 sq. ft. of Parcel 36 will be required. The owners have been contacted about the proposed improvements and will be briefed further as news on the land acquisitions occur.

On the northern side of the reservoir, BWS is proposing to install a drainage system that is approximately 315' long. This system will traverse the Tanouye's property and abut a property, identified as Parcel 14 of TMK 4-7-47 (third affected parcel), owned by Mr. and Mrs. Glenn K. Takanishi. A drainage easement of approximately 40 feet and 10 feet wide will be established for the drainage swales and underground drainage line. The affected property owners have been notified of the proposed improvements and will be further briefed on the project status.

Topography and Drainage

Located at the lower end of Puu Kolo Ridge, BWS's reservoir sits just above the Kaalaea Acres residential lots. The site, which is at approximately the 245-foot elevation, is on a ridgeline where one side slopes at approximately 70 percent toward Kaalaea and the other slopes at approximately 90 percent toward Waihee. Above and to the west of the site, the ridgeline continues for approximately 1.4 miles to an elevation of 2,654 feet where it meets with the Koolau Range.

When the existing reservoir was constructed in the 1950s, the building pad for the reservoir required a flat elevation of approximately 19,000 sq. ft. on the ridgeline. This called for cutting a slope into the ridge to create the level pad. In minimizing the amount of required earthwork, a cut slope of 0.5:1 was excavated which was acceptable by the City in the 1950s. Over the years, this slope has proven inadequate given the size of the bank, its unprotected surface and extensive precipitation in the area.

Another factor that may have contributed is the ineffective use of the small diversion ditch at the top of the slope. This ditch may have been filled by sedimentation and debris and during heavy rainfall, runoff may have simply flowed over the ditch and down the face of the cut slope. Severe erosion problems have developed on the cut slope and immediate action is now required to remedy the condition. It is not clear what slope protection was installed during the initial slope construction, but field inspections indicate that only groundcover may have been used. This groundcover, though, appears to be having a difficult time holding itself on the slope.

At the base of the cut slope is an existing concrete ditch that wraps around the back half of the existing reservoir. It is designed to carry surface runoff from the cut slope to the northern side of the reservoir where the runoff then flows into an existing catch basin and short drainage line to a 135-foot long open swale. The flow then discharges onto a level area adjacent to a private residential driveway. Notably, the drainage swale also receives flow from the

reservoir's overflow line as well as runoff from a sloping bench on Pua Kolo's upper northern flank. At the driveway, the flow, which during a 10-year storm would have a quantity of 2.5 cubic feet per second (cfs), follows the existing contour along the private access to Mahakea Road (see Figures 7 & 8).

It is also noted that there are two drainage pipes that presently cross the private driveway near the makai terminus of the reservoir's drainage swale. These pipes have a catchment inlet that is designed to receive runoff from the mauka slope adjacent to the BWS swale. Flow through these pipes then travel through another swale to a natural drainage course approximately 140 feet from the driveway. The flow through this second swale is approximately 7.24 cfs (10-year storm). The natural drainage at the terminus of the swale eventually makes its way through the lowlands of Kaalaea and Waihee.

With the installation of the new drainage system in the existing swale, the discharge from the new system will increase by 2.5 cfs or 35 percent over the existing flow (see Figure 8). The discharge from the swale to Mahakea Road will be greatly reduced.

Runoff on the makai side of the reservoir flows over an existing pavement and parking area down over the reservoir driveway to Mahakea Road.

Soils

Soil on the property consists of *Waikane silty clay, 40 to 70 percent slopes, WpF*, as classified by the U.S. Soil Conservation Service. Soils of this type have runoff conditions that are rapid to very rapid and erosion hazards that are severe. They are well-drained and are found on alluvial fans and terraces. These soils were developed in alluvium and colluvium derived from basic igneous rock. Their elevations are normally from 200 to 1,000 feet and are in areas where annual rainfalls range from 50 to 70 inches.

The cut slope of the site is composed primarily of saprolite or highly weathered rock. This type of soil is very poor for supporting flora. Normally, it is acidic and contains high levels of aluminum. Excess aluminum in the subsoil normally inhibits and confines root growth by reducing the amount of nutrients and water available to aluminum-sensitive vegetation.

Climate

Temperatures generally range from an average daily low of 65 degrees Fahrenheit to an average daily high of 85 degrees. Rainfall averages about 70 inches per year and the predominant winds are from the northeast.

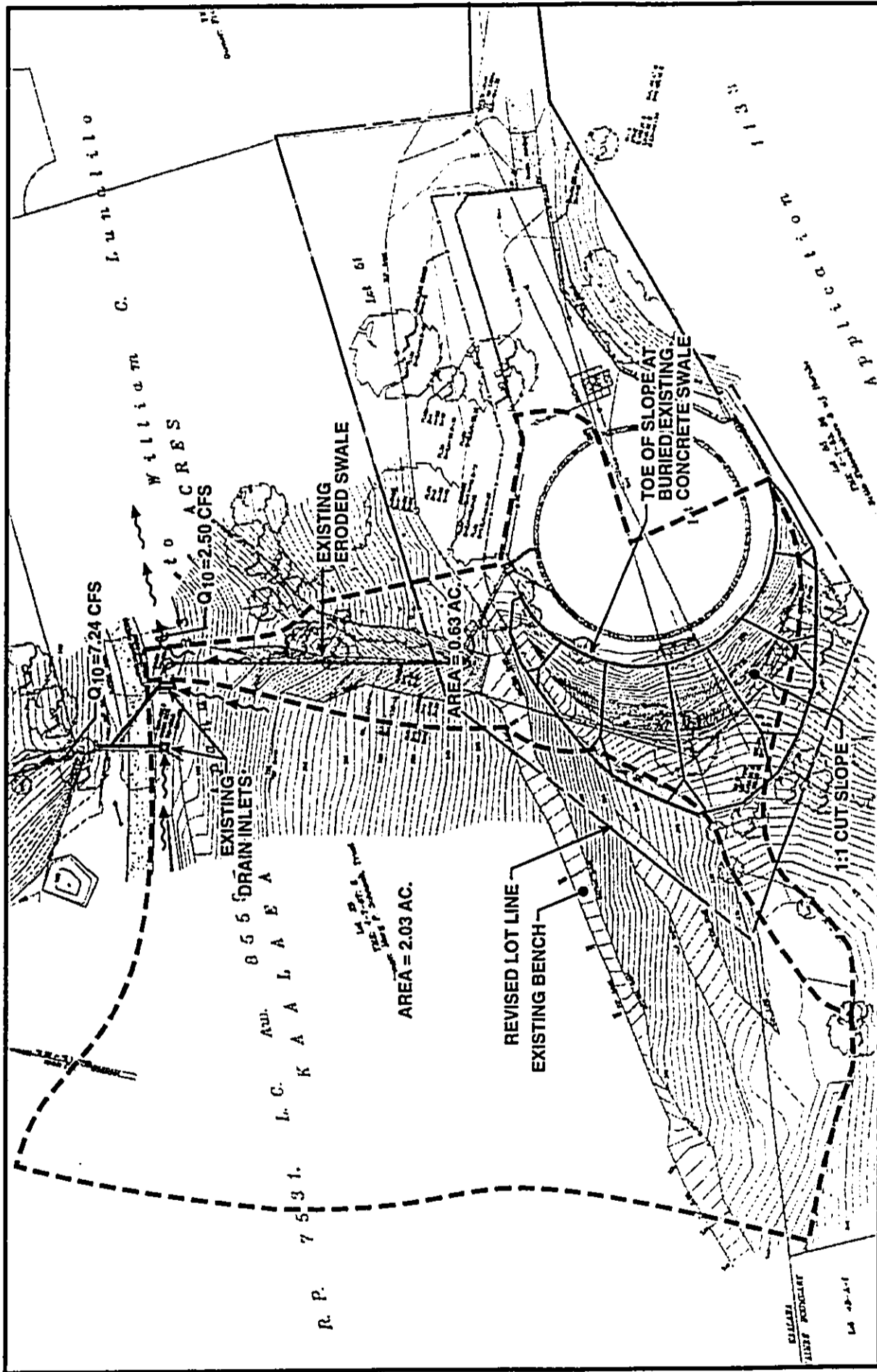


Figure 7
EXISTING DRAINAGE AREAS ON NORTHERN SLOPE

Waihee 265 Reservoir Drainage Improvements
 Prepared by Belt Collins Hawaii
 October 1999

LEGEND

Q10 Discharge for 10-year storm
 CFS Cubic feet per second



Hydrology

There are no surface water features on the property. Groundwater is located far beneath the site given the property's elevation and location on a ridgeline. The project site is not situated within any forest reserve.

Flora

Vegetation on the property consist of groundcover on the slope behind the reservoir and scattered trees, shrubs and groundcover on the ridge above the slope and on the northern flank of Puu Kolo. The predominant vegetation in the project area are java plum, juniper berry, haole koa, false staghorn fern, saw fern, octopus tree, ohia lehua, autograph tree, Japanese tea, and molasses grass. None of these species are considered rare, threatened or endangered.

Fauna

Known fauna species that occupy this area include predominantly lowland urban species which have wandered into the area from the residential fringe areas. These species typically consist of common myna, red-vented bulbul, zebra dove, Japanese white eye, house sparrow, spotted dove and house finch as well as rats, mice, feral dogs and stray cats. The project site is not known to be a habitat for rare, endangered and threaten wildlife species.

Noise Impact

The major sources of noise in the vicinity are the occasional vehicles on Mahakea Road and any activities from the neighborhood residents. There are no nearby noise-intensive uses such as playfields, entertainment centers and industrial facilities.

The proposed site improvements will not generate any noise. During construction, however, noise is expected to be generated from construction activities. It will be short-term and occur only during the projected 4 to 6 month construction period. It is also expected to occur only during the weekdays and daylight hours.

Air Quality

There are no major sources of air pollutants in the vicinity. No manufacturing, agricultural burning, animal farms, incinerators or landfill activities are located nearby. Emissions from heavy traffic are also absent from the area.

Long-term activities at the project site are not expected to generate any air-borne pollutants. Short-term activities, however, are anticipated to generate emissions from construction equipment and vehicles and fugitive dust from site work, particularly during excavation of the cut slope. As will be provided in Section IX of this document, mitigation measures will be employed to reduce the potential impacts of these pollutants.

Archaeological and Cultural Sites

The project site is steep and located in an inaccessible area where habitation would be impractical. In a letter from the State Historic Preservation Division (SHPD), the State acknowledges the condition of the site and that the area has been extensively modified for construction of the reservoir and related facilities. Further, after reviewing historic reports, maps and aerial photos, SHPD has determined that the site would be unlikely to contain significant historic features and believes that the proposed improvements will have "no effect" on significant sites (see Appendix A).

In assessing the cultural effects of the proposed action, the proposed improvements would not be in the path or route of traditional gathering of natural resources. Better access is located around the property in less difficult terrain. Moreover, there is no evidence of natural resources on the site or immediately vicinity that would be of value to existing or early communities.

Natural Hazards

Waihee 265 Reservoir is located more than 4,000 feet from the shoreline. It will not be subject to high waves and severe surges, tsunami inundation, subsidence and coastal flooding. Located on an elevated ridge, the site, however, will be subject to brush fire and high winds. These natural forces, notably, will have minimal effect on the regraded slope and new drainage system. The regraded slope will have an erosion control mesh and groundcover, which if damaged by brush fire or high winds, will not involve a substantial replacement cost. After such natural hazards, the surface above the drainage line will be left "as is" with possible debris cleanup, while the natural vegetation would be allowed to rehabilitate and rejuvenate in the area.

As with any brush fire in remote locations, the Honolulu Fire Department will exercise emergency procedures appropriate for the area. Since it is unlikely that a fire truck would climb the steep existing driveway to the reservoir site, a helicopter and bucket may be used to extinguish the fire. Alternatively, a fire truck or tanker may climb the reservoir driveway, as high as possible, and then use an extended fire hose to reach the hot spot.

The project site is not located in any floodway or flood fringe area. Heavy rain and earthquakes may cause slippage on the slope, however, the cost of repair would be moderate and would not be as high as the original construction cost. The repair would specifically involve removal of the existing mat, smoothing out the eroded or shifted areas, removing the displaced soil and sedimentation at the base of the slope, rematting the slope and replanting.

Scenic Views

Views of the reservoir from the main coastal road, a distance of more than 4,000 feet, are evident if it is specifically being searched. Otherwise, the distance from the highway and presence of surrounding vegetation make the site particularly obscure at long distance.

The proposed site work will occur behind the reservoir and on the north side of the ridge. These areas will be less visible to motorists travelling on the coastal road. The finishing work will consist of providing groundcover on the cut slope. The groundcover will be typical of the area. The new drainage system to the north of the reservoir will be installed at grade and underground and shielded by existing vegetation. These improvements will result in very little negative visual impacts to the surrounding communities.

Socio-Economic

The project site is located in a rural residential community where the lifestyle is tied to the country living. The proposed action is not expected to disrupt this lifestyle and its social character nor overburden or negatively impact the local public services and facilities.

Economically, the proposed action is expected to have some positive effects. These effects, however, will be small and temporary. Considering the size of the project, construction of the proposed improvements is expected to generate a small amount of new work in the industry. It would involve probably the use of existing labor -- no new jobs would be created -- and equipment. Since no new employment is expected to be generated, no new employee housing will be required.

Construction employee income will increase, thus government revenues from income tax will increase. The added income would translate into employee spending and more government revenues from consumer/sales taxes.

Construction of the proposed improvements are not expected to affect land values of the adjacent private properties.

VII. INFRASTRUCTURE

Circulation and Traffic

Access to the project site is provided by a driveway from Mahakea Road. The BWS driveway is located within an easement over two private residential properties and a roadway parcel that is part of the reservoir property. Mahakea Road, a private two-lane right-of-way owned by its abutting residents, extends approximately 2,000 feet from Ahilama Road. Mahakea Road serves 29 properties, but not all are developed or occupied. Ahilama Road, a two-lane minor road, is a City and County right-of-way that serves residents in Kaalaea and Waihee Valleys.

The proposed improvements will not generate new traffic. No new residents or on-site employees will result from the project. There will be no increase in commuter trips.

During the project's construction stage, there will be a short-term or temporary increase in traffic volume. Excavated material from the slope work is expected to be removed from the property in hauling trucks which would transport the material to a City approved landfill, and rocks and mortar will be brought to the site in hauling trucks for construction of the new drainage system. The number of round trips is preliminarily projected to range from 8 to 12 per day, depending on the size of the hauling trucks, for approximately 8 weeks. The number of trips is then reduced to 1 or 2 per day for approximately the next 6 to 8 weeks.

Construction workers are expected to commute to the site every weekday during the construction period. The number of workers is expected to be approximately 12 or less, and the number of trips and time of arrival and departure are not expected to cause traffic congestion in the area. Parking will be on Mahakea or Ahilama Road with a limited number of parking provided at the reservoir site.

Water

The proposed action will not require long-term water use during its operational stage. No irrigation system is planned for the ground improvements.

During construction, however, water may be needed to provide initial irrigation of the groundcover on the reservoir's cut slope. The water may be brought to the site by water trucks rather than from the reservoir which does not have a spigot or bib for watering purposes.

The water trucks may also provide water sprinkling for dust control, if necessary, should wind conditions generate fugitive dusts that drift toward the adjacent residences.

Sewer

There are no sewer facilities on the reservoir site. Maintenance personnel currently use off-site accommodations. During construction, portable toilets will be provided for the workers. No long-term provisions for wastewater facilities are planned.

Electricity

Electricity is provided to the site via a connecting line from an existing pump station located below the property. The reservoir, however, is no longer using power from the Hawaiian Electric Co Inc., because communication for relaying water level information between the reservoir and pump station is now being done by electronic transmitters.

The proposed site improvements will not require electrical power, but may need power during construction to run certain power tools or construction equipment. The demand for electricity during this phase of the project is expected to be small and may be provided by gas generators.

Telephone

There are no telephone facilities at the site and none are planned with the proposed improvements.

Solid Waste

Solid waste will be generated from routine ground maintenance. Fallen leaves and overgrown groundcover will require periodic upkeep. Debris will be collected and disposed at an off-site public disposal site. In lieu of BWS personnel, a maintenance contractor may be hired to perform this work.

Solid waste/debris generated during construction will be removed from the site by the construction contractor. BWS's contract with the developer will specify that the site be clean and free of debris upon completion of the project.

Public Facilities and Services

The proposed action will involve only site improvements. As a result, there will be no population increase and no associated need for public facilities, such as schools, libraries, medical facilities, parks and other recreational facilities. Security will be provided by an existing 6' high chain link fence around the reservoir site, and the Honolulu Police Department will be on call for any emergencies or investigative work.

The Honolulu Fire Department has a station adjacent to the Kahaluu Elementary School located approximately one-half mile from the site. The station has facilities for traditional fire fighting emergencies. Special fire fighting techniques involving helicopter and bucket will require the assistance of other stations. Coordination and dispatchment of these fire units to the emergency hotspot will be the responsibility of the district or main fire station.

VIII. PUBLIC LAND USE POLICIES

Federal Permits

On March 4, 1999, the Corps of Engineers (COE), U.S. Department of the Army, conducted a site inspection of the drainageway where the BWS is proposing a drainage outlet. The COE determined that the drainageway is not a regulated stream that falls within its jurisdiction (see Appendix A).

State Land Use District

The project site is located in the State Conservation District. Alteration and grading of the site's topography will require preparation and submittal of a Conservation District Use Application. The Board of Land and Natural Resources, State of Hawaii, is the approving agency.

State Functional Plans

The State Functional Plans are intended to provide more detail to the Hawaii State Plan. As defined in Chapter 226, HRS, a functional plan sets forth "the policies, programs and projects designed to implement the objectives of a specific field of activity when such activity or program is proposed, administered, or funded by an agency of the State."

The State Water Resources Development Functional Plan is directed primarily at State operations and, to some extent, private industry. It presents general objectives and policies for the management of potable water supply,

floodplains, agricultural water and estuarine environments. BWS's plan to improve the site condition at its Waihee reservoir is consistent with this functional plan.

The State Conservation Lands Functional Plan provides a management program that allows judicious use of the State's natural resources. It provides a framework for the protection and preservation of the state's pristine lands and shorelines. The proposed project is designed to remove the hazardous condition that is created by the severe erosion and land slippage occurring on the site. Resolution to these problems will help stabilize and protect the surrounding environment.

State Environmental Policy

The proposed improvements are consistent with the State Environmental Policy particularly in conserving " the natural resources, so that land, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii."

The proposed improvements are designed to stabilize a cut slope at the Waihee Reservoir so no further serious erosion occurs and to channel runoff from the reservoir vicinity into a drainage line toward a natural drainageway. These improvements are designed to prevent severe erosion, heavy sedimentation onto downslope properties and loss of existing vegetation. They would implement the State's guidelines for encouraging "management practices which conserve and protect watersheds and water sources, forest, and open space areas."

State Department of Land and Natural Resources

The proposed outlet for the new drainage system will extend to the edge of the natural drainageway below the reservoir. It will not enter the natural drainage course. The Commission on Water Resource Management, therefore, will not be involved in the review of the proposed action.

Hawaii Coastal Zone Management Program

The objectives and policies of the Coastal Zone Management Program are discussed below in relation to the proposed project.

Recreational Resources:

The proposed project will not interfere with any access to or use of coastal recreational facilities and opportunities. No beach area or other coastal recreational sites will be reduced in size.

Historic Resources:

The proposed project will not impact any natural and manmade historic and prehistoric resources that are significant in Hawaiian and American history and culture.

Scenic and Open Space Resources:

The proposed project is located more than 4,000 feet from the shoreline and will not impact any coastal scenic and open space resources.

Economic Uses:

The proposed project involves improvements to an existing facility which is suitable at its location. Economic benefits, in terms of employment, personal income and government revenues, will be generated by the construction of the proposed improvements.

Coastal Hazards:

The project site is not located in the coastal area and will not be subject to storm waves, tsunami inundation, subsidence and coastal pollution. The project site is located on a ridge where stream flooding would not be a potential hazard. Site erosion, however, has occurred, and the proposed action is designed to reduce or prevent this problem.

Managing Development:

The Environmental Assessment includes public participation as an integral part of its review process. Public comment and input are provided during the EA's early consultation period and later during a 30-day public comment period. These public input opportunities open communication channels for addressing coastal management issues.

Public Participation:

This policy is directed more toward public agencies. Notably, this EA serves as an informational document on the project and its potential effects, if any, on the coastal management area.

Beach Protection:

The proposed project is located inland from the shoreline. It will not involve any shoreline improvements or activities. The proposed action will not affect the policies and guidelines of the CZM program pertaining specifically to the shoreline area.

Marine Resources:

The proposing agency is conscious of the environmental and conservation considerations promoted by the State and City agencies and will work to be consistent with them if applicable.

City General Plan

Policy 4 of Natural Environment - Objective A of the City General Plan states that the City shall "require development projects to give due consideration to natural features such as slope, flood and erosion hazards, water-recharge areas, distinctive land forms, and existing vegetation," and Policy 6 of the same objective states that the City shall "design surface drainage and flood-control systems in a manner which will help preserve their natural settings."

Although the proposed action is not the main use of the site, it is intended to improve the site condition of the existing facility. The proposed improvements are designed to stabilize the cut slope behind the reservoir to reduce potential erosion and sedimentation and improve drainage on the northern side of the BWS tank to eliminate hazardous conditions that may later negatively affect the environment.

City Development Plan

The City's Development Plan for Koolaupoko District shows the reservoir site in the Preservation District. The proposed action calls for improvements to an existing utility that are permissible in the district.

City Zoning

The current zoning is P-1 Preservation, however, the property is located in the State Conservation District and all proposed improvements will be subject to the review and approval of the State Department of Land and Natural Resources.

Summary of Required Permits and Approvals

The required land use approval for the project is a Conservation District Use Permit from the State Board of Land and Natural Resources. Subsequently, a grading permit will be required from the City Department of Planning and Permitting.

IX. SUMMARY OF MAJOR IMPACTS AND PROPOSED MITIGATION MEASURES

Construction Impacts

During construction, temporary or short-term impacts will be generated. Noise and possibly fugitive dust may occur from the project site during site preparation and construction. Heavy equipment will be used to excavate and re-grade the cut slope for stabilization and to reduce the potential of erosion and land slippage. Heavy equipment would also be required to put rocks in place for the new drainage system on the northern slope.

Reshaping of the cut slope and installation of the new drainage system may result in erosion and sedimentation, if construction occurs during wet periods and no sedimentation control measures are employed.

Construction is expected to occur over an approximate 4- to 6-month period, but noise and dust generated from the construction activity would occur only during a fraction of the time. Archaeological features are not expected to be encountered during the site work.

Mitigation Measures for Construction Impacts

Precautionary measures will be employed by the construction contractor to insure that the least amount of project impacts occur on the neighboring properties. Dust control measures, such as dust screens, water sprinkling in graded areas and construction restraints during windy days, will be employed, as required, in compliance with the provisions of Chapter 11-60.1 HAR, "Air Pollution Control," Section 11-60.1-3 on fugitive dust. Construction noise will

be in compliance with State and City noise control standards and requirements. Best management practices will be employed during construction to control and reduce erosion and sedimentation and the potential discharge of pollutants. Compliance will be a part of the construction contract and the responsibility of the selected contractor.

Traffic Impacts

During construction, traffic on Mahakea Road is not expected to be significantly impacted. There may be a need, however, for construction employee parking on the private access. Since the road is private, permission to park within the right-of-way may be necessary from the owners.

Mitigation Measures for Traffic Impacts

During construction, if Mahakea Road is unavailable for parking, construction employees could park on Ahilama Road which is a public right-of-way. Arrangements could be made for construction employees to park on the City road and share a ride with other employees to the reservoir site where a few parking spaces are available. Others may decide to walk to the construction site.

Long-Term Impacts

The new drainage system on the northern slope will effectively redirect surface runoff from the private driveway directly to the natural drainageway. The present drainage course for the runoff on the private driveway follows the contours of the existing access to Mahakea Road where it runs along and over the pavement until it reaches a catchment basin on the side of the right-of-way approximately 1,300 feet from the driveway.

The flow from the catchment basin then follows an open swale through residential property to the same natural drainage that occurs upland where BWS is proposing the new drainage system outlet. The quantity of this makai flow would be only marginally less than the flow that would be discharged at the upland point of the natural drainageway. Considering a 10-year storm over a prolonged period, the peak flow would occur when the ground is saturated and little water is absorbed into the ground. The flow that is discharged at the private driveway would be almost the same as the flow that is discharged into the natural drainageway further downstream. Notably, a 1,300-foot section of this route is impervious paving where no ground infiltration occurs.

Therefore, the impact of the redirected flow into the natural drainage would be essentially between the two discharge locations. With the new drainage system, the segment between the two discharge locations would now have a flow of 2.5 cfs more than if the new system were not installed. This volume would have only a minor degree of impact on the adjacent land. When a 10-year storm occurs, the water level would rise no more than one-quarter inch over the typical level of that occurrence.

Mitigation Measures for the Long Term Impacts

No mitigation measures are planned for the long-term impacts. The rise in water level, as a result of the new drainage system, will have minimal effects on the riparian land. Additionally, the existing natural drainage consists of a deep stream bed for large flows.

X. ALTERNATIVES CONSIDERED

No Action

An alternative to the proposed action is to forsake any improvements to the existing facility. Although this option was available, it was not considered. The site is currently experiencing severe erosion problems on its cut slope and on a drainage swale to the north of the property. If left unattended, the condition would worsen and would result in further erosion, land slippage, increased sedimentation and vegetation loss. These conditions could obstruct access to the back side of the reservoir as well as damage downslope properties, particularly, on the northern side of the reservoir.

Alternative Site

The proposed action is site specific. It would not be feasible to perform these improvements elsewhere. The proposed action is designed to remedy a specific on-site problem.

Alternative Design

An alternative to increasing the slope area behind the reservoir is to construct a partial retaining wall at the toe of the slope and add fill to build up the bottom section of the slope and decrease the overall slope gradient from 0.5:1 to 1:1. The cost of this alternative would be more than the current design despite its requirement to acquire some land above the slope.

Another design solution would be to maintain the existing slope but to install a heavy mesh or erosion control mat over the area. Although this could be an effective means of controlling erosion, it may not be feasible on steep slopes such as that which exists behind the reservoir. The subject slope may still need to be lowered to allow the mat to be effective.

The curb swale and underground 18" diameter drainage line will provide a controlled drainage route for the surface runoff from the reservoir area and reduce the tendency of runoff to flow loosely over a large area potentially causing extensive erosional damage, especially during heavy rainfall periods. Alternative designs would not be as effective for controlling runoff through the area nor being feasibly constructed on such steep slopes.

XI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed action will involve construction that requires irreversible and irretrievable commitment of resources. Public funds, construction labor, contractor equipment, construction and landscape materials, and utility services, including energy resources, water sources, waste water disposal and solid waste disposal, will be needed to prepare the project site for development. Construction of the improvements will not involve displacement of existing businesses, residences or agricultural activities.

When construction is completed, the project will involve long-term commitment of resources including the use of the land for public utility purposes and the use of BWS personnel for operations monitoring and occasional maintenance work.

XII. DETERMINATION

This Final Environmental Assessment demonstrates that the proposed action will not have significant adverse effects on the environment and that an Environmental Impact Statement is not warranted. A Finding of No Significant Impact, therefore, is determined for this project.

XIII. FINDINGS AND REASONS SUPPORTING THE DETERMINATION

The following findings and reasons demonstrate that the proposed action will not have significant adverse impacts on the environment and, consequently, support the above determination.

- o The proposed action will occur on a site that is already in utility use and in an area that is already severely eroded. No archaeological or cultural features are anticipated in the immediate vicinity.
- o The proposed expansion area for the modified cut slope is currently undeveloped and will be put to productive use.
- o As provided in Section VIII of this document, the proposed action is consistent with the State's long-term environmental policies and guidelines (Chapter 344, HRS).
- o The proposed project is expected to have a beneficial effect on the local economy. Its construction phase will generate work and personal income and stir spending throughout the county and state.
- o No significant long-term adverse social impacts are expected to be generated. The proposed action will not displace existing businesses, residences or other community facilities that are essential for the public welfare.
- o No hazardous materials will be brought to the site during its long-term use. During construction, heavy equipment will be using petroleum products that could leak from their engines or hydraulic systems. The construction contractor will be responsible for all remedial actions and cleanup.
- o The proposed action will serve as a public utility to meet the needs of community growth. It will not directly generate population increase nor create a direct need for additional public facilities.
- o The proposed action calls for site improvements that will not change the overall character of the land.
- o The proposed action is not part of a larger project nor series of additional projects. Thus, there are no anticipated cumulative effects.
- o The proposed action will be in an area adjacent to an existing reservoir site. No rare, threatened or endangered wildlife or flora or their habitat will be affected.

- o The anticipated impacts associated with project construction, such as erosion/sedimentation, fugitive dust and noise, are short-term and temporary. They will be minimized or prevented from occurring by implementing mitigative measures in accordance with applicable federal, state and county laws, statutes, ordinances, and rules and regulations. Anticipated negative impacts from project operations will also be minimized or prevented by compliance with similar government controls.
- o The project site is not located in any environmentally sensitive areas, such as flood plains, tsunami inundation zones, beach lands or geologically hazardous sites. The steep cut behind the reservoir is subject to erosion, but the proposed action is designed to reduce the potential of erosion and land slippage.
- o The proposed action, which is located in a remote area, will not significantly obstruct scenic vistas or view planes from designated scenic routes or roadways or from residential areas.
- o Finally, the long-term effect of the proposed action, which comprises only ground improvements, will not require the use of energy or electrical power.

XIV. AGENCY COMMENTS AND BWS RESPONSES

A copy of the Draft Environmental Assessment for this project was transmitted to the following agencies and private organizations for review and comment. The parties that responded are indicated below and a copy of their correspondence with a response from the proposing agency is attached to this section. Comments that were substantive and applicable were incorporated into the Final Environmental Assessment.

	<u>Agencies Responded</u>	<u>Agencies Responding w/No Comment</u>	<u>Agency Letters and Responses Attached in this Section</u>
<u>Federal Agencies</u>			
Fish and Wildlife Service			
Natural Resources Conservation Service			
<u>State Agencies</u>			
Dept. of Business, Economic Development & Tourism		X	X
Dept. of Health	X		X

	<u>Agencies Responded</u>	<u>Agencies Responding w/No Comment</u>	<u>Agency Letters and Responses Attached in this Section</u>
<u>State Agencies (continue)</u>			
DLNR Land Division			
DLNR Historic Preservation Division	X		X
Office of Environmental Quality Control			
Office of Hawaiian Affairs		X	X
<u>City Agencies</u>			
Dept. of Design and Construction			
Dept. of Environmental Services	X		X
Dept. of Facility Maintenance		X	
Dept. of Planning and Permitting	X		X
Dept. of Transportation Services	X		X
Fire Department	X		X
<u>Utilities</u>			
Hawaiian Electric Company, Inc.		X	X
<u>Organizations</u>			
Kahaluu Neighborhood Board No. 29			
Sierra Club, Hawaii Chapter			
The Nature Conservancy			
<u>Elected Officials</u>			
Councilmember Steve Holmes			
Representative Colleen Meyer			
Senator Bob Nakata			
<u>Owners and Neighbors of Mahakea Road</u>			
(see list in Appendix B)			No Receipt of Written Comments



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

BENJAMIN J. CAYETANO
GOVERNOR
SEJI F. HAYA, Ph.D.
DIRECTOR
BRADLEY J. MOSSMAN
DEPUTY DIRECTOR
DAVID W. BLANE
DIRECTOR, OFFICE OF PLANNING

Telephone: (808) 587-2848
Fax: (808) 587-2824

Ref. No. P-8244

August 25, 1999

RECEIVED

1999 AUG 31 P 1:23

BELT COLLINS HAWAII

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Boulevard
First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Draft Environmental Assessment (DEA)
Waihee 265 Reservoir Site Improvements
Koolaupoko, Oahu, Hawaii

We have no comments on the subject. For your information, the Hawaii Coastal Zone Management (CZM) Program is no longer routinely reviewing these documents. However, we note that CZM objectives and policies have been addressed on page 22 of the report.

Sincerely,

David W. Blane
Director
Office of Planning

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 28, 1999

JEREMY HARRIS, Mayor

COPY

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

Mr. David W. Blane, Director
Office of Planning
Department of Business,
Economic Development and Tourism
State of Hawaii
P. O. Box 2359
Honolulu, Hawaii 96804

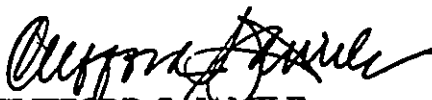
Dear Mr. Blane:

Subject: Your Letter of August 25, 1999 to Belt Collins Hawaii Regarding
the Draft Environmental Assessment for the Board of Water
Supply's Proposed Waihee 265 Reservoir Site Improvements Project

Thank you for your letter regarding the Draft Environmental Assessment for the proposed
reservoir site improvements project.

We acknowledge that you have no comments to offer at this time.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Glenn Koyama, Belt Collins

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



RECEIVED

BRUCE S. ANDERSON, Ph.D., M.P.H.
DIRECTOR OF HEALTH

1999 SEP 21 P 1:30

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:
File:

September 14, 1999

99-182/epo

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Draft Environmental Assessment (DEA)
Waihee 265 Reservoir Site Improvements
Koolaupoko, Oahu
TMK: 4-7-47: 13; 4-7-7: 5; & 4-7-33: 36

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

Water Pollution

1. In a letter dated March 8, 1999, the U.S. Army Corps of Engineers (COE) indicated that based on a March 4, 1999 site investigation and other various data, a Federal permit (including a Department of Army permit) is NOT required for the proposed drainage outlet structure. Because a Federal permit is not required, a Section 401 Water Quality Certification (WQC) will not be required from the Department of Health. If there is any deviation to the proposed layout plan which was submitted to the COE, the applicant should once again contact the COE for their determination.
2. A National Pollutant Discharge Elimination System (NPDES) general permit is required for each of the following activities which discharges into State waters:
 - a. Discharge of storm water runoff associated with construction activities, including clearing, grading, and excavation that result in the

Mr. Glen T. Koyama
September 14, 1999
Page 2

99-182/epo

disturbance of equal to or greater than
five (5) acres of total land area;

- b. Discharge of hydrotesting water; and
 - c. Discharge associated with construction activity dewatering.
3. The applicant may be required to apply for an Individual NPDES Permit if there is any type of process wastewater discharge from the project into State waters.

The application form(s) for those discharges which need to obtain a certification, coverage, and/or permit will be provided upon request.

If you have any questions regarding these comments, please contact Ms. Joanna L. Seto, P.E., Engineering Section of the Clean Water Branch, at 586-4309.

Control of Fugitive Dust

For the improvement related activities proposed for the project, there is a significant potential for fugitive dust during all phases of construction activities. The Draft Environmental Assessment states that construction activities would occur in close proximity to existing residential establishments, thereby exacerbating potential dust problems. The Department of Health suggests that a dust control management plan be developed which identifies and addresses activities having a potential to generate fugitive dust. Implementation of adequate dust control measures during all phases of the project is warranted. Construction activities must comply with the provisions of Chapter 11-60.1, Hawaii Administrative Rules, "Air Pollution Control," section 11-60.1-3 on Fugitive Dust.

The contractor should provide adequate means to control dust from road areas and during the various phases of construction activities. These means include, but are not limited to:

- a. planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing material transfer points and on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;

Mr. Glen T. Koyama
September 14, 1999
Page 3

99-182/epo

- b. providing an adequate water source at the site prior to start-up of construction activities;
- c. landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- d. controlling of dust from shoulders, project entrances, and access roads; and
- e. providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities.

If you have any questions regarding fugitive dust, please contact Mr. Timothy Carvalho of the Clean Air Branch at 586-4200.

Sincerely,



GARY GILL
Deputy Director for
Environmental Health

c: CAB
CWB

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
30 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



October 1, 1999

JEREMY HARRIS, Mayor
EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON
KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio
CLIFFORD S. JAMILE
Manager and Chief Engineer

COPY

G Koyama

Mr. Gary Gill
Deputy Director for Environmental Health
State of Hawaii
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Mr. Gill:

Subject: Your Letter of September 14, 1999 Regarding the Draft Environmental Assessment for the Board of Water Supply's Proposed Waihee 265 Reservoir Site Improvements Project


Thank you for reviewing the Draft Environmental Assessment for the proposed reservoir site improvements project.

We provide the following response to your concerns:

1. We acknowledge that a Federal permit is not required for the proposed project.
2. The National Pollutant Discharge Elimination System effluent discharge permits will not be required for the proposed project. There will be no process wastewater discharged into State receiving waters. Construction activity will occur over a land area of less than five acres. The proposed project will involve site improvements and the installation of drainage structures that do not involve the discharge of hydrotesting water. In addition, the proposed project is not expected to encounter groundwater; therefore, no construction dewatering permit is anticipated.
3. We acknowledge that construction activities must comply with the provisions of Chapter 11-60.1, HAR, "Air Pollution Control," section 11-60.1-3 on Fugitive Dust.

If you have any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Glen Koyama, Belt Collins Hawaii

RECEIVED
OCT 11 A 8:17
1999
BELT COLLINS HAWAII

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



RECEIVED

TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
JANET E. KAWELO

STATE OF HAWAII

1999 AUG 31 P 1:24

BELT COLLINS HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

August 25, 1999

Mr. Glen Koyama
Belt Collins Hawaii
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

LOG NO: 23999 ✓
DOC NO: 9908EJ20

Dear Mr. Koyama:

**SUBJECT: Chapter 6E-8 Historic Preservation Review -- Draft Assessment (DEA) for Proposed Slope and Drainage Improvements to the Board of Water Supply Waihee 265 Reservoir
Ka'alaea and Waihe'e, Ko'olaupoko District, O'ahu
TMK: 4-7-047: 014**

Thank you for the opportunity to provide comment on the DEA for the proposed slope and drainage improvements to the Board of Water Supply Waihee 265 Reservoir. We commented during the pre-assessment consultation phase that a review of our records shows that there are no known historic sites at the project location. Our previous comments that we believe that this project will have "no effect" on significant historic sites is summarized in Section VI, Archaeological and Cultural Sites and are produced in their entirety in Appendix A.

If you have any questions please call Elaine Jourdane at 692-8027.

Aloha,

A handwritten signature in black ink, appearing to read "Don Hibbard".

Don Hibbard, Administrator
Historic Preservation Division

EJ:jk

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 28, 1999

JEREMY HARRIS, Mayor

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

COPY

Mr. Don Hibbard, Administrator
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
Kakuhihewa Building, Room 555
501 Kamokila Boulevard
Kapolei, Hawaii 96707


Dear Mr. Hibbard:

Subject: Your Letter of August 25, 1999 to Belt Collins Hawaii Regarding
the Draft Environmental Assessment for the Board of Water
Supply's Proposed Waihee 265 Reservoir Site Improvements Project

Thank you for your letter regarding the Draft Environmental Assessment for the proposed reservoir site improvements project.

We acknowledge that the proposed project will have 'no effect' on any significant historic sites at the project location.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Glenn Koyama, Belt Collins

PHONE (808) 594-1888

FAX (808) 594-1865



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

August 11, 1999

RECEIVED
1999 AUG 18 P 1:29
BELT COLLINS HAWAII

Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Blvd.
First Floor
Honolulu, Hawaii 96813-5406

EIS #331

Subject: Draft Environmental Assessment
Waihee 265 Reservoir Site Improvements
Koolaupoko, Oahu, Hawaii
TMKs 4-7-47: 13, 4-7-07: 5, and 4-7-33: 36

Dear Mr. Koyama,

Thank you for the opportunity to review the above-referenced draft.

At this time, the Office of Hawaiian Affairs has no comment on this project or the Draft Environmental Assessment.

If you have any questions, please contact Ken R. Salva Cruz, Policy Analyst at 594-1847.

Sincerely,

Handwritten signature of Colin Kippen.

Colin Kippen
Deputy Administrator

Handwritten signature of C. Sebastian Aloit.
C. Sebastian Aloit
Division Director

cc: Board of Trustees

BOARD OF WATER SUPPLY

STATE OF HAWAII
CITY AND COUNTY OF HONOLULU
10 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 28, 1999

JEREMY HARRIS, Member

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KACPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

COPY

Mr. C. Sebastian Aloit
Hawaiian Rights Division Director
Office of Hawaiian Affairs
State of Hawaii
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

Dear Mr. Aloit:

Subject: Your Letter of August 11, 1999 to Belt Collins Hawaii Regarding
the Draft Environmental Assessment for the Board of Water
Supply's Proposed Waihee 265 Reservoir Site Improvements Project

Thank you for your letter regarding the Draft Environmental Assessment (EA) for the
proposed reservoir site improvements project.

We acknowledge that you have no comments to offer on this project or the Draft EA.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Glenn Koyama, Belt Collins

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 527-6663 • FAX: (808) 527-6675

RECEIVED

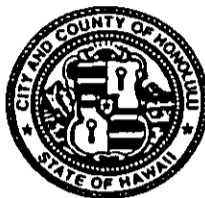
1999 AUG 19 P 1:18

BELT COLLINS HAWAII KENNETH E. SPRAGUE, P.E., Ph.D.
Director

BARRY FUKUNAGA
Deputy Director

ENV 99-94

JEREMY HARRIS
Mayor



AUG 18 1999

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Blvd.
Honolulu, HI 96813-5406

Dear Mr. Koyama:

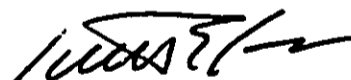
Subject: Draft Environmental Assessment (DEA)
Waihee 265 Reservoir Site Improvements
TMK: 4-7-47: 13, 4-7-07: 5, and 4-7-33: 36

We have reviewed the subject DEA and have the following comment:

Best management practices (BMPs) should be employed during construction to control and reduce discharge of pollutants.

Should you have any questions, please contact Mr. Alex Ho, Environmental Engineer, at 523-4150.

Sincerely,


KENNETH E. SPRAGUE
Director

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 28, 1999

JEREMY HARRIS, Mayor

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMI
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

COPY

TO: MR. KENNETH E. SPRAGUE, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL SERVICES

FROM: 
CLIFFORD S. JAMILE

SUBJECT: YOUR LETTER OF AUGUST 18, 1999 TO BELT
COLLINS HAWAII REGARDING THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE BOARD OF WATER SUPPLY'S
WAIHEE 265 RESERVOIR SITE IMPROVEMENTS, WAIHEE, OAHU

Thank you for your letter regarding the Draft Environmental Assessment for the proposed
Waihee 265 Reservoir site improvements project.

Best management practices will be employed during construction to control and reduce the
discharge of pollutants.

cc: Glenn Koyama, Belt Collins



RECEIVED
DEPARTMENT OF FACILITY MAINTENANCE
BELT COLLINS

AUG 9 9 04 AM '99
AUG 11 P 1:36
August 5, 1999
9741.0200/99P-298

Mr. Ross S. Sasamura
Director and Chief Engineer
Department of Facility Maintenance
650 South King Street
Honolulu, Hawaii 96813

Dear Mr. Sasamura:

**Draft Environmental Assessment
Waihee 265 Reservoir Site Improvements
Koolaupoko, Oahu, Hawaii
TMKs 4-7-47; 13, 4-7-07; 5, and 4-7-33: 36**

On behalf of the Honolulu Board of Water Supply (BWS), we respectfully request your review and comment on the enclosed Draft Environmental Assessment (DEA) for the proposed reservoir site improvements at Waihee, Oahu.

Last week, the DEA was submitted to the Office of Environmental Quality Control (OEQC) under Chapter 343, HRS, requirements. By that submittal, a notice of the DEA's availability will be published in the OEQC's August 8th Environmental Notice. Publication of the notice will initiate a 30-day public review period. Should you have any concerns or input on this project, we would appreciate receiving your comments in writing by September 8, 1999.

We thank you for your time and consideration. If there are any questions regarding the enclosed document, please do not hesitate to contact me at 521-5361.

Sincerely yours,

BELT COLLINS HAWAII LTD.

Glen T. Koyama

August 9, 1999

We do not have any comments. If you have any questions, please call Laverne Higa at 527-6246.

GTK:lf

cc: Clifford S. Jamile, BWS

Enclosure

**Ross S. Sasamura
Director and Chief Engineer
Department of Facility Maintenance**

BELT COLLINS HAWAII LTD. • 680 ALA MOANA BOULEVARD, FIRST FLOOR, HONOLULU, HAWAII 96813-5406 U.S.A.
TEL: 808 521-5361 FAX: 808 538-7819 EMAIL: hawaii@beltcollins.com WEB: www.beltcollins.com

PLANNING • ENGINEERING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL CONSULTING
HAWAII • SINGAPORE • HONG KONG • AUSTRALIA • THAILAND • MALAYSIA • PHILIPPINES • GUAM • SEATTLE • SCOTTSDALE
Belt Collins Hawaii is an Equal Opportunity Employer.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

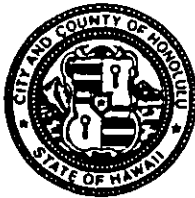
650 SOUTH KING STREET • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6743

RECEIVED

1999 SEP -7 A 10:05

BELT COLLINS HAWAII

JEREMY HARRIS
MAYOR



JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

September 3, 1999

1999/CLOG-5217 (DT)
99 EA Comments Zone 4

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

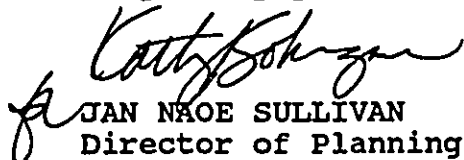
Draft Environmental Assessment (EA)
Proposed Slope and Drainage Improvements
Board of Water Supply (BWS) Reservoir
Tax Map Key: 4-7-47: 13 and 14; 4-7-7: 5; 4-7-33: 36

We have reviewed the proposal to stabilize the slope behind the BWS reservoir, which is currently experiencing erosion problems. We understand that the purpose of this project is to improve the existing surface drainage around the site.

The EA indicates the City plans to acquire a portion of three separate parcels in order to accommodate the expanded slope area. A consolidation or joint development approval will be required when these properties are acquired.

Should you have any questions regarding this letter, please call Ms. Dana Teramoto of our staff at 523-4648.

Very truly yours,


JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am

walhee.djt
posse document 7003

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
130 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



RECEIVED COPY


JEREMY HARRIS, Mayor
EDDIE FLORES, Jr., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON
KAZU HAYASHIDA, Ex-Officio
KOSU S. SASAMURA, Ex-Officio
CLIFFORD S. JAMILE
Manager and Chief Engineer

1999 OCT -1 P 2:00

BELT COLLINS HAWAII

September 28, 1999

TO: MS. JAN NAOE SULLIVAN, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: 
CLIFFORD S. JAMILE

SUBJECT: YOUR LETTER OF SEPTEMBER 3, 1999 TO BELT
COLLINS HAWAII REGARDING THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE BOARD OF WATER SUPPLY'S
WAIHEE 265 RESERVOIR SITE IMPROVEMENTS, WAIHEE, OAHU

Thank you for your letter regarding the Draft Environmental Assessment for the proposed Waihee 265 Reservoir site improvements project.

We acknowledge that a consolidation or joint development approval will be required for the additional land needed to accommodate the expanded slope area.

cc: Glenn Koyama, Belt Collins

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
PACIFIC PARK PLAZA • 711 KAPIOLANI BOULEVARD, SUITE 1200 • HONOLULU, HAWAII, 96813
TELEPHONE: (808) 523-4529 • FAX: (808) 523-4730

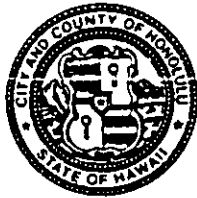
RECEIVED

1999 SEP -9 P 2: 06
BELT COLLINS HAWAII

CHERYL D. SOON
DIRECTOR

JOSEPH M. MAGALDI, JR.
DEPUTY DIRECTOR

JEREMY HARRIS
MAYOR



September 7, 1999

TPD8/99-03856R

MEMORANDUM

TO: CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

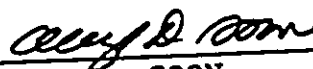
FROM: CHERYL D. SOON, DIRECTOR

SUBJECT: WAIHEE 265 RESERVOIR SITE IMPROVEMENTS

In response to the August 5, 1999 letter from Belt Collins Hawaii Ltd., the draft environmental assessment for the subject project was reviewed. The following comments are the result of this review:

1. On Page 26, it is stated that construction employees could park on Ahilama Road. If the City jurisdiction portion of Ahilama Road is to be used for parking, vehicles should not park on the unimproved sidewalk area intended for pedestrian use.
2. Area residents should be apprised of the project and its impacts prior to commencement of construction.

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at Local 6976.



CHERYL D. SOON

cc: Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
830 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 29, 1999

JEREMY HARRIS, Mayor

EDDIE FLORES, JR., Chairman

CHARLES A. STED, Vice Chairman

JAN M.L.Y. ANRI

HERBERT S.K. KAOPIA, SR.

BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio

ROSS S. SASAKURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

TO: MS. CHERYL D. SOON, DIRECTOR
DEPARTMENT OF TRANSPORTATION SERVICES

FROM: 
CLIFFORD S. JAMILE

SUBJECT: YOUR LETTER OF SEPTEMBER 7, 1999 REGARDING
THE DRAFT ENVIRONMENTAL ASSESSMENT FOR THE
BOARD OF WATER SUPPLY'S WAIHEE 265 RESERVOIR
SITE IMPROVEMENTS, WAIHEE, OAHU

Thank you for your letter regarding the Draft Environmental Assessment for the proposed Waihee 265 Reservoir site improvements project.

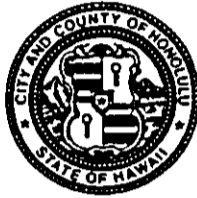
We provide the following response to your concerns:

1. Construction employees will be informed not to park on the unimproved sidewalk area of the City jurisdiction portion of Ahilama Road. Pedestrian areas will remain clear of vehicles.
2. Prior to construction, area residents will be informed of the project and its anticipated impacts.

If you have any questions, please contact Barry Usagawa at 527-5235.

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
3375 KOAPAKA STREET, SUITE H425
HONOLULU, HAWAII 96819-1869

JEREMY HARRIS
MAYOR



1999 SEP -2 P 1:23

BELT COLLINS HAWAII

ATTILIO K. LEONARDI
FIRE CHIEF

JOHN CLARK
DEPUTY FIRE CHIEF

August 30, 1999

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Boulevard
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Draft Environmental Assessment
Waihee 265 Reservoir Site Improvements
Koolaupoko, Oahu, Hawaii
TMKs: 4-7-047: 013, 4-7-007: 005, and 4-7-33: 036
HFD Internal No. OL 99-173

We received your letter dated August 5, 1999, regarding the Draft Environmental Assessment for the subject project. We have no objection to this project and do not foresee a significant impact with the fire services that we provide.

Should you have any questions, please call Acting Battalion Chief Alan Chong of our Fire Prevention Bureau at 831-7778.

Sincerely,

A handwritten signature in cursive script, appearing to read "Attilio K. Leonardi".

ATTILIO K. LEONARDI
Fire Chief

AKL/AC:bh

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
330 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 28, 1999

JEREMY HARRIS, Mayor

EDDIE FLORES, JR., Chairman
CHARLES A. STEED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

COPY

TO: MR. ATTILIO K. LEONARDI, FIRE CHIEF
FIRE DEPARTMENT

FROM: 
CLIFFORD S. JAMILE

SUBJECT: YOUR LETTER OF AUGUST 30, 1999 TO BELT
COLLINS HAWAII REGARDING THE DRAFT ENVIRONMENTAL
ASSESSMENT FOR THE BOARD OF WATER SUPPLY'S
WAIHEE 265 RESERVOIR SITE IMPROVEMENTS, WAIHEE, OAHU

Thank you for your letter regarding the Draft Environmental Assessment for the proposed
Waihee 265 Reservoir site improvements project.

We acknowledge that you have no objections to the proposed project and do not foresee a
significant impact to the fire services that you provide.

/cc: Glenn Koyama, Belt Collins

Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001

RECEIVED

1999 AUG 18 P 1:39

BELT COLLINS HAWAII



Scott W.H. Seu, P.E.
Manager
Environmental Department

August 16, 1999

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, HI 96813-5406

Dear Mr. Koyama:

Subject: Waihee 265 Reservoir Site Improvements

Thank you for the opportunity to comment on your June 1999 DEA for the Waihee 265 Reservoir Site Improvements, as proposed by Board of Water Supply, City and County of Honolulu. We have reviewed the subject document and have no comments at this time.

HECO shall reserve further comments pertaining to the protection of existing powerlines bordering the project area until construction plans are finalized. Again, thank you for the opportunity to comment on this DEA.

Sincerely,

WINNER OF THE EDISON AWARD
FOR DISTINGUISHED INDUSTRY LEADERSHIP



BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
530 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843



September 28, 1999

JEREMY HARRIS, Mayor

COPY

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice Chairman
JAN M.L.Y. AMII
HERBERT S.K. KAOPUA, SR.
BARBARA KIM STANTON

KAZU HAYASHIDA, Ex-Officio
ROSS S. SASAMURA, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

Mr. Scott W.H. Seu, P.E.
Manager, Hawaiian Department
Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840-0001

Dear Mr. Seu:

Subject: Your Letter of August 16, 1999 to Belt Collins Hawaii Regarding
the Draft Environmental Assessment for the Board of Water
Supply's Proposed Waihee 265 Reservoir Site Improvements Project

Thank you for your letter regarding the Draft Environmental Assessment for the proposed
reservoir site improvements project.

We acknowledge that you have no comments to offer at this time.

Very truly yours,


CLIFFORD S. JAMILE
Manager and Chief Engineer

cc: Glenn Koyama, Belt Collins

XV. REFERENCES

- o City and County of Honolulu (1992). The General Plan, Objectives and Policies.
- o ____ (1995). Development Plan - Land Use Map (Koolaupoko).
- o ____ (1999). The Land Use Ordinance, Ordinance 99-12.
- o _____. Tax Maps Office of the Property Assessment Branch, Finance Department.
- o _____, DLU (1987). Coastal View Study.
- o Belt Collins Hawaii (January 1998). Conceptual Engineering Report, Erosion Controls and Drainage Improvements for Waihee 265 Reservoir, Koolaupoko, Oahu, Hawaii.
- o Federal Emergency Management Agency (FEMA). Federal Flood Insurance Rate Maps (FIRM), City and County of Honolulu, Hawaii.
- o PSC Associates Inc. (November 18, 1998) Geotechnical Exploration Report, Waihee 265 Reservoir Slope, Kahaluu, Oahu, Hawaii.
- o State of Hawaii, Department of Land and Natural Resources (1986). Rainfall Atlas of Hawaii.
- o _____. State Plan and Functional Plans.
- o U.S Geological Survey. Topographic Map, 7.5 Minute Quadrangle.
- o U.S. Department of Agriculture Soil Conservation Service (1972). Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.
- o University of Hawaii. Correspondence with Botany Department staff.

APPENDIX A

**Letters Received During
Early Consultation Period**



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U. S. ARMY ENGINEER DISTRICT, HONOLULU
FORT SHAFTER, HAWAII 96858-5440

March 8, 1999

RECEIVED

1999 MAR -9 A 11:09

Operations Branch

Belt Collins, Hawaii
680 Ala Moana Boulevard, 1st Floor
Honolulu, Hawaii, 96813-5406

ATTENTION: Mr. Glen Koyama

Dear Gentlemen:

On February 24, 1999, Mr. Brian Chung of my staff received a telephone call from Mr. Glen Koyama of your office, requesting a determination on whether a Department of the Army (DA) permit would be required for your proposed drainage outlet project, Waihee 265 Reservoir Drainage Improvements.

After receiving information requested by Mr. Chung, Mr. Farley Watanabe, also of my staff and Mr. Chung conducted a site visit on March 4, 1999, to the approximate location (as best could be determined by your faxed layout drawing) of where the proposed drainage outlet would be constructed. After following the flow of water and discussion with the property owner located at 47-440 Mahakea Road, it was determined that the proposed outlet location would occur within the upper portion of the bank of this drainage ditch. The high water mark could not be determined. The water flows intermittently from a manmade pond that is fed by spring waters and rainfall, that ultimately ends up within the wetlands (freshwater marsh) fronting Kamehameha Highway between Waihee Road and Wailehua Road.

Based on these findings and a cursory review of various data (ie. Wetlands map, Soil Survey of Oahu, GIS quad map, and Headwaters of Oahu map), it has been determined that no Department of the Army (DA) permit would be required for this proposed drainage outlet structure. During project construction, Best Management Practices should be followed with the removal and/or placement of soils. The soils should not be placed within the lower portion of the bank of the drainage ditch, nor should it placed within the drainage ditch. It should also be noted that this letter does not in anyway obviate your responsibilities to acquire other permits and/or certifications that would be required by other government agencies. Furthermore, should you deviate from the proposed layout plan that was furnished this office, we should be consulted to determine whether a DA permit may be required.

Please feel free to contact Mr. Brian Chung of my staff at 438-9258, extension 12, if you have any questions.

Sincerely,



George P. Young, P.E.
Chief, Operations Branch

Copies furnished:

- Hawaii State Department of Health, Environmental Management
Division, Clean Water Branch, P.O. Box 3378, Honolulu, HI
96801-3378
- Hawaii State Department of Land and Natural Resources, Commission
on Water Resource Management, P.O. Box 621, Honolulu, Hawaii
96809
- Hawaii State Department of Land and Natural Resources,
Land Division, P.O. Box 621, Honolulu, Hawaii 96809



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

P.O. Box 50004
Honolulu, HI
96850

Our People...Our Islands...In Harmony

December 2, 1998

RECEIVED

1998 DEC -4 A 11: 27
BELL COLLINS HAWAII

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

Dear Mr. Koyama:

Subject: Environmental Assessment (EA) - Proposed Slope and Drainage
Improvements, Board of Water Supply Reservoir, Waihee, Oahu, Hawaii

We have reviewed the above mentioned document and have no comments to offer at
this time.

Thank you for the opportunity to review this document.

Sincerely,



KENNETH M. KANESHIRO
State Conservationist

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



RECEIVED

MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT COLCIMA ACATAJ

1993 OCT 16 P 2:01

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

September 22, 1998

Mr. Glen Koyama
Belt Collins Hawaii
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

LOG NO:22260 ✓
DOC NO:9809SC19

Dear Mr. Koyama:

**SUBJECT: Chapter 6E-8 Historic Preservation Review of Proposed Improvements to
Waihee 265 Reservoir
Ka'alaea and Waihe'e, Ko'olaupoko District, O'ahu
TMK: 4-7-047: 014**

Thank you for the opportunity to comment on proposed improvements to Waihee 265 Reservoir near Kane'ohe, O'ahu. According to your preliminary report, current erosion problems at Waihee Reservoir could be solved by cutting the slope behind the existing facility, and installing a geobinder and erosion control blanket in this area. In addition, to prevent further drainage problems at the reservoir site, it is proposed to install a CRM or concrete apron and a new drainage line within the existing drainage way. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the subject parcel.

The subject parcel has been extensively modified for construction of the reservoir and related facilities, so it is highly unlikely that significant historic sites are present on the subject parcel. In addition, the slopes to be graded are very steep, and are unlikely to contain significant historic sites. In view of these facts, then, we believe that the proposed improvements to the Waihee 265 Reservoir will have "no effect" on significant historic sites.

Should you have any questions, please feel free to call Sara Collins at 587-0013.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

SC:je

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES
GILBERT COLOMA-AGARAN
TIMOTHY E. JOHNS

STATE OF HAWAII 1998 DEC 18 A 11:32

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhikewe Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES
ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

December 8, 1998

Mr. Glen Koyama
Belt Collins Hawaii
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

LOG NO: 22606 ✓
DOC NO: 9812EJ01

Dear Mr. Koyama:

**SUBJECT: Chapter 6E-8 Historic Preservation Review -- Pre-Environmental Assessment Consultation for Proposed Slope and Drainage Improvements to the Board of Water Supply Waihee 265 Reservoir
Ka'alaea and Waihe'e, Ko'olaupoko District, O'ahu
TMK: 4-7-047: 014**

Thank you for the opportunity to provide comment for the EA on the proposed improvements to the Waihee 265 Reservoir near Kane'ohe, O'ahu. We commented earlier to your office regarding the proposed improvements (Log 22260, September 22, 1998).

Our comments remain the same for the improvements outlined in this pre-EA consultation. According to your information, current erosion problems at Waihee Reservoir could be solved by cutting the slope and the planting of groundcover behind the existing facility. In addition, to prevent further drainage problems at the reservoir site, it is proposed that the existing drainage swale will be regraded and grassed and a new underground drainage lined be installed following an existing swale into a larger drainage approximately 340 feet from the reservoir site. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the subject parcel.

The subject parcel has been extensively modified for construction of the reservoir and related facilities, so it is highly unlikely that significant historic sites are present on the subject parcel. In addition, the slopes to be graded are very steep, and are unlikely to contain significant historic sites. In view of these facts, then, we believe that the proposed improvements to the Waihee 265 Reservoir will have "no effect" on significant historic sites.

If you have any questions please call Sara Collins at 692-8026 or Elaine Jourdane at 692-8027.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

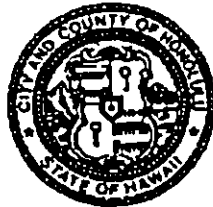
EJ:jk

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU

850 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4341 • Fax: (808) 527-5857

RECEIVED
1998 NOV -5 A 11:05
BELT COLLINS HAWAII

JEREMY HARRIS
MAYOR



JONATHAN K. SHIMADA, PhD
DIRECTOR AND CHIEF ENGINEER

ISIDRO M. BAQUILAR
DEPUTY DIRECTOR

IN REPLY REFER TO:
PRO 98-218

November 4, 1998

Mr. Glen T. Koyama
Belt Collins Hawaii Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

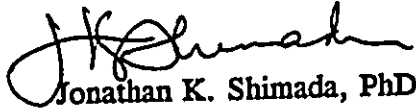
Dear Mr. Koyama:

Subject: Environmental Assessment - Board of Water Supply Reservoir, Waihee

Thank you for giving us the opportunity to review the Environmental Assessment, however we do not have any comments.

If you have any questions, please call Laverne Higa at 527-6246.

Very truly yours,


Jonathan K. Shimada, PhD
Director and Chief Engineer

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET • HONOLULU, HAWAII 96813
PHONE: (808) 523-4414 • FAX: (808) 527-6743

NOV 18 P 1:50

CITY AND COUNTY OF HAWAII

JEREMY HARRIS
MAYOR



JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

1998/CLOG-54 (DT)
'98 EA Comments Zone 4

November 17, 1998

Mr. Glen T. Koyama
Belt Collins Hawaii, Ltd.
680 Ala Moana Boulevard, First Floor
Honolulu, Hawaii 96813-5406

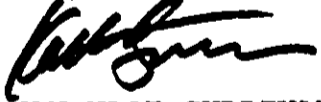
Dear Mr. Koyama:

Preliminary Review
Proposed Slope and Drainage Improvements
Board of Water Supply (BWS) Reservoir
Tax Map Key: 4-7-47: 13

We have no comments at this time to the BWS's proposal to stabilize the slope behind the reservoir, which is currently experiencing erosion problems. We understand that the purpose of this project is to improve the existing surface drainage around the site. We would, however, like to review the Draft Environmental Assessment (EA) when it becomes available. Please provide two copies of the EA to our department.

Should you have any questions regarding this letter, please call Ms. Dana Teramoto of our staff at 523-4648.

Very truly yours,


JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am

[posse document 183]

Mr. and Mrs. Takanishi
47-439 Mahakea Road
Kaneohe, Hawaii 96744

Belt Collins Hawaii, LTD
680 Ala Moana Boulevard
First Floor
Honolulu, HI 96813-5406

RECEIVED

1993 NOV 16 P 1:32

BELT COLLINS HAWAII

Dear ~~Mr. Koyama~~

I wish to be consulted on any matters that will impact our home, TMK: 4-7-47: 14.

From the diagram entitled Alternative #2 Drainage Improvements, 9741.0200/001-14 1.9.98, I see that the drain pipe will border our proper and end at "outlet #6". My primary concern would be that outlet 6 is low enough so that water will remain in the stream, and not overflow on to our yard.

The owners of the property upstream from us had graded their property causing the muddy runoff to fill up the stream bed which was previously about 5' deeper.

Regards,
Glenn Takanishi

Glenn Takanishi

APPENDIX B

Owners and Neighbors of Mahakea Road (TMK 4-7-47: 34)

Owners and Neighbors of Mahakea Road (TMK 4-7-47: 34)

<u>TMK</u>	<u>Property Owner</u>	<u>Address</u>
4-7-47: 1	Elsie S. Hataye	45-718 Puohala St. Kaneohe, HI 96744
2	Jerry & Sumiko Dilsaver	47-338 Mahakea Rd. Kaneohe, HI 96744
3	Masako Miyashiro	c/o Richard Miyashiro 47-346 Mahakea Rd. Kaneohe, HI 96744
4	Johanna Lindsey	47-355 Mapumapu Rd. Kaneohe, HI 96744-4922
5	John S. Ige	47-358 Mahakea Rd. Kaneohe, HI 96744
6	Robert D. Cushnie	162 Kailuana Loop Kailua, HI 96734
7	Gary & Rozella Fujihara	47-372 Mahakea Rd. Kaneohe, HI 96744
8	Joel & Ellen Miranda	47-376 Mahakea Rd. Kaneohe, HI 96744
9	Tanya Tagami	2499 Kapiolani Blvd., #503 Honolulu, HI 96826
10	Tamayo Kotomori	1018 Hoawa Lane Honolulu, HI 96826
11	Mariano S. Quinata	47-422 Mahakea Road Kaneohe, HI 96744
12	Kevin & Felomina Emery	47-434 Mahakea Rd. Kaneohe, HI 96744
14	Glenn & Jadine Takanishi	47-439 Mahakea Rd. Kaneohe, HI 96744

- 15 Thomas & Kathryn Serikaku 47-433 Mahakea Rd.
Kaneohe, HI 96744
- 16 Kenneth & Josephine Chang 47-425 Mahakea Rd.
Kaneohe, HI 96744
- 17 Laurence & Judy Ledoux 47-421 Mahakea Rd.
Kaneohe, HI 96744
- 18 Dexter & Vernadetta Dickson 47-415 Mahakea Rd.
Kaneohe, HI 96744
- 19 Edward & Joan Karimoto 47-411 Mahakea Rd.
Kaneohe, HI 96744
- 20 Sakai & Satsuko Higuchi 47-405 Mahakea Rd.
Kaneohe, HI 96744
- 21 Herman & Harriet Kam 47-379 Mahakea Rd.
Kaneohe, HI 96744
- 22 Bernadette T. Burke 573 Papalani St.
Kailua, HI 96734
- 23 George & Edith Horimoto 47-365 Mahakea Rd.
Kaneohe, HI 96744
- 24 Solomon G. Kaonohi P.O. Box 4991
Kaneohe, HI 96744
- 25 Takao Fujii 47-351 Mahakea Rd.
Kaneohe, HI 96744
- 26 James & Susan Montgomery 47-345 Mahakea Rd.
Kaneohe, HI 96744
- 27 Michael S. Sinclair 47-337 Mahakea Rd.
Kaneohe, HI 96744
- 28 William & Ann Ketell 47-329 Mahakea Rd.
Kaneohe, HI 96744
- 29 Richard & Vivian Tom 1561 Hoaaina St.
Honolulu, HI 96821

30	Kaneohe Ventures Ltd	Mahakea Rd. Kaneohe, HI 96744
31	Stanley Kobashigawa	c/o R. Silvestre 98-1401 Kamahao Street, #174 Pearl City, HI 96782
4-7-33: 17	Glenn I. Yogi	45-1048 Kamehameha Hwy Kaneohe, HI 96744