DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII
25 AUPUNI STREET • HILO, HAWAII 96720
TELEPHONE (808) 961-8660 • FAX (808) 961-8657

April 26, 1999

Mr. Gary Gill, Director
State of Hawaii
Office of Environmental Quality Control
State Office Tower
235 South Beretania Street, Room 702
Honolulu, HI 96813

FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR
KEAAU-PAHOA 12-INCH WATERLINE INSTALLATION
KEAAU, DISTRICT OF PUNA, HAWAII

The Department of Water Supply, County of Hawaii, has reviewed the comments received during the 30-day public comment period which began on March 23, 1999. The agency has determined that this project will not have significant environmental effects and has issued a FONSI. Please publish this notice in the May 8, 1999 OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form and four copies of the Final Environmental Assessment. Please call Mr. Bruce McClure of our staff at (808) 961-8660 if you have any questions.

Milton D. Pavao, P.E.
Manager

BCM:gms

Enc.

copy - BK, Inc.

1999-05-08-HA-FEA-

MAY 8 1999

FILE COPY

FINAL ENVIRONMENTAL ASSESSMENT

KEAAU-PAHOA 12-INCH WATERLINE INSTALLATION

Keaau, District of Puna, Hawaii

Prepared for:
Department of Water Supply
County of Hawaii

Prepared by:

BK Inc.
and
Gerald Park Urban Planner

FINAL ENVIRONMENTAL ASSESSMENT

KEAAU-PAHOA 12-INCH WATERLINE INSTALLATION

Keaau, District of Puna, Hawaii

Prepared in Partial Fulfillment of the Requirements
of Chapter 343, Hawaii Revised Statutes, Title 11,
and Chapter 200, Hawaii Administrative Rules,
Department of Health, State of Hawaii

Prepared for:
Department of Water Supply
County of Hawaii
25 Aupuni Street
Hilo, Hawaii 96720

Prepared by:
BK Inc.
675 Kinoole Street
Hilo, Hawaii 96720

and

Gerald Park Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814

April, 1999

SUMMARY INFORMATION

Project:	Keaau-Pahoa 12-Inch Waterline Installation Keaau High School to Keaau Transfer Station
Proposing Agency:	Department of Water Supply County of Hawaii 25 Aupuni Street Hilo, Hawaii 96720
Accepting Authority:	Department of Water Supply for Mayor, County of Hawaii
Tax Map Key:	Highway Right-of-Way
Land Area:	Not Determined
Land Owner:	State of Hawaii (Highway Right-of-Way)
Existing Use:	State Highway 130 Keaau Pahoa Road
State Land Use Designation:	Agricultural
General Plan:	Orchard
Zoning:	Ag-1, Ag-20
Special Management Area:	Outside Special Management Area
Need for Assessment:	Use of County Funds Use of State Land
Contact Person:	Bruce McClure Department of Water Supply County of Hawaii 25 Aupuni Street Hilo, Hawaii 96720 Telephone: 961-8660

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SECTION 1 DESCRIPTION OF THE PROPOSED PROJECT

The Department of Water Supply, County of Hawaii, proposes to construct improvements to a section of the Olaa-Mt. View Water System located to the southeast of the town of Keaau, Puna District, Island, County, and State of Hawaii. The project is located within the right-of-way of Keaau-Pahoa Road (State Highway 130) beginning near and extending south of its intersection with the Keaau-Pahoa Bypass Road now under construction. A Location Map is shown in Exhibit 1.

A. Purpose of the Project

The purpose of the project is to eliminate a "bottleneck" in a section of the Olaa-Mt. View Water System between the towns of Keeau and Pahoa. The bottleneck is created by a one-half mile section of 8-inch waterline that is smaller in diameter than the 12-inch lines connected to it on both ends. The smaller diameter waterline restricts flow in this section of the water system and the Department of Water Supply has determined that it should be replaced with a 12-inch line.

B. Technical Characteristics

Approximately 0.5 mile of 12-inch ductile iron pipe will be installed along the mauka edge of Keaau-Pahoa Road (See Photographs 1 and 2). The waterline will connect an existing 12-inch line at the northwest end of the project area with a 12-inch line adjacent to the Keeau Transfer Station Road to the southeast end of the project area (See Photograph 3). Most of the waterline will be installed along the edge of highway pavement except where the pavement narrows then installation will occur within the highway shoulder.

The waterline will cross under Keaau-Pahoa Road opposite the Keaau Refuse Transfer Station Road. Here, 8-inch piping and valves will be removed and replaced with 12-inch valves, fittings, and piping. On the Pahoa side of the connection, all pipes and valves will be 12-inches. On the Keaau side of the connection the 12-inch line will be reduced to tie into an existing 8-inch service line serving agricultural and residential uses along the highway. A Project Plan is shown in Exhibit 2.

The waterline will be routed under all existing driveways, intersections, water service connections, drainage culverts, an existing 8-inch waterline, and fire hydrants along the highway. The contractor will notify affected lot owners at least two days in advance of impending construction and will maintain vehicle access at all times. When construction ceases for the day, all trenches will be covered with steel plates. Following construction, work areas will be restored to pre-construction conditions or better.

A cut and cover method will be used to install the waterline. A trench a minimum of 2-feet wide and 4-feet deep would be excavated. The pipe will be joined in the trench and supported on a cushion of backfill material to prevent movement off-line or off-grade and covered with sub-base and base course material. The road section or shoulder will then be paved with asphalt concrete or covered with earth if construction is off the pavement.

Sections of the pipeline will be pressure tested approximately every 1,000 lineal feet. Hydrotesting water will be discharged into swales alongside the road where it will percolate into the ground. Following installation, the entire line will be disinfected with a chlorine solution which will also be

discharged into swales alongside the road and allowed to percolate into the ground. Testing and disinfection will adhere to Department of Water Supply standards.

C. Economic Characteristics

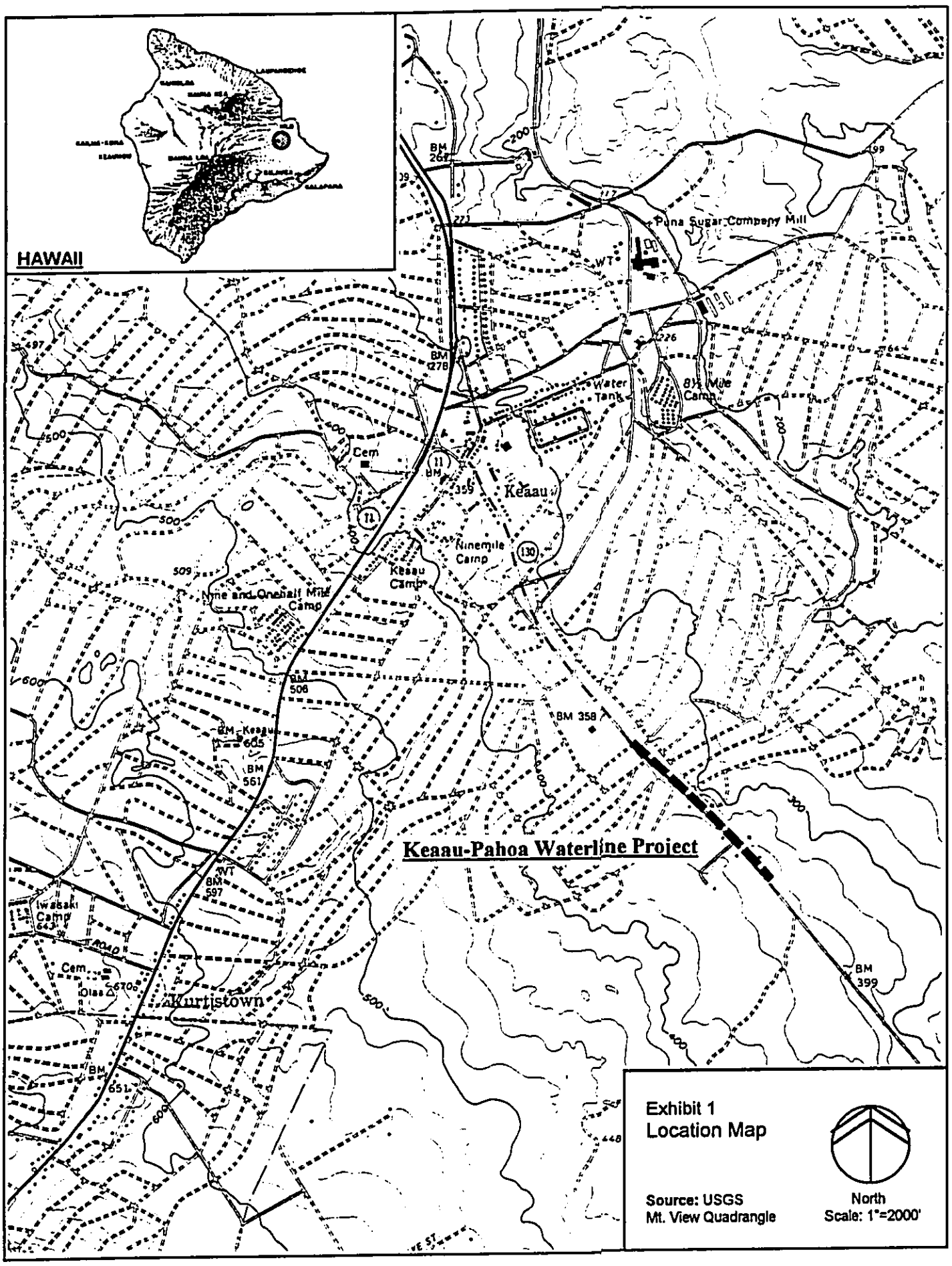
The cost of the project is estimated at $ .5 million and will be funded through the County of Hawaii Capital Improvements Program. Construction is projected to commence in late 1999 and should be completed within one year.

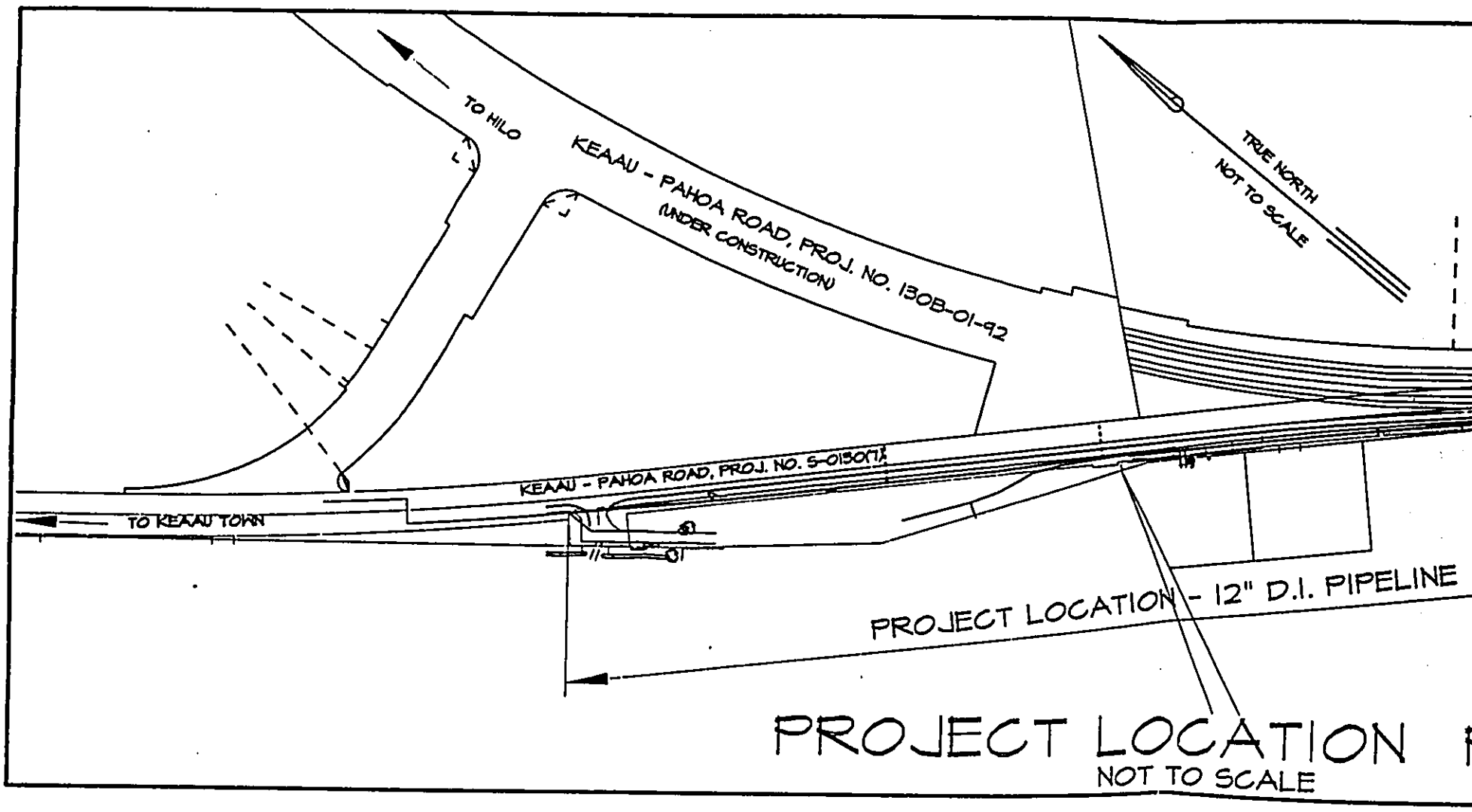
D. Land Tenure

The Keaau-Pahoa Road right-of-way is owned by the State of Hawaii. The waterline will be installed entirely within the highway right-of-way and will not enter upon private property fronting the highway.

E. Social Characteristics

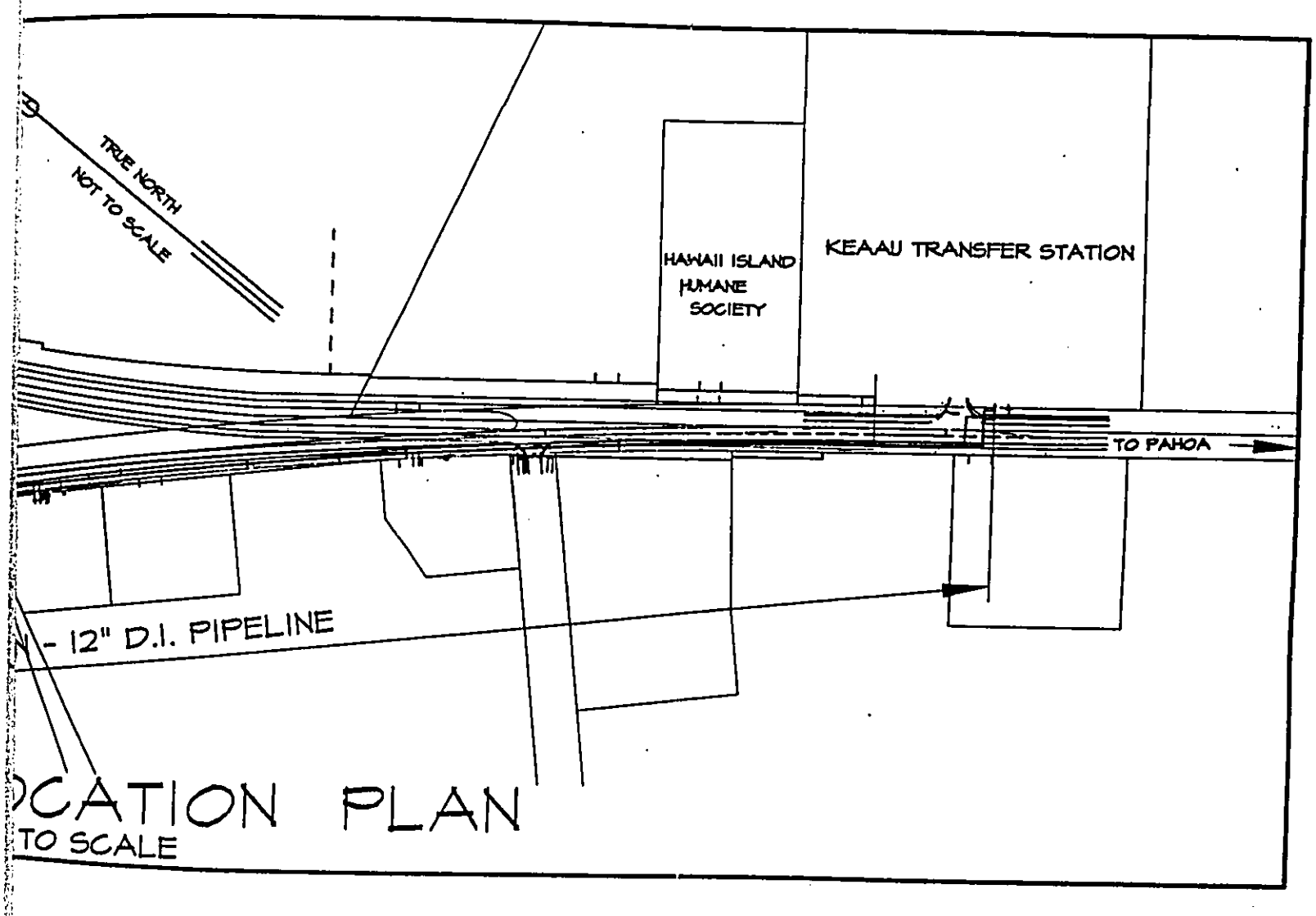
No residents or business will be displaced by the proposed project.


HAWAII
Puna Sugar Company Mill
WT
BM 278
Water Tank
8½ Mile Camp
Cem
BM 359
Keaau
Ninemile Camp
Keaau Camp
Nine and One-half Mile Camp
BM 506
BM Keaau 605
BM 561
BM 358
Keaau-Pahoa Waterline Project
WT
BM 597
Iwasaki Camp 643
Cem
Olaa
Kurtistown
BM 651
BM 399
Exhibit 1
Location Map
Source: USGS
Mt. View Quadrangle
North
Scale: 1"=2000'



PROJECT LOCATION

NOT TO SCALE



OCATION PLAN

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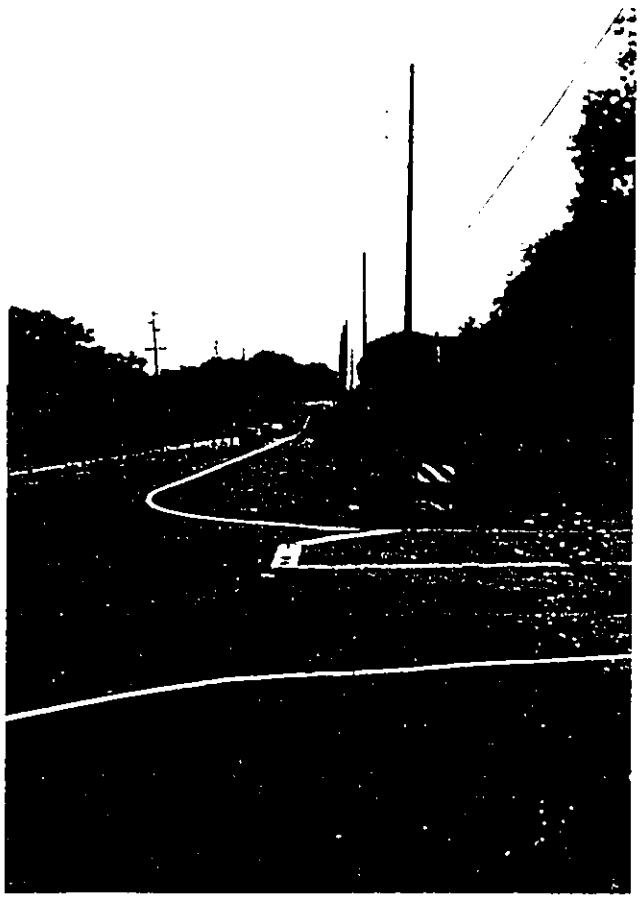

Photograph 1. North End of Project Area Looking South. Water Line To Be Installed Along Right Edge of Pavement.

Photograph 2. South End of Project Area Looking North. Water Line To Be Installed Within Road Shoulder.

Photograph 3. North Facing View of Keaau-Pahoa Road From Vicinity of Keaau Transfer Station Access Road.

SECTION 2 DESCRIPTION OF THE AFFECTED ENVIRONMENT

A. Existing Conditions

About two-thirds of the proposed waterline lies within the section of Highway 130 that has been cut off by the new Keauu-Pahoa Bypass Road now under construction. Agriculture appears to be the primary use of the surrounding lands. Limited residential development is visible mauka of the highway and three residences actually front on Highway 130 in the project area. Public facilities and services in the area include the Girl Scouts of America Service Center, Nawahiokalani 'Opu'u School, formerly the Henry Opukahaia School, the Hawaii Island Humane Society, and the Keaau Refuse Transfer Station.

B. Climate

Rainfall in the project area averages about 140 inches per year which is more than the annual rainfall recorded for Hilo (University of Hawaii, 1983). Monthly rainfall ranges between 10 to 20 inches with the most rainfall occurring between December and February. Temperature is relatively cool with monthly lows averaging 60° F and, on occasion the 50's, to highs in the low 80's. Relative humidity (recorded at Hilo) is typically between 60 to 90 percent.

C. Topography

The waterline alignment follows the grade of Keaau-Pahoa Road. Ground elevation at the western end of the project area is 344 feet above mean sea level and elevation at the eastern end is also about 344 feet. About midway between both ends elevation dips to a low of about 328 feet (for about 500 lineal feet) and gradually rises to the elevations noted at both ends.

D. Soils

Two soil types are found along this section of Highway 130---Olaa silty clay loam and pahoehoe lava flows. The Soil Conservation Service describes the Olaa soil as a well-drained silty clay loam formed in volcanic ash. The surface layer is non-stony, permeability is rapid, runoff is slow, and the erosion hazard is slight. This soil is found at the Keaau end of the waterline alignment and at one time was cultivated in sugar cane. Former sugar cane fields and dirt roads are clearly visible on soil maps of the area.

Pahoehoe is mapped as a miscellaneous land type. This lava has a billowy glassy surface that is relatively smooth. Pahoehoe lava has no soil covering.

E. Drainage

There are no major drainage ways or drainage structures along this section of Highway 130. Runoff gravity flows along the edge of pavement into two low spots along the mauka side of the road. From the low spots, runoff is passed under the road through 30 -inch and 24-inch culverts. The inlet ends of the culverts are open pipes with stone headwall facings. One inlet is clogged with vegetation and the second kept clear by stones.

F. Natural Hazards

The Flood Insurance Rate Map panel for the Keeau area has not been printed. The panel number for Keaau is preceded with the notation "Panel not printed-area all in Zone X". Zone "X" is defined as "areas determined to be outside the 500 year flood plain (FEMA, 1994)".

According to the 1994 Uniform Building Code, the Island of Hawaii is placed in Seismic Zone 3. Zone '0' designates areas with the least seismic activity while Zone 4 designates areas with the greatest seismic activity.

Lava Flow Hazard Maps (USGS, No Date) divide the Island of Hawaii into "zones that are ranked from 1 (highest) to 9 (lowest) based on the probability of coverage by lava flows". The District of Puna is placed in Zones 1, 2 and 3 in which the probability of lava hazards are high. Most of the Puna District is susceptible to lava hazards from Kilauea, Hawaii's youngest and, in modern times, most active volcano. Keaau is placed in Zone 3 and subject to lava hazard from Mauna Loa rather than Kilauea.

G. Surface Water

There are no freshwater streams, ponds, or lakes on or near the project area despite the high rainfall.

H. Hydrology

Groundwater in the project area is primarily basal water. Water is drawn from the Keaau Aquifer System (Aquifer Code 80402) which consists primarily of fresh basal water overlying saline groundwater. The Keaau Aquifer is thought to be capable of producing 393 million gallons of sustainable yield. Current groundwater withdrawal in the Puna District is approximately 2.3 million gallons per day (GK & Associates, 1995).

I. Historical Features

There are no archaeological or cultural features within the right-of-way of Keaau-Pahoa Road (State Highway 130).

J. Flora and Fauna

Vegetation found in the project area are common ornamentals or plants found throughout the State of Hawaii. Both cultivated and non-cultivated vegetation were observed along the half-mile alignment. Vegetation include trees and palms such as guava, plumeria, strawberry guava, banyan, coconut, areca palm and coco bean. Shrubs and grasses such as California grass, wandering jew, sugar cane, lantana, ginger, and wayside weeds were observed.

A faunal survey was not conducted. Dogs, cats, and rodents are probably the most common animals present given residential and agricultural uses in the project area. The Hawaii Island Humane Society is located on the Keaau side of the Keaau Refuse Transfer Station Road but no animals were observed on the premises.

K. Land Use Controls

State and County land use controls governing the use of the property adjacent to the pump station and the waterline are:

State Land Use Designation: Agricultural
County of Hawaii General Plan: Orchard
Zoning: Ag-1 and Ag-20
Special Management Area: Outside Special Management Area

State Department of Agriculture Agricultural Lands of Importance to the State of Hawaii (ALISH) map classifies some of the agricultural lands in the area as Prime Agricultural Lands.

L. Public Facilities

Keaau-Pahoa Road, an all weather surface road, lies within an 80-foot right-of-way. One of the two-lanes of the highway accommodates outbound traffic to Pahoa; the second lane is coned and closed to traffic. Inbound traffic to Keaau uses one lane of the new Keaau-Pahoa Bypass Road. The posted speed limit on both roads ranges between 35 to 45 mph in the project area.

An existing 8-inch waterline along the mauka edge of the highway supplies domestic water and fire flow for agricultural activities, residential properties, public facilities, and institutional uses in this section of Keaau.

There are no municipal sewer or drainage systems in the project area.

Keaau-Pahoa Road is also a utility corridor for overhead telephone and electrical systems. Telephone and electrical power poles are located on both sides of the road and within the highway right-of way.

SECTION 3 SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

A. Assessment Process

The scope of the project was discussed with the consulting engineer and staff of the Department of Water Supply. State and County agencies were contacted for information relative to their areas of jurisdiction and expertise. Time was spent noting conditions along the proposed alignment. The sum total of consultations and field investigations helped to identify existing conditions and features which could affect or be affected by the project. These include:

- No change in the use of land is proposed;
- The waterline will be constructed within an improved highway right-of-way;
- No rare, threatened, or endangered flora or fauna were observed;
- There are no recorded archaeological or cultural resources in the right-of-way; and
- The improvements are not proposed in a flood hazard area.

B. Short-term Impacts

Construction will be accomplished using cut and cover methods or variations thereof as determined by field conditions. In its simplest application, a trench will be dug to a specific width (a minimum of 2 feet) and depth (a minimum of 4 feet), surface and subsurface materials removed, pipe sections laid and joined in the trench, and fill placed along or under the pipe to prevent movement off-line or off-grade. The pipe would then be tested for leaks every 1,000 lineal feet, the trench back filled, compacted, and the ground surface restored to pre-construction conditions or better. Trenching work will be limited to 150-200 LF in advance of pipelaying. For the most part, construction will be confined to along the edge of pavement of Keaau-Pahoa Road except where the pavement narrows then the waterline will be installed within the highway shoulder.

Construction work is a persistent source of fugitive dust. Site contractors are aware that dust is a nuisance to both workers and people living or working near to work sites and it is imperative for them to maintain stringent dust controls. Frequent water sprinkling is probably the most effective dust control measure given the scale of proposed improvements and the limited work area. The Contractor, however, may choose to implement other measures based on their experience with similar projects and job sites. Being located in an area of heavy rainfall, frequent showers also may help in controlling fugitive dust.

The Contractor will be responsible for general housekeeping of the site and for keeping adjacent areas free of mud, sediment, and construction litter and debris. Pollution control measures will comply with Chapter 60.1, Air Pollution Control regulations of the State Department of Health.

Like fugitive dust, construction noise cannot be avoided. Several residences and agricultural activities have street frontage on Keaau-Pahoa Road. Construction noise will be audible in these areas but exposure to noise will vary by construction phase, the duration of each phase, and the type of equipment used during the different phases.

Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source would be generated by heavy machinery and pneumatic impact equipment. Noise is expected to be most pronounced and therefore most annoying during the excavation phase of the project because of the underlying strata. Reductions in sound levels, frequency, and duration can be expected during actual waterline installation and post-construction phases.

Construction noise may annoy residents living along the highway but they already are exposed to noise throughout the day emanating from large trucks, buses, and automobile traffic on Keaau-Pahoa Road. For residences along the highway, there is no real quiet and sounds of nature associated with agricultural land.

Community Noise Control regulations establish maximum permissible sound levels for construction activities occurring within "acoustical" zoning districts. Based on residential and agricultural uses in the area, the project is considered to be located in the Class A zoning district for noise control purposes. The maximum permissible daytime sound level in the district is 55 dBA between the hours of 7:00 AM to 10:00 PM and 45 dBA between 10:00 PM and 7:00 AM (Chapter 46, Community Noise Control, 1996).

In general, construction activities cannot exceed the permissible noise levels for more than ten percent of the time within any twenty minute period except by permit or variance. Any noise source that emits noise levels in excess of the maximum permissible sound levels cannot be operated without first obtaining a noise permit from the State Department of Health. Although the permit does not attenuate noise per se it regulates the hours during which excessive noise is allowed.

The general contractor will be responsible for obtaining the permit and complying with conditions attached to the permit. Work will be scheduled for normal working hours (7:00 AM to 3:30 PM) Mondays through Fridays. The contractor will also ensure that motors are properly equipped with mufflers in good operating condition.

Site work may create opportunities for runoff and erosion. Best Management Practices (BMPS) for erosion and drainage control during construction will be prepared for review and approval by the Department of Public Works, County of Hawaii. Areas affected by construction will be restored to pre-construction conditions or better.

Should archaeological or cultural features be unearthed, work in the immediate area will cease and historic authorities promptly notified for disposition of the finds.

The flora observed along the highway shoulder are common to the Island and State of Hawaii. None are considered rare, threatened, or endangered or proposed for such status.

Agricultural Lands of Importance to the State of Hawaii should not be affected by construction confined to the highway right-of-way.

Construction in the right-of-way will interrupt traffic on the outbound lane of Keaau-Pahoa Road. This is expected to result in slightly longer travel times and generally inconvenience motorists and pedestrians. The existing one-way traffic lane will be diverted to one side of the road away from construction. Traffic cones or other directional devices will be placed in the roadway to guide vehicles around work areas. Traffic tie-ups cannot be avoided and the contractor will implement measures to provide access past work sites and minimize the inconvenience to the general public. Traffic control

plans will be submitted to the Department of Transportation, State of Hawaii for review and approval. Measures to be taken to mitigate traffic impacts include but are not limited to:

- Posting warning signs on both sides of the work area to alert motorists of road work and to slow traffic speed;
- Positioning traffic cones or other directional devices in the roadway to guide vehicles around work areas;
- Posting flagmen to assist in traffic control;
- Providing alternative access if driveway closings cannot be avoided;
- Limiting construction to between 8:00 AM and 2:30 PM, Monday through Friday.

For safety purposes, trenches will be covered with traffic plates during non-working hours and safety devices and signs posted for the duration of construction. Work will be coordinated with the Highways Division, Department of Transportation, State of Hawaii.

A minimum distance of 3 feet will separate the excavated water line trench from existing utility poles. If necessary, the Contractor will temporarily brace the poles adjoining the trench perimeter fence as a precautionary measure (GTE Hawaiian Tel Comment Letter, 1999).

Material deliveries will be scheduled during non-peak traffic hours to minimize impacts on local traffic. Flagmen will be posted for traffic control during material loading and off-loading. Traffic delays can be expected but should not last more than a few minutes.

Overhead utilities should not be affected by installation of the waterlines. Construction plans will be submitted for review and construction operations coordinated with the respective utility providers. In the event of accidental breakage emergency crews will be summoned immediately to repair the breakage and affected residents and businesses notified of the disruption. If extensive repair work is required, the contractor will take reasonable effort to provide service to affected residents and businesses.

Temporary interruptions in water service to residential and agricultural user can be expected when the new line is tied into the existing 12-inch lines. Customers will be notified in advance of the disruption and the contractor will complete the connection in a timely manner to minimize inconvenience to water customers.

Sections of the waterline will be pressure tested with water during construction and, following construction, disinfected with a chlorine solution prior to being placed online. Hydrotesting water and disinfection water will be discharged into existing swales along the highway and allowed to percolate into the ground. Disinfection will be performed according to Department of Water Supply standards and should not pose a threat to public health and safety.

C. Long-Term Impacts

The project will improve the delivery of water to users and improve the operational efficiency of the system. This impact supports a general plan policy to improve water system facilities in the Puna District.

The proposed project connects two existing 12-inch lines and should alleviate the bottleneck in the waterline. The 12-inch line on the Pahoa side of the connection terminates near Paradise Drive in the Hawaiian Paradise Park Subdivision about 4 miles to the southeast of the project area. This line provides water service to lots close to the highway. The Olaa-Mt. View System eventually will connect to the Pahoa Water System, a separate system currently serving the town of Pahoa and owned and operated by the Department of Water Supply. The system, when connected, will officially be called the Keaau-Pahoa Water System. The interconnected system will be able to supply water to both towns particularly during dry periods and emergencies.

A third water system-the Central Puna Water System--- is proposed for Central Puna (Department of Water Supply, 1999). Keaau and Pahoa are outside this water system boundaries. If constructed, the proposed system would provide water service to the many substandard subdivisions in Central Puna and connect to the 12-inch water line in Keaau-Pahoa Road.

The Department of Water Supply continues to upgrade the island-wide municipal water system and projects similar to this action can be expected subject to funding and Capital Improvement Program priorities.

The buried waterline will not result in long-term adverse impacts on air quality, the acoustical environment, historic features, flora and fauna, highway use, scenic resources, and open space quality.

SECTION 4 ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

The no action alternative would maintain the status quo and preclude the occurrence of environmental impacts, short and long-term, beneficial and adverse described in this Assessment. The Department of Water Supply does not consider the No Action alternative to be a prudent course of action.

SECTION 5 PERMITS AND APPROVALS

Permits and approvals listed below are indicative of rather than a comprehensive listing of all permits that may be required to implement the project.

Permit	Authority
County of Hawaii	
Environmental Assessment	Department of Water Supply
Building, Electrical and Plumbing	Department of Public Works
Grubbing, Grading, Excavation and Stockpiling	Department of Public Works
Best Management Practices	Department of Public Works
State of Hawaii	
Variance from Pollution Controls	Department of Health
National Pollution Discharge Elimination System (NPDES) Permit	Department of Health
Permit to Perform Work on State Highways	Department of Transportation

SECTION 6 AGENCIES AND ORGANIZATIONS TO BE CONSULTED

The Draft Environmental Assessment for the Keaau-Pahoa 12-Inch Waterline Installation was published in the Office of Environmental Quality Control Environmental Notice of March 23, 1999 and April 8, 1999. Publication in the Environmental Notice initiated a 30-day public review period which ended on April 22, 1999. The Draft Environmental Assessment was mailed to agencies and organizations listed below. An asterisk * identifies agencies and organizations that submitted written comments during the comment period. All comment letters and responses are found in Appendix A.

State of Hawaii
- Department of Health
- Department of Transportation
  - Highways Division
- *Civil Defense

County of Hawaii
- *Department of Public Works
- *Planning Department
- *Police Department
- Fire Department

Others
- Hawaii Electric Light Company
- *GTE Hawaiian Tel
- W.H. Shipman Limited
- Keaau Public Library (Draft EA Placed in Library)

SECTION 7 DETERMINATION OF SIGNIFICANCE

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (§11-200-12). The relationship of the proposed project to these criteria is discussed below.

1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

   There are no natural or cultural resources in the project area that would be affected by the proposed project.

2) Curtails the range of beneficial uses of the environment;

   The proposed project is not proposing a use significantly different from existing waterlines in the affected highway.

3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

   The project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawaii.

4) Substantially affects the economic or social welfare of the community or State;

   The project will clear a bottleneck in the transmission line between Keaau and Pahoa thus improving the operational efficiency of this section of the Olaa-Mountain View waster system..

5) Substantially affects public health;

   The proposed action will not adversely affect public health. On occasion, construction noise will exceed the allowable noise standards. Noise, however, will be temporary at any one location and should not endanger public health.

6) Involves substantial secondary impacts, such as population changes or effects on public facilities,

   The project will not result in substantial secondary impacts such as population changes or adverse impacts on public facilities.

7) Involves a substantial degradation of environmental quality;

   Environmental quality will not be degraded as a result of this project. Construction will be confined to an existing highway right-of-way. Land adjoining the waterline alignment affected by construction will be restored to pre-construction conditions or better.

8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The proposed project does not involve a commitment for a larger action. The Department of Water Supply, however, is planning projects similar to this in an effort to upgrade and improve the entire municipal water system in the Puna District. Planning and construction of future improvements will depend on availability of public funds and Capital Improvement Program priorities.

9) Substantially affects a rare, threatened or endangered species, or its habitat;

There are no rare, threatened or endangered flora or fauna or habitat in the project area.

10) Detrimentally affects air or water quality or ambient noise levels; or

Ambient air quality may be affected by fugitive dust and combustion emissions but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site work but should diminish as the waterline is placed underground and covered. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health. Best Management Plans will be prepared to minimize construction runoff.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

The proposed action is not located in a flood hazard area, tsunami zone, beach, erosion prone area, or adjacent to fresh and coastal water bodies.

The Puna District, in which the town of Keaau is located, is subject to lava inundation.

12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies; or

The proposed improvements will not substantially affect scenic vistas and view planes

13) Requires substantial energy consumption.

Not determined.

Based on the above criteria, the proposed Keaau-Pahoa 12-Inch Waterline Installation project will not result in significant adverse environmental impacts and an Environmental Impact Statement should not be required.

REFERENCES

BK Inc. 1998. *Plans for the Construction of the Keaau-Pahoa 12-Inch Waterline Installation (Keaau High School to Keaau Transfer Station).* Job No. 98-707. Prepared for Department of Water Supply, County of Hawaii.

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APPENDIX A

COMMENTS AND RESPONSES

Stephen K. Yamashiro
Mayor

Wayne G. Carvalho
Police Chief

James S. Correa
Deputy Police Chief

County of Hawaii
POLICE DEPARTMENT

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March 18, 1999

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1400 Rycroft Street, Suite 876
Honolulu, HI 96814-3021

Dear Mr. Park:

SUBJECT: KEAAU-PAHOA 12-INCH WATERLINE INSTALLATION
TAX MAP KEY: 1-6-04: POR. 21
KEAAU, PUNA DISTRICT, HAWAII

Staff has reviewed the Environmental Assessment for the proposed project and has no objections or comments to offer at this time.

Thank you for the opportunity to comment.

Sincerely,

Wayne G. Carvalho

WAYNE G. CARVALHO
POLICE CHIEF

EO:lk

Stephen K. Yamashiro
Mayor

Virginia Goldstein
Director

Russell Kokubun
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-8742

March 19, 1999

Mr. Gerald Park
1400 Rycroft Street, Suite 876
Honolulu, HI 96814-3021

Dear Mr. Park:

Draft Environmental Assessment for the Keaau-Pahoa 12-inch Waterline Installation
Keaau-Pahoa Highway, Keaau, Puna, Hawaii

Thank you for your letter dated March 11, 1999, transmitting a copy of the above-describe environmental assessment for our review and comment.

We have completed our review and find that the information contained within regarding Land Use Controls is accurate. Furthermore, we have no objections or concerns regarding the report's tentative finding of no significant impact to the environment.

We do, however, would like to point out that your memorandum incorrectly cites the project site as being situated within TMK: 1-6-04: portion of 21. This property is situated at the top of Ainaloa Subdivision, some distance from the project site.

Please contact Daryn Arai of this office should you have any questions.

Sincerely,

VIRGINIA GOLDSTEIN
Planning Director

DSA:gp
f:\wp60\dsa\1999\LParkG01.dsa

c: County-DWS
OEQC

GTE Hawaiian Tel

Beyond the call

GTE Hawaiian Telephone Company Incorporated
P.O. Box 4249 Hilo, HI 96720 (808) 933-6488

March 23, 1999

RECEIVED 3. 26. 99

Gerald Park
Urban Planner
1400 Rycroft Street
Suite 876
Honolulu, Hawaii 96814-3021

Dear Mr. Park:

Subject: Keaau-Pahoa 12-inch Waterline Installation
Tax Map Key: 1-6-04: por. 21
Keaau, Puna District, Hawaii

Thank you for including GTE Hawaiian Tel in your review process for the Environmental Assessment for the above subject project.

Based on your maps and pictures of the proposed project site our only concern is how close to our existing poles will the trench for the proposed 12-inch waterline be. The poles in this area are joint poles and was just replaced by the power company in conjunction with the State's Keaau Bypass Road Project No. 130B-01-92, Phase 1.

If you have any questions regarding our comments, please feel free to call either Mr. Gordon Yadao or myself at 933-6488.

Sincerely,

Rodney Kelii
Designer

c: B. McClure, DWS
TPS 99025

GERALD PARK
Urban Planner
■
Planning
Land Use
Research
Environmental
Studies
■
1400 Rycroft Street
Suite 876
Honolulu, Hawaii
96814-3021
■
Phone/Fax
(808) 942-7484

April 26, 1999

Rodney Kelii
GTE Hawaiian Tel
PO Box 4249
Hilo, Hawaii 96720

Dear Mr. Kelii:

Subject: Keaau-Pahoa 12-inch Waterline Installation
Keaau, Puna District, Hawaii

Thank you for reviewing the subject environmental assessment. We offer the following response to your comment.

A minimum distance of 3 feet will separate the excavated water line trench from existing utility poles. If necessary, the Contractor will temporarily brace the poles adjoining the trench as a precautionary measure. Construction drawings will be submitted to GTE Hawaiian Tel for review.

We thank GTE Hawaiian Tel for participating in the environmental assessment review process.

Sincerely,

GERALD PARK URBAN PLANNER

Gerald Park

c: B. McClure, DWS

Stephen K. Yamashiro
Mayor

Jiro A. Sumada
Deputy Chief Engineer

County of Hawaii

DEPARTMENT OF PUBLIC WORKS
25 Aupuni Street, Room 202 · Hilo, Hawaii 96720-4252
(808) 961-8321 · Fax (808) 961-8630

April 13, 1999

MR GERALD PARK
URBAN PLANNER
1400 RYCROFT STREET SUITE 876
HONOLULU HAWAII 96814-3021

SUBJECT : ENVIRONMENTAL ASSESSMENT
KEAAU-PAHOA 12-INCH WATERLINE
Keaau, Puna, Hawaii
TMK: 1-6-04: por. 21

The Department of Public Works has no comments concerning the subject project. The Keaau-Pahoa Road (Highway 130) is under the jurisdiction of the Hawaii Department of Transportation (HDOT). All comments and requirements concerning this roadway should be directed to the HDOT.

Should there be any additional questions concerning this matter, please feel free to contact Mr. Casey Yanagihara in our Engineering Division at (808)961-8327.

Galen M. Kuba, Division Chief
Engineering Division

CKY

copy: DWS (B. McClure)

BENJAMIN J. CAYETANO
GOVERNOR

MAJOR GENERAL EDWARD V. RICHARDSON
DIRECTOR OF CIVIL DEFENSE

ROY C. PRICE, SR.
VICE DIRECTOR OF CIVIL DEFENSE

STATE OF HAWAII
DEPARTMENT OF DEFENSE
OFFICE OF THE DIRECTOR OF CIVIL DEFENSE
3949 DIAMOND HEAD ROAD
HONOLULU, HAWAII 96816-4495

PHONE 808 733-4301
FAX 808 733-4287

April 19, 1999

TO: Mr. Gerald Park
Urban Planner
1400 Rycroft Street, Suite 876
Honolulu, Hawaii 96814-3021

FROM: Major General Edward V. Richardson
Director of Civil Defense

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, KEAAU-PAHOA, 12-INCH WATERLINE INSTALLATION, DEPARTMENT OF WATER SUPPLY, COUNTY OF HAWAII

We appreciate the opportunity to comment on the Department of Water Supply, County of Hawaii, State of Hawaii, draft Environmental Assessment.

State Civil Defense (SCD) does not have any negative comments specifically directed at the draft Environmental Assessment; we do not wish to make any comments at this time.

Our SCD planners and technicians are available to discuss this further, if there is a requirement. Please have your staff call Mr. Norman Ogasawara of my staff at 733-4300.