BENJAMIN J. CAYETANO
GOVERNOR

KAZU HAYASHIDA
DIRECTOR

DEPUTY DIRECTORS
BRIAN K. MINAAI
GLENN M. OKIMOTO

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:
HWY-DD
2.3379

APR 13 1999

TO: GARY GILL, INTERIM DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: KAZU HAYASHIDA
DIRECTOR OF TRANSPORTATION

SUBJECT: FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS, VICINITY OF POLINALINA ROAD, TMK 5-1-9 AND 5-1-12, KAAAWA, OAHU, HAWAII

The State Department of Transportation has reviewed the comments received during the 30-day public comment period which began on February 8, 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. APR 23

We have enclosed a completed OEQC Publication Form and four copies of the final EA. If submitting a written reply, please reference HWY-DD 2.3379, attention Ross Hironaka. Please call him at our Design Section, Design Branch at 692-7575 should you have any questions.

Enclosure

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FINAL
ENVIRONMENTAL ASSESSMENT

KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS
VICINITY OF POLINALINA ROAD

Prepared by

State of Hawaii
Department of Transportation
Highways Division

April, 1999

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PLAN OF PROPOSED CONSTRUCTION

COMMENTS TO PRE-DRAFT ENVIRONMENTAL ASSESSMENT
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COMMENTS TO PRE-DRAFT AND DRAFT ENVIRONMENTAL ASSESSMENT
AND RESPONSES TO LETTERS

Final Environmental Assessment

Kamehameha Highway Drainage Improvements
Vicinity of Polinalina Road
Project No. 83D-01-98
TMK 5-1-9 AND 5-1-12
Kaaawa, Oahu
April 1999

Proposing Agency: Department of Transportation
Highways Division
State of Hawaii

Accepting Agency: Department of Transportation
Highways Division
State of Hawaii

Agencies Consulted:

The following agencies were notified and permits will be secured, if required.

OEQC

County: Board of Water Supply
Design and Construction Department
Department of Planning and Permitting Department
Department of Parks and Recreation
Planning Department
Facility Maintenance Department

State: DBEDT Planning Office
Department of Health
Department of Land and Natural Resources
DLNR Historic Preservation Division
Office of Hawaiian Affairs

Federal: Army Corps of Engineers
National Marine Fisheries Service
Fish and Wildlife Service

Project Location: This project is located on the island of Oahu in the state of Hawaii. The drainage improvement will be located in Kaaawa in the vicinity of Polinalina Road and Kaaawa Elementary School..

Project Overview:

Proposed Improvements:

The State of Hawaii, Department of Transportation, Highways Division in accordance with the Kaaawa Community Association (See Appendix for letters from Community Association) proposes to replace an existing concrete pipe with a new reinforced concrete box culvert in the vicinity of Polinalina Road (TMK 5-1-9). The State also proposes to construct a new concrete box culvert to supplement an existing culvert in the vicinity of Kaaawa Elementary School (TMK 5-1-12). The primary purpose of these improvements is to increase the capacity of the drainage systems in these two areas.

Existing Drainage System:

In the vicinity of Polinalina Road, the drainage system is composed of grass swales, a concrete lined ditch and a corrugated metal pipe. During rainfall, the surface runoff sheet flows from surrounding areas, across the existing county roads and into the existing grass swales. The surface runoff from the grass swales then feeds into a concrete ditch. The surface runoff from the concrete ditch flows into a corrugated metal pipe and deposited into the ocean.

In the vicinity of Kaaawa Elementary School, the existing drainage system is composed of a grass swale located on the south end of the school, a concrete lined ditch and a 6' x 3' concrete box culvert. The surface runoff flows across the Elementary School into the existing grass swale and into a concrete lined ditch. The water then moves from the concrete lined ditch into an existing 6' x 3' concrete box culvert and subsequently is deposited into the ocean.

Description of Project Need:

The existing drainage facilities located along Kamehameha Highway in the vicinity of Kaaawa Elementary School and Polinalina Road may not be

sufficient to carry stormwater flows caused by heavy rainfall. During heavy rainfall, the existing drainage culverts may not have the capacity to carry the runoff to the ocean. Consequently, there is a possibility that overflow runoff will flood the existing school, businesses and residences. Due to these conditions, drainage improvements are required.

Project Characteristics:

General: This project involves the improvement of drainage facilities at two areas along Kamehameha Highway in the district of Kaaawa, island of Oahu. The first project area is located in the vicinity of Polinalina Road. The project location consists mainly of private lots, businesses and city roads. The State of Hawaii Department of Transportation (DOT) is proposing to replace the existing 48" reinforced concrete drainage pipe with an 8' x 4' concrete box culvert to increase the capacity of the existing drainage system and reduce the possibility of flooding in the project area.

The second project area is located near Kaaawa Elementary School. The existing drainage system is comprised of a 6' x ' box culvert. The DOT is proposing to construct an additional 8' x 4' box culvert to reduce flooding in the nearby school and adjacent lots by increasing the capacity of the existing drainage system.

Technical: In the vicinity of Polinalina Road, the existing drainage system consists of a 48" concrete pipe which carries surface runoff from a drainage area of approximately 78 acres. It is comprised of "resident made" grass swales which feed into the existing 48" concrete pipe. The concrete pipe carries runoff across the highway to be discharged into the ocean. Since the existing 48" concrete pipe does not meet the required capacity for a 50 year flood, the State of Hawaii Department of Transportation is proposing to replace the existing 48" concrete pipe with a 8' x 4' concrete box culvert. The proposed concrete box culvert replacement would resulft in a drainage capacity of 400 cfs.(The 50-year flood capacity is 201 cfs)

In the vicinity of Kaaawa Elementary School, the existing drainage area consists of 96 acres. During rainfall, water sheet flows across Kaaawa Elementary School field into a grass swale. Water then flows from the grass swale into a concrete lined ditch which in turn feeds a 6' x 3' concrete culvert. During heavy rainfall the existing drainage system does not have the capacity to carry the runoff towards the ocean. This causes

the existing drainage system to flood the school grounds and neighboring property. The proposed drainage improvement consists of constructing a new 8' x 4' concrete box culvert adjacent to the existing 6' x 3' concrete box culvert to increase the drainage capacity by 500 cfs.

Economic: The estimated construction cost of the proposed project is $233,000.

In the vicinity of Kaaawa Elementary School, local businesses will experience a reduction in the frequency of flooding. This would allow buisnesses to stay open during heavy rainfall instead of preparing their businesses for flood.

In the vicinity of Polinalina Road, local residences will experience a reduction in the frequency of flooding. This will result in less damage and expense to the home and property.

Social: The project will also increase the safety on Kamehameha Highway in the vicinity of Polinalina Road and Kaaawa Elementary School. Residents in the vicinity of Polinalina Road will experience a reduction in the frequency of floods, thus reducing their time and frustration. Roadside ponding will be alleviated, thus bicyclists/pedestrians will not impede motorists by not riding/walking in the traveled way. Kaaawa Elementary School will experience a reduction in the frequency of flooding thus enabling the school to provide a safer and healthier environment for the students.

Construction of the box culvert at both sites will not prevent public use of coastal recreational opportunities.

Environmental: Kamehameha Highway, in the vicinity of Polinalina Road and Kaaawa Elementary School, consists mainly of residential lots and both private and city roads. The area contains heavy woody vegetation composed of Haole koa, guava, lantana, klu, Java plum, hau, kolea, crotolaria, Christmas berry and associated shrub species.

The soil is composed primarily of Kaena Stony Clay(KaeC), Kaena Very Stony Clay(KanE), Lolekaa Silty Clay(LoE and LoF) and Pearl Harbor Clay(Ph).

KaeC is found on coastal plains and steep talus slopes. The consistency of

this dark reddish brown soil is very sticky and plastic. Workability is difficult due to the narrow range of moisture content within which the soil can be cultivated. KaeC has a low permeability which causes slow to medium runoff. This soil has a high shrink swell potential while having a low erosion hazard. KaeC is primarily used for sugarcane, pasture lands, truck crops, and fingergrass.

KanE is found on talus slopes and alluvial fans. The workability is difficult because the soil is stony, steep, very sticky and very plastic. The erosion hazard is moderate to severe while the runoff is medium to rapid. This soil is primarily used for pasture and urban development.

LoE and LoF occurs along drainage ways and on fans adjacent to the Koolau Range. These soils exist in low level elevations(sea level to 500 feet). The workability of these soils is difficult and the runoff is medium to rapid. The soil is impractical to cultivate and used primarily for pasture lands.

Ph occurs on level coastal plains and develops in alluvium overlying organic material. This soil is used primarily for taro, sugarcane, and pasture lands. The permeability and runoff of Ph is very slow while the erosion hazard is low. The soil is very plastic thus making the workability difficult.

Summary of the Affected Environment:

Surrounding Land Use:

The area bordering the two project sites contain a diverse range of commercial uses, as well as new and established residential areas. Both project sites are located in rural lots on a low volume two lane highway.

In the vicinity of Kaaawa Elementary School, the school is surrounded by two parks, Kaaawa Beach Park and Kalaeoio Beach Park. The project site is also located near residential as well as commercial buildings.

In the vicinity of Polinalina Road, the project site is located near residential as well as commercial buildings.

Climate:

Oahu's climate is characterized by uniform temperature and moderate humidity year round. The months of May through September are mainly dry, while most of the rainfall occurs from November to April. Trade winds travel from Northeast to Southwest.

Topography:

The proposed drainage improvement will not require acquisition of right of way or involve any relocation of utilities in the project area. In the vicinity of Polinalina Road, the design and construction of the 8' x 4' box culvert will not cause any significant adverse effect to the environment. Furthermore, in the area near Kaaawa Elementary School, the design and construction of the proposed box culvert will not cause any significant adverse effect to the environment.

Both proposed box culverts will be constructed near the shoreline. Therefore, a shoreline survey will be conducted and certified by the Department of Land and Natural Resources Surveying Office. Since the proposed construction is within 40 feet of the shoreline, the DOT will apply for a Shoreline Setback Variance to the City and County Department of Planning and Permitting.

In the vicinity of Kaaawa Elementary, the proposed box culvert will require a minor Special Management Area (SMA) Permit. However, in the vicinity of Polinalina Road, the proposed box culvert is considered a replacement to the existing culvert, thus a SMA permit is not required.

Flora, Fauna and Critical Habitats

Due to past highway construction and improvements done adjacent to Kamehameha Highway, no endangered flora, fauna or critical habitats are known to exist in the proposed project sites. Construction of the new box culvert at both sites will provide minimal disruption and adverse impacts on all coastal and surrounding ecosystems.

Archaeological and Historic Sites:

According to the State Department of Land and Natural Resources, State Historic Preservation Division, the proposed project area may contain historic burials. Historic burials have been inadvertently discovered in the

beach sands near the proposed highway improvement. A suitable archaeological monitoring plan will be implemented to monitor construction at the project site. Proper measures will be taken to protect, preserve and restore these natural, historic and prehistoric resources in the coastal zone management area that are of significance to Hawaiian and American history and culture.

Air quality:

During construction, minimal air quality impacts may occur and will be mitigated with pollution control measures. Air quality impacts attributed to the project will include dust generated by construction related activities. Site work such as clearing, grubbing and excavation will generate air pollution. Dust control measures will be implemented to minimize wind blown pollution.

Noise:

Noise levels are expected to increase temporarily during construction. Construction equipment will be the dominant source of noise during the construction period. All construction activities will be limited to the normal daylight working hours. Mitigating controls may be used such as properly muffled equipment as required.

Zoning:

According to the City and County of Honolulu, Department of Planning and Permitting, the prospective project is within the Special Management Area (SMA). Replacing the existing 48" drainage pipe with the 8' x 4' box culvert (in the vicinity of Polinalina Road) is within the SMA, but is exempt from Chapter 25, Revised Ordinances of Honolulu, under Section 1.3(2)(B)(D). The proposed 6' x 2.5' box culvert near Kaaawa Elementary School will require a minor SMA Use Permit. Furthermore, a Shoreline Setback Variance Permit will be required since the project area is within 40 feet of the shoreline. A certified shoreline survey will be taken to determine the distance from the project area to the shoreline.

Visual:

The proposed drainage improvements installed along Kamehameha Highway will not interfere with the scenic view from the mauka side of the highway towards the ocean. The proposed drainage improvement will be

aligned under the highway and be out of sight from traffic and pedestrians.

Alternatives considered:

The "no-build" alternative was considered but deemed unacceptable because the benefits of providing the public with an improved drainage facility outweighs the adverse impacts of this project. Adverse impacts of a "no-build" alternative include continued flooding problems for neighboring residents, businesses and schools. These hazards make the "no-build" alternative unacceptable.

Proposed Mitigation Measures:

The State Historic Preservation Division will require archaeological monitoring of the site during ground disturbing activities. An archaeological monitoring plan will contain the following:

1. The type of remains anticipated.
2. Location in the construction area the remains are likely to be found.
3. How the expected types of remains will be treated, if found.
4. The archaeologist conducting the monitoring has the authority to halt construction in the immediate area of a find in order to carry out the plan.
5. A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan.
6. Laboratory work to be done on remains that are collected.
7. Details concerning the archiving of any collections that are made.

The proposed project will not increase sedimentation in the coastal waters fronting Kaaawa Beach. The proposed drainage systems at both locations will not alter the existing runoff discharge conditions.

The construction of this project will require site specific BMP's(Best Management Practices) during preconstruction and construction.(See Appendix)

Since the proposed project is within the Shoreline Setback Area, the Shoreline Hardening Policy and Environmental Assessment Guidelines, December 1998

should be referenced and responded to. (See appendix for Guidelines and responses to those questions.)

Expected Determination:

In accordance with Chapter 343, Hawaii Revised Statutes, this environmental assessment has characterized the technical and environmental issues of the Kamehameha Highway Drainage Improvements project, identified potential impacts and their significance. It is anticipated that the project will not significantly impact the environment. Therefore, a Negative Declaration is anticipated, and an Environmental Impact Statement is not required for this project. This determination is based on the significance listed on 11-200-12 of the Environmental Impact Statement Rules. Specifically, these significance criteria are addressed below:

1. The proposed project will not result in an irrevocable commitment to loss or destruction of any natural or cultural resources. Due to increase drainage capacity, the likelihood of loss or destruction to any natural or cultural resources may be decreased.

2. The range of beneficial uses of the environment will not be curtailed. By increasing the drainage capacity, flooding will be less likely. The drainage improvement will take place inside the State right of way and under Kamehameha Highway.

3. The project will not conflict the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, H.R.S., and any revisions thereof and amendments thereto, court decisions, or executive orders. The project supports the Department of Transportation's long range traffic planning.

4. The project will not affect the economic and social welfare of the community or state. By increasing the runoff capacity, schools will not require closing due to flooding during heavy rainfall. Furthermore, increased runoff capacity will allow the highway to be safer during heavy rainfall than without the culvert.

5. The project will not adversely affect public health. Air quality impacts will be minimized or mitigated with pollution control measures as required.

6. The project will not involve substantial adverse secondary impacts, such as population changes or effects on public facilities. The proposed project is in response to both current needs and concerns.

7. The project will not involve a substantial degradation of environmental quality. The intended method of construction should not result in any significant adverse water quality impacts.

8. The project will not include considerable cumulative effect upon the environment nor involve a commitment for larger actions.

9. The project will not substantially affect rare, threatened, or endangered species, or their habitat. There are no such species or habitats in the area.

10. The project will not detrimentally affect air, water quality, or ambient noise levels. Short term noise impacts will occur during the construction phase. The contractor will be required to comply with current Department of Health regulations.

11. The project will not affect an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal waters.

12. The project does not affect scenic vistas or view planes. The proposed drainage project will be beneath the roadway.

13. The project does not require substantial energy consumption.

Permits Required for Construction:

1. 401 Permit
2. 404 Permit
3. Minor Special Management Area Permit
4. Shoreline Setback Variance Permit

Appendix

December 4, 1997

Mr. Francis Nishioka
Highways Division
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Nishioka:

Thank you for taking the time to meet with community members from Kaaawa recently to discuss possible locations for flood control projects along Kamehameha Highway. At the time, we identified three possible locations for these projects: 1) a box drain in front of Tom Lunn's house; 2) a box drain in front of Kaaawa School; and 3) a drain or culvert from the corner of Pohuehue Road and Kamehameha Highway to "NoName" stream.

Since our meeting, we have had time to discuss these possible locations. In addition, we have had further discussions with Senator McCartney staff and the Director of the Office of State Planning, Mr. Richard Egged. Senator McCartney's staff has informed us that he will be submitting a budget proviso for the Supplemental Budget to appropriate funds for a study of possible flood mitigation measures for the entire Kaaawa community. Mr. Egged has informed us that his staff in charge of Coastal Zone Management, Disaster Mitigation Unit would be willing to undertake the study should funds become available.

As such, the Kaaawa Beach Owners Association and the Kaaawa Community Association have determined that since, the 1997 appropriation is available for 3 years, it would be most prudent to not complete all three projects at this time. We have met and it was unanimously agreed that the project in front of Tom Lunn's house is a top priority and should be completed as soon as possible. However, planning and design for the other two projects should not be initiated until after the 1998 Legislative Session to determine if funds are available for a community-wide Disaster Mitigation planning study. A portion of this year's appropriation could be used to help implement the community wide plan.

I appreciate your efforts to work with the community and please do not hesitate to contact me at 237-8026 or Ms. Deedee Letts at 237-8980 if you have any further questions.

Sincerely,

Gregory P. Barbour
President
Kaaawa Beach Owners Association

Deedee Letts
President
Kaaawa Community Association

Cc: Honorable Senator Mike McCartney
Honorable Richard Egged
Honorable Kazu Hayashida

KA'A'AWA COMMUNITY ASSOCIATION
P.O. Box 620, Ka'a'awa, Hawai'i 96730

February 14, 1998

Senator Mike McCartney
State Capitol
Honolulu, HAWAI'I

Dear Senator McCartney

re: Ka'a'awa Flood Drainage Improvement Project

Thank you for your letter informing us of the situation regarding the status of the Flood Control Project for Ka'a'awa. The unreasonable position taken by Greg Barbour is unfortunate. As you know Barbour does not speak for the Ka'a'wa community and is not even one of our officers. Barbour's letter of December 4, 1997 to you contained statements that were plainly untrue. His letter was written in such a way as to convey the impression that it had the support of the Ka'a'awa Community Association; it did not. We do not believe that Barbour somehow has the right to veto a project for which you and many of us in the communty have worked so hard for. Barbour's position is ludicrouas, based on a number of fatally flawed premises, hollow, simplistic, naieve and plainly silly. His objections, such as they may be called that, have no support in this community that I know of. We suggest that you ignore him and proceed to put this project into effect without further delay.

The Ka'a'awa Community Association strongly supports the immediate use of the money that has been appropriated. We have waited for a very long time to get the support and assistance necessary to begin solving what has been, for too long, a very serious flooding problem in this community. We deeply appreciate the patience, good sense and unfailing commitment that you have had over the years for this project which was finally funded, albeit in part, this past year. We are grateful beyond measure for your support.

Sincerely yours

Jim Anthony, Ph.D.
President

cc: Kazu Hayashida, DOT

Kaaawa Beach Owners Association
P.O. Box 186
Kaaawa, Hawaii 96730

March 26, 1998

Mr. Francis Nishioka
Highways Division
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Nishioka:

On December 4, 1997, DeeDee Letts and I sent you a letter regarding our respective Board's position on the use of funds for flood control projects along Kamehameha Highway in Kaaawa.

Since then, we have had discussions with and received a letter from Senator McCartney on January 30, 1998 regarding his intent (as the sponsor of the proviso) of the use of these funds for the construction of projects along the highway.

Subsequently, the Board of the Kaaawa Beach Owner's Association has met and we support the use of the funds for the purposes originally intended by the legislation as indicated in his letter.

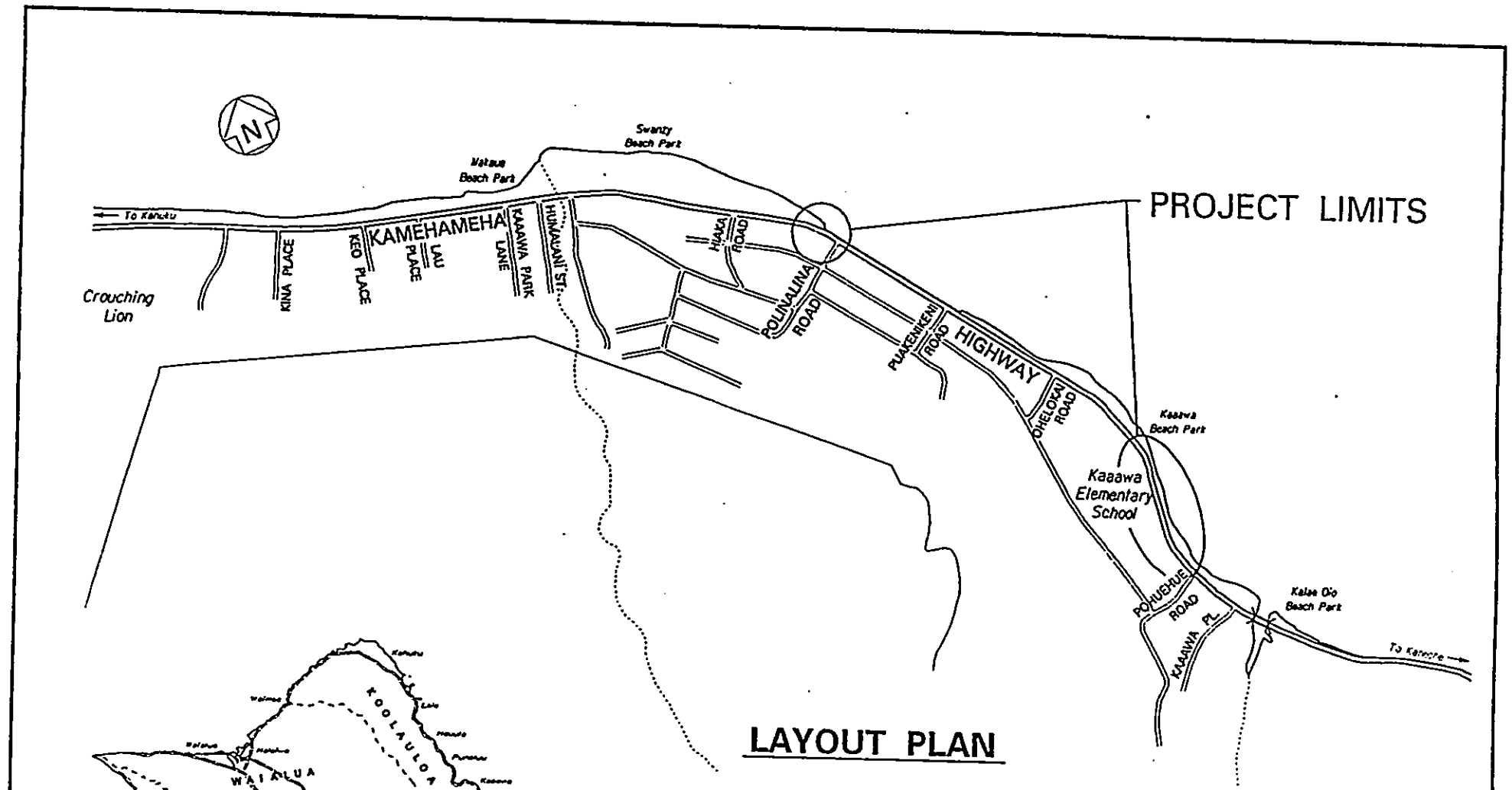
We look forward to working with you should efforts to obtain additional funds for planning purposes become available.

Very truly yours,

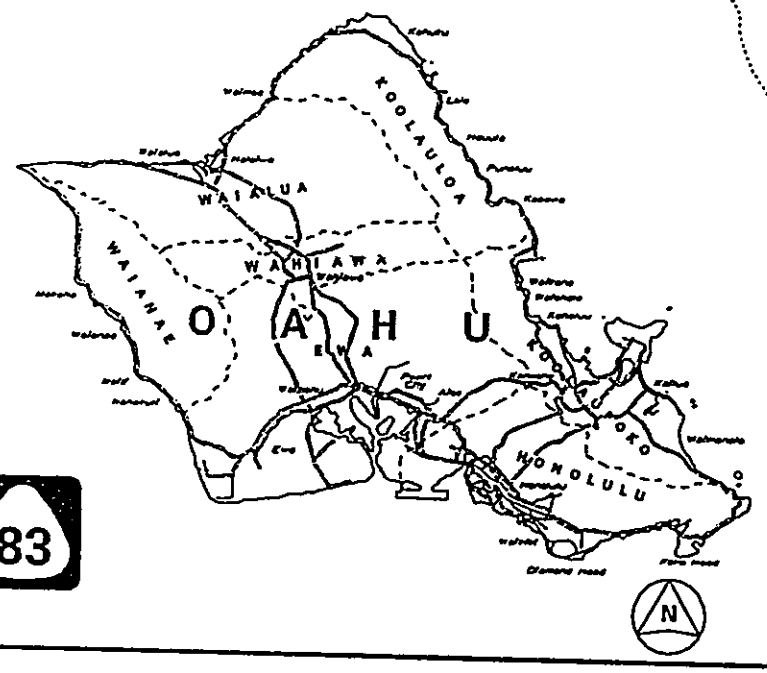
Gregory Barbour
President

cc: Honorable Senator McCartney
Honorable Kazu Hayashida
DeeDee Letts
Jim Anthinuy/Kaaawa Community Association Board of Directors

4/1/98 Contacted Nancy (Sen McCartney's Office)
3:20 pm She'll talk to the Senator and get back to me to give us direction.
3:35 pm. Nancy said to proceed w/ project



LAYOUT PLAN



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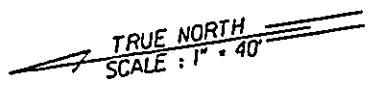
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS

VICINITY OF POLINALINA ROAD

DISTRICT OF KOOLAULOA
ISLAND OF OAHU

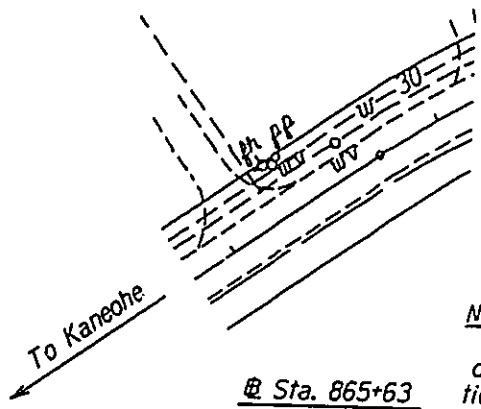
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-98	1999	0	0



℄ Sta. 833+05
Construct: Type "1" Concrete Headwall
Type "2" Concrete Headwall
GRP Inlet Structure
Install: 8'x4' Precast Concrete Box Culvert

Estimated Quantities

Structure Excavation	=	C.Y.
Structure Backfill	=	C.Y.
Asphalt Concrete Basecourse	=	Tons
A.C. Pav't, Mix No. IV	=	Tons
Bedcourse Material	=	C.Y.
8'x4' Precast Modules	=	EA.
Grouted Rubble Paving	=	C.Y.



NOTES:

℄ Sta. 865+63
Construct: Type "3
Type "4"
Install: 8'x3'-9"

drainage systems will be functional at all times during
tion. The Contractor is to furnish materials, equipment,
ls and incidentals necessary to accomplish maintenance
The cost shall be incidental to the various Contract

Estimated Quantiti
Structure Excavati
Structure Backfill
Asphalt Concrete E
A.C. Pav't, Mix No.
Bedcourse Materia
8'x3'-9" Precast M

ractor shall verify the locations of all existing
and utilities in the field. Any existing culverts and
damaged during construction shall be repaired or
by the Contractor at his own expense.

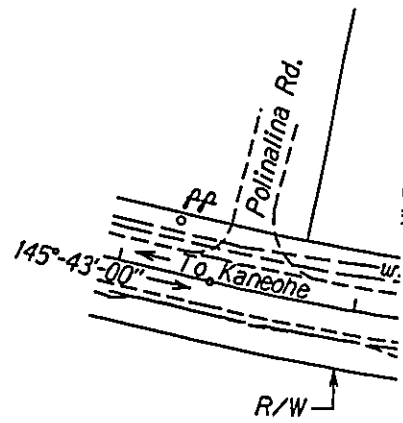
ractor shall comply with all conditions of the Army Corps
eer's Nationwide Permit and the Department of Health's
iality Certification Permit. Any proposed changes to
these permits will require the Contractor to file an
permit application(s) with the appropriate agencies.

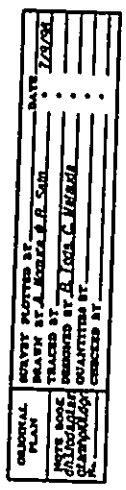
ing, removing, disposing existing concrete headwalls and
einforced concrete pipe; sawcutting and removing
of existing concrete piles shall not be paid for
ly, but shall be considered incidental to Item 206.2020 -
e Excavation for Drainage Systems.

ert trench, backfill, and A.C. pavement restoration
e Sheet No. .

shall be Class A unless otherwise noted.

all exposed concrete edges 1".





STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

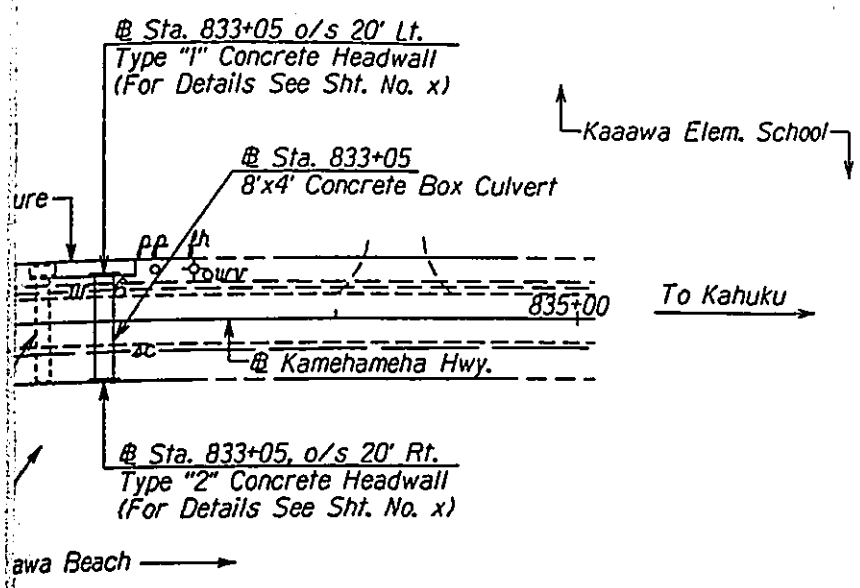
DRAINAGE PLAN

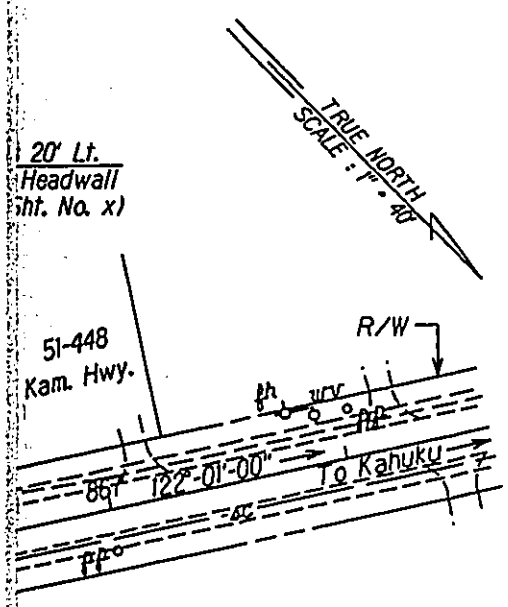
KAMEHAMEHA HIGHWAY DRAINAGE IMP.
In The Vicinity of Polinalina Road
Proj. No. 83D-01-98

Scale: 1"=40' Date: Sept, 1998

SHEET No. HX OF X SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-98	1999	0	0





℄ Sta. 833+05
Construct: Type "1" Concrete Headwall
Type "2" Concrete Headwall
GRP Inlet Structure
Install: 8'x4' Precast Concrete Box Culvert

Estimated Quantities

Structure Excavation	=	C.Y.
Structure Backfill	=	C.Y.
Asphalt Concrete Basecourse	=	Tons
A.C. Pav't, Mix No. IV	=	Tons
Bedcourse Material	=	C.Y.
8'x4' Precast Modules	=	EA.
Grouted Rubble Paving	=	C.Y.

DRAINAGE NOTES:

1. Existing drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various Contract Items.
2. The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.
3. The Contractor shall comply with all conditions of the Army Corps of Engineer's Nationwide Permit and the Department of Health's Water Quality Certification Permit. Any proposed changes to either of these permits will require the Contractor to file an amended permit application(s) with the appropriate agencies.
4. Demolishing, removing, disposing existing concrete headwalls and 48-inch reinforced concrete pipe; sawcutting and removing portions of existing concrete piles shall not be paid for separately, but shall be considered incidental to Item 206.2020 - Structure Excavation for Drainage Systems.
5. For culvert trench, backfill, and A.C. pavement restoration detail, see Sheet No. .
6. Concrete shall be Class A unless otherwise noted.
7. Chamfer all exposed concrete edges 1".

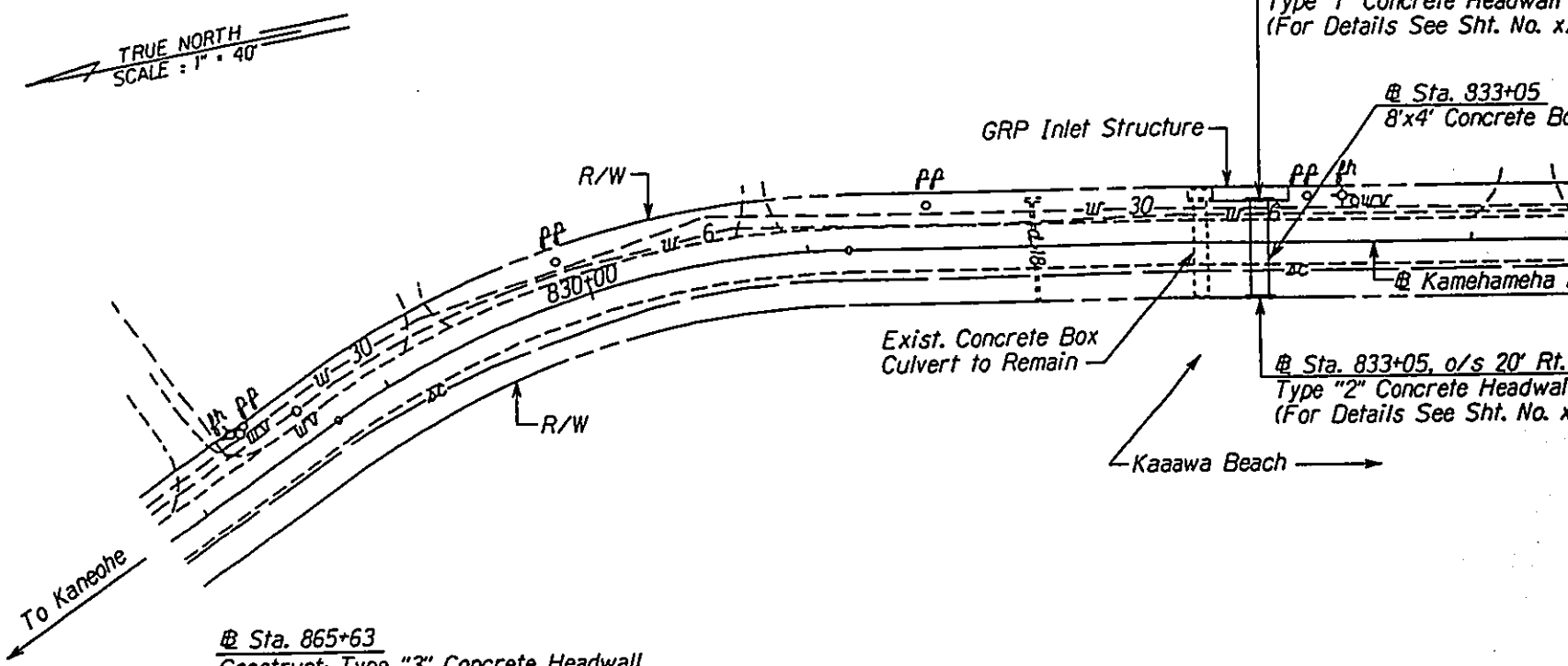
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN

KAMEHAMEHA HIGHWAY DRAINAGE IMP.
In The Vicinity of Polinalina Road
Proj. No. 83D-01-98

Scale: 1"=40' Date: Sept, 1998

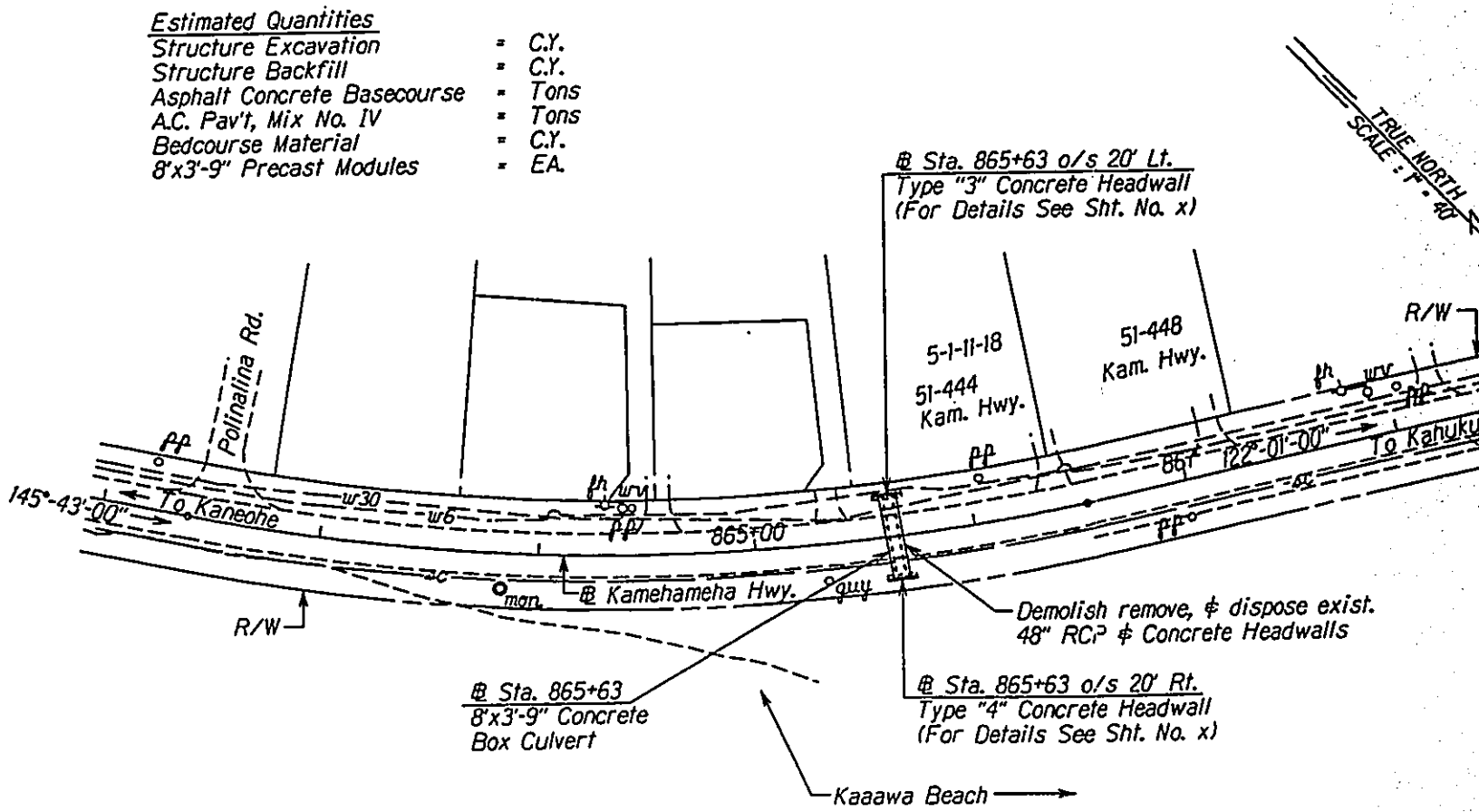
SHEET No. HX OF X SHEETS



℄ Sta. 865+63
Construct: Type "3" Concrete Headwall
Type "4" Concrete Headwall
Install: 8'x3'-9" Precast Concrete Box Culvert

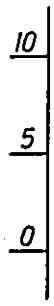
Estimated Quantities

Structure Excavation	=	C.Y.
Structure Backfill	=	C.Y.
Asphalt Concrete Basecourse	=	Tons
A.C. Pav't, Mix No. IV	=	Tons
Bedcourse Material	=	C.Y.
8'x3'-9" Precast Modules	=	EA.



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-98	1999	0	0

R/W Line

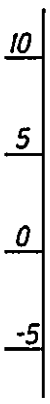


Finish Grade

STA. 833+05

13± o/s 20'± Rt.
Concrete Headwall

R/W Line



℄ STA. 865+63

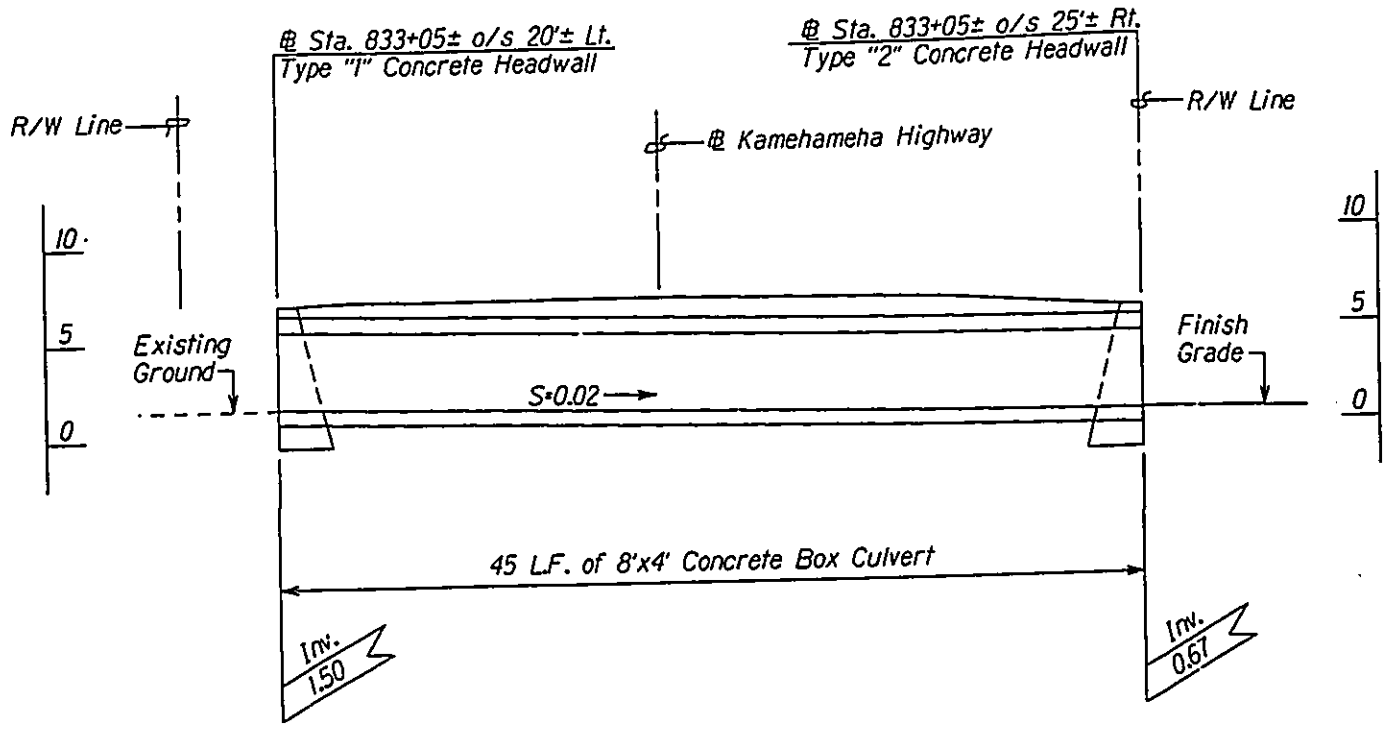
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PROFILE

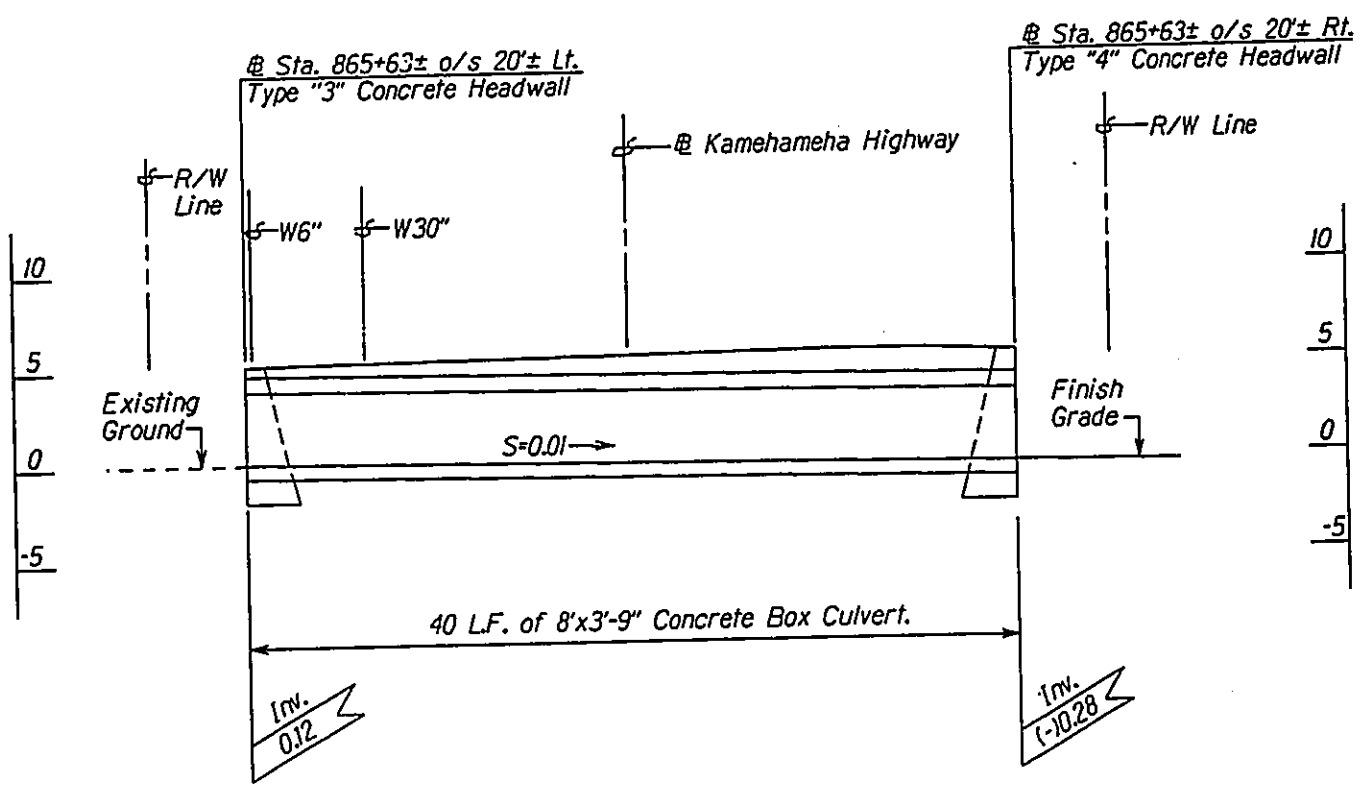
KAMEHAMEHA HIGHWAY DRAINAGE IMP.
In The Vicinity of Polinalina Road
Proj. No. 83D-01-98

Scale: 1"=5' Date: Sept, 1998

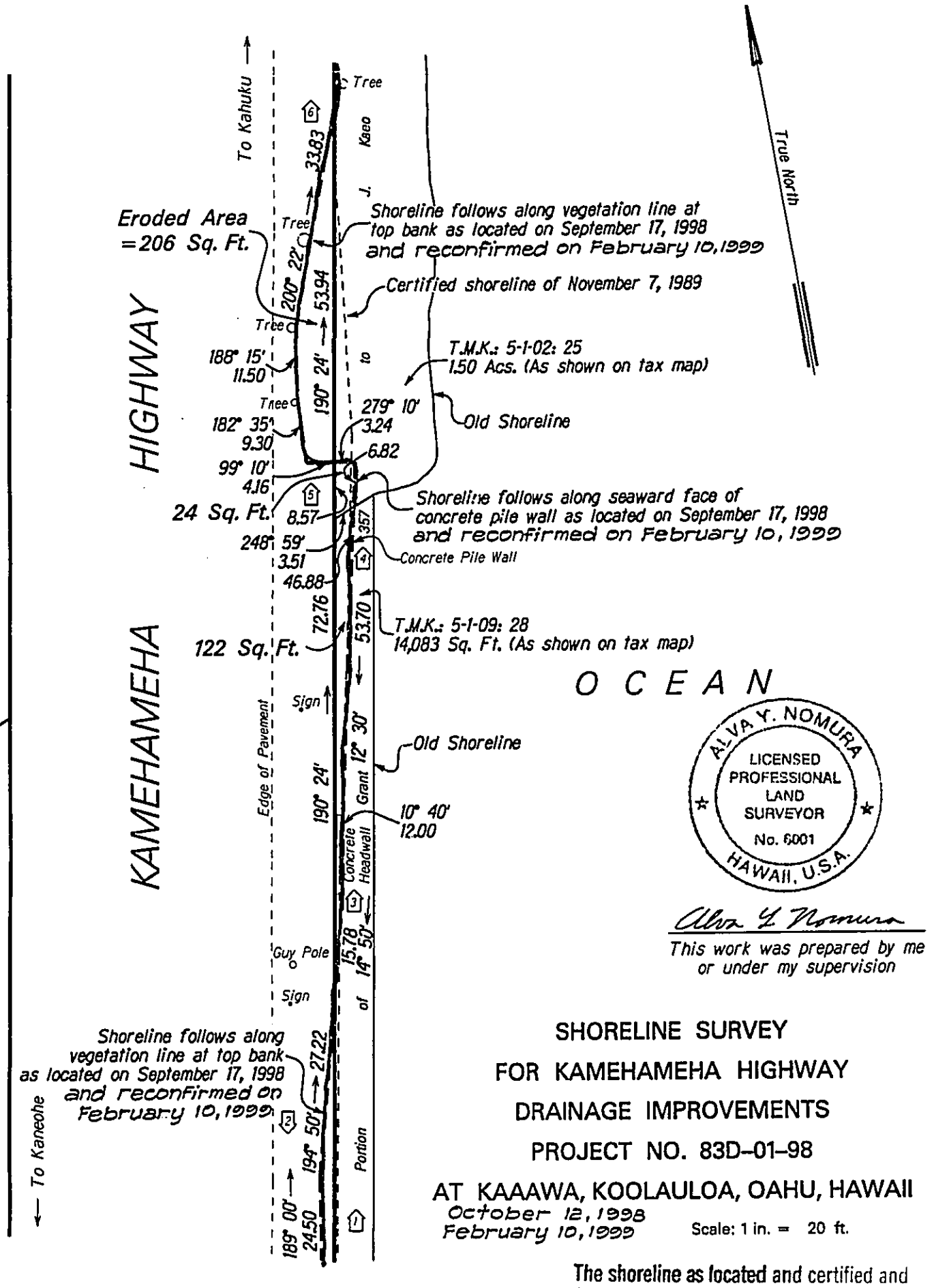
SHEET No. HX OF X SHEETS



℄ PROFILE OF 8'X4' CONCRETE BOX CULVERT AT KAMEHAMEHA HWY. ℄ STA. 833+05



℄ PROFILE OF 8'X3'-9" CONCRETE BOX CULVERT AT KAMEHAMEHA HWY. ℄ STA. 865+63



ALVA Y. NOMURA
LICENSED PROFESSIONAL LAND SURVEYOR
No. 6001
HAWAII, U.S.A.

Alva Y. Nomura

This work was prepared by me or under my supervision

SHORELINE SURVEY
FOR KAMEHAMEHA HIGHWAY
DRAINAGE IMPROVEMENTS
PROJECT NO. 83D-01-98
AT KAAAWA, KOOLAULOA, OAHU, HAWAII

October 12, 1998
February 10, 1999

Scale: 1 in. = 20 ft.

The shoreline as located and certified and delineated in red is hereby confirmed as being the actual shoreline as of FEB 10 1999

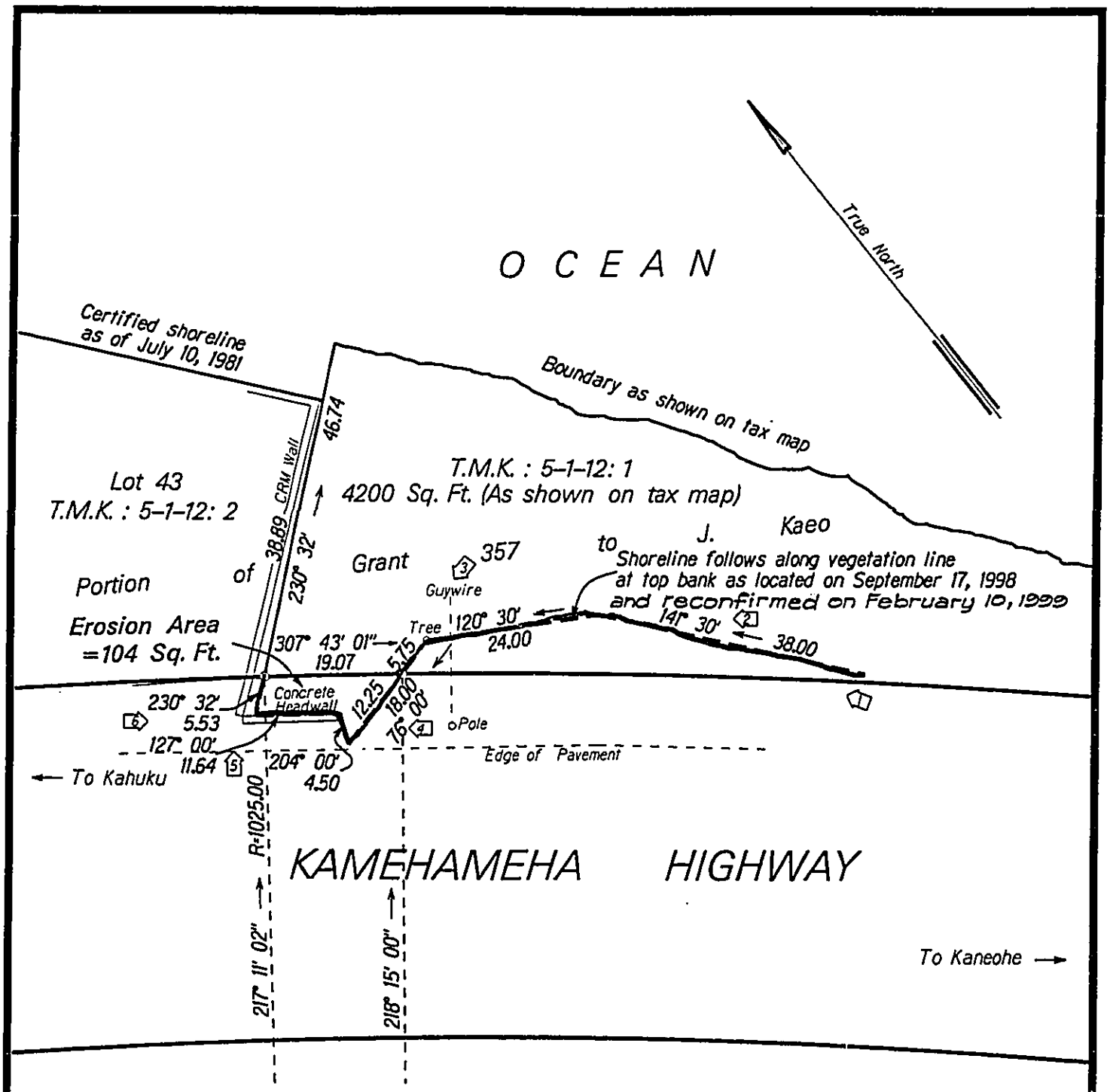
Chairman, Board of Land and Natural Resources

Note:
⟨1⟩ Denotes Photograph number and direction taken

Tax Map Key: 5-1-09: 28(Por.)
5-1-02: 25(Por.)
Data Folder: 848

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Traced by:
Checked by:



ALVA Y. NOMURA
LICENSED PROFESSIONAL LAND SURVEYOR
No. 6001
HAWAII, U.S.A.

Alva Y. Nomura
This work was prepared by me or under my supervision

SHORELINE SURVEY
FOR KAMEHAMEHA HIGHWAY
DRAINAGE IMPROVEMENTS
PROJECT NO. 83D-01-98
AT KAAAWA, KOOLAULOA, OAHU, HAWAII

October 12, 1998
February 10, 1999

Scale: 1 in. = 20 ft.

Note:
◁ Denotes Photograph number and direction taken

The shoreline as located and certified and delineated in red is hereby confirmed as being the actual shoreline as of FEB 10 1999

Timothy E. Johns
Chairman, Board of Land and Natural Resources

Tax Map Key: 5-1-12: 1(Portion)
Data Folder: 848

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

Traced by:
Checked by:

SITE-SPECIFIC BEST MANAGEMENT PRACTICES

I. SITE 1: CONCRETE BOX CULVERT IN THE VICINITY OF POLINALINA ROAD

A. Pre-Construction:

The work crews (Contractor and State) shall be briefed on the requirements of the Water Quality Certification (WQC) prior to construction to ensure that the BMPs are implemented properly.

The Project Engineer (State) shall assign at at least one person(s) to be familiar with the WQC Permit requirements and to oversee the construction activities to assure that these requirements are followed.

B. During Construction:

1. All loose debris such as litter and vegetation in the vicinity of the construction site shall be removed prior to the start of construction activities. These include areas along the Kaaawa beach fronting the proposed culverts.

2. Installation of Structural Best-Management Practices:

a. Sand or gravel-filled bags wrapped with filter fabric shall be installed at the outlet of the proposed culverts as shown in Figure 1 and 2. Each bag shall weigh at least 25 pounds.

b. The bags shall be inspected at the beginning and end of each working day. If repairs are necessary, construction activities shall cease until the bags are repaired and in good working order.

c. All construction vehicles and machinery shall be allowed in the sandy beach area.

3. Construction Activities:

a. Construction shall begin at the mauka side (inlet) and progress towards the makai side (outlet).

b. Excavated material (soil, concrete, asphalt, etc.) from backhoes shall be transfered into dumped trucks and disposed of off-site as soon as possible. Temporary stockpilling of excavated material shall be allowed only along the mauka side and away from the existing drainageway. All stockpiled material shall be removed by the end of each working day. There shall be no stockpiled material (excavated/backfill) left overnight.

c. Concrete pouring for the headwall structure at the inlet shall be done when the upstream channel is dry.

d. Aggregate gradation of the bed course material shall be equivalent to "#3B Fine" as specified in the Specifications. The "3B Fine" bed course will not have to be compacted therefore eliminating construction dewatering.

e. Concrete box culvert shall be pre-cast as specified on the Contract Plans. Installing pre-cast sections will lessen the potential discharge of poured concrete into State waters.

f. Concrete pouring for the headwall structure at the outlet shall be done when the upstream channel is dry, and during periods of calm ocean tides where there will be little or no ocean water *entering construction site.*

4. All loose debris such as litter and vegetation, shall be removed from the construction site after each days work.

C. Post-Construction:

All loose debris, litter, excess material from construction activities shall be removed in and around the project area prior to removing the structural BMPs.

The roadway embankments and the sandy beach area affected by the construction activities shall be restored to its original condition.

Other BMPs:

No construction activities shall be conducted during inclement weather, and/or during high surf where ocean water will splash onto the roadway.

Dump trucks hauling material from the construction site will be covered with a tarpaulin.

COASTAL ZONE MANAGEMENT PROGRAM
OBJECTIVES AND POLICIES

1. Recreational resources

   The construction of the box culvert at both sites will not prevent public use of coastal recreational resources.

2. Historic resources

   During construction of the box culvert, an archaeological monitoring plan will be implemented to protect and preserve natural and manmade historic resources that are significant to Hawaiian and American history and culture.

3. Scenic and open space resources

   The construction of the box culvert at both sites will not impact the quality of coastal scenic and open space resources.

4. Coastal ecosystems

   The construction of the box culvert at both sites will not impact the quality of coastal ecosystems.

5. Economic uses

   The construction of the box culvert at both sites will reduce the tendency for flooding in the area allowing local businesses greater growth potential.

6. Coastal Hazards

   The primary concern of this project is to increase the capacity of the existing drainage system and reduce the possibility of flooding in the project area. Reducing the possibility of flooding in the area will increase public safety and decrease potential property damage.

7. Managing development

   This item does not apply to this project.

8. Public participation

   The construction of this project will increase awareness of the local residences to the flooding situation occurring in their community.

9. Beach Protection

The construction of the box culvert at both sites will not prevent public use of coastal recreational resources.

10. Marine resources

The State's ocean resources management plan does not apply to this project.

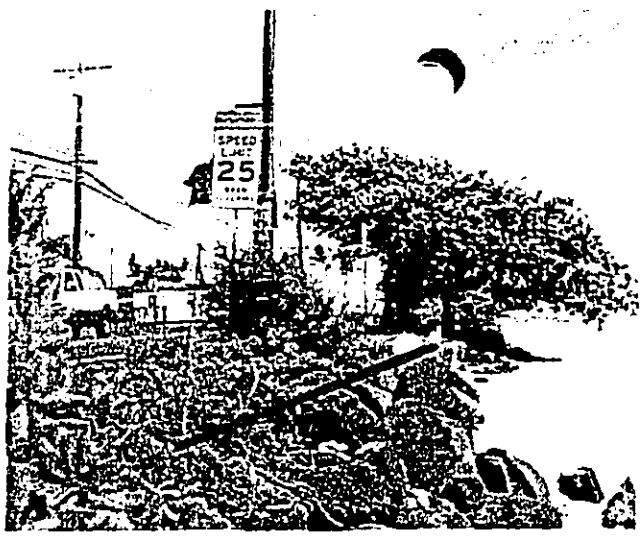


Photo 1

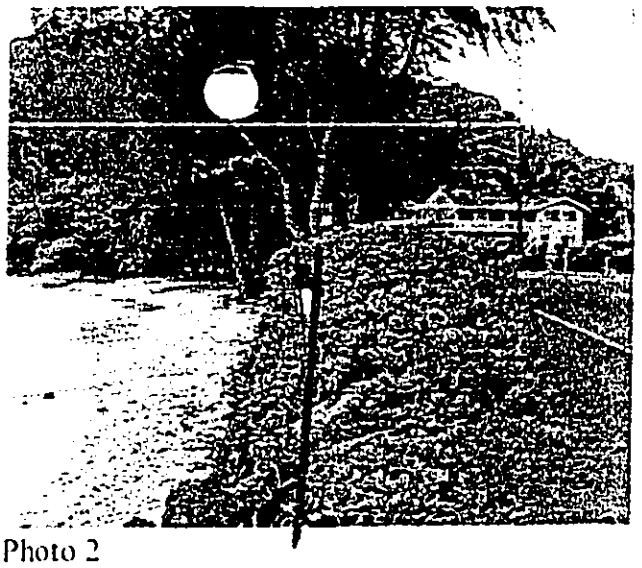


Photo 2

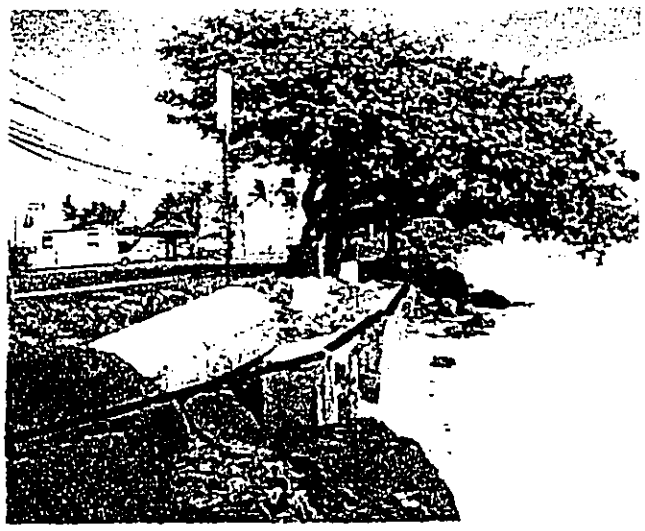


Photo 3

Photo 4

Photo 5

Photo 6

Shoreline Survey
for Kamehameha Highway Drainage Improvements
Project No. [illegible]

TMK: [illegible] Portion
[illegible] Portion

September [illegible], 2008 [illegible] am

Photo 1

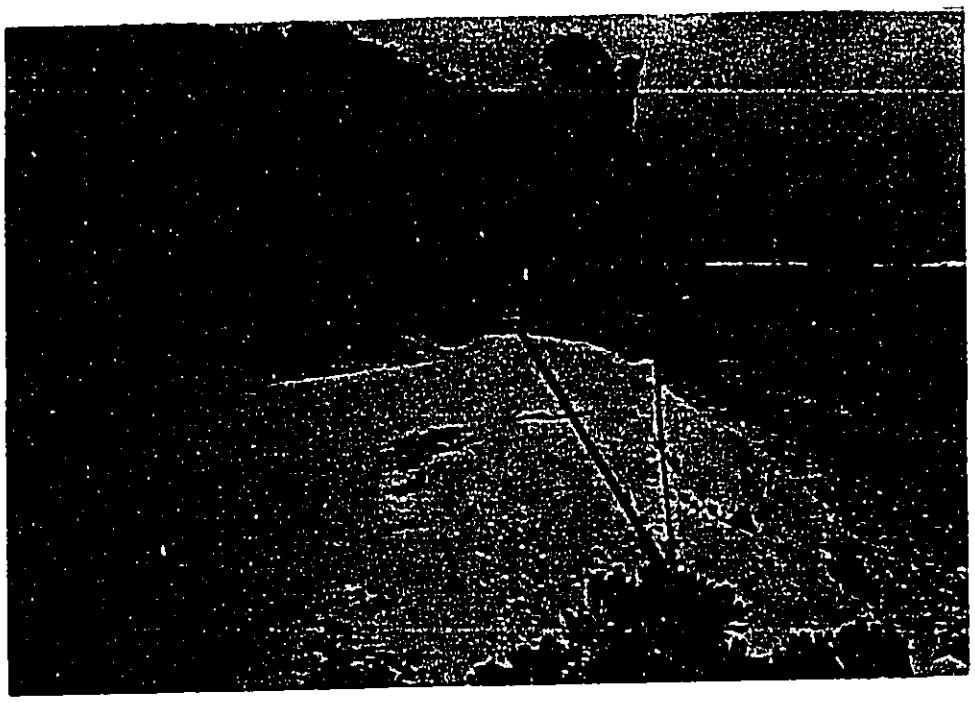


Photo 2

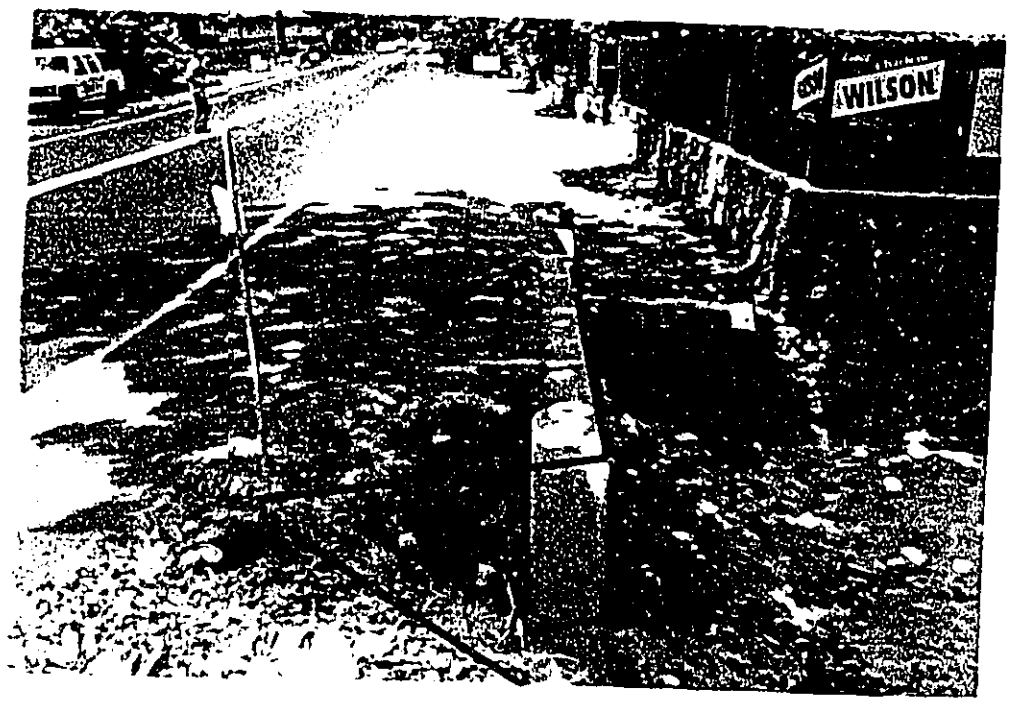
Shoreline Survey
for Kamehameha Highway Drainage Improvements
Project No. 830-01-98

TMK: 5-1-12:1 (Portion)

September 17, 1998 1:00 pm

Photo 3

Photo 4



Shoreline Survey
for Kamehameha Highway Drainage Improvements
Project No. 830-01-98

TMK: 5-1-12:1 (Portion)

September 17, 1998 1:00 pm

Photo 5

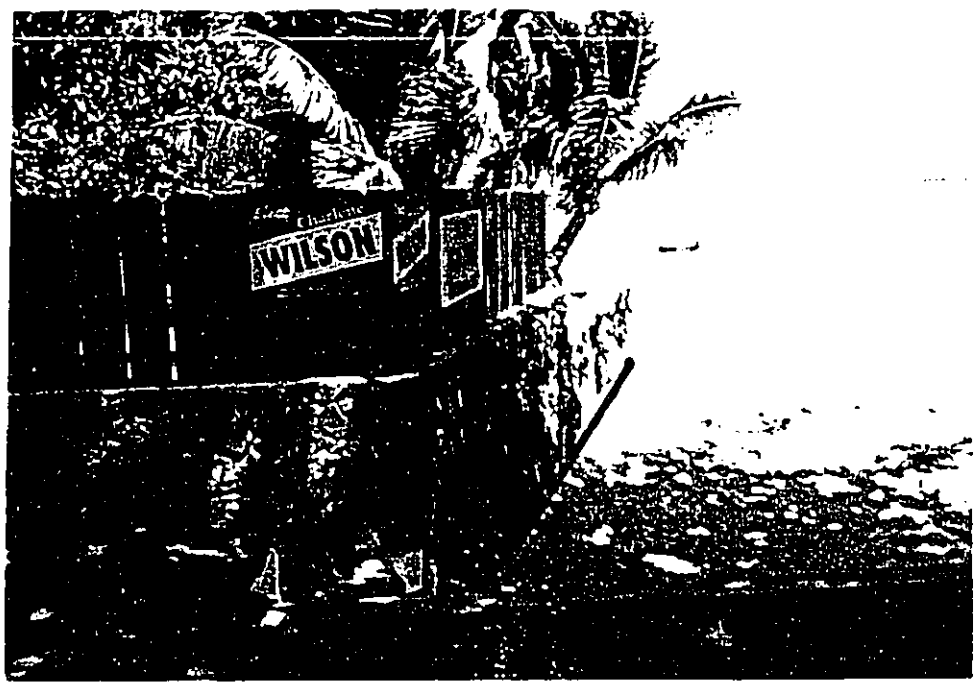
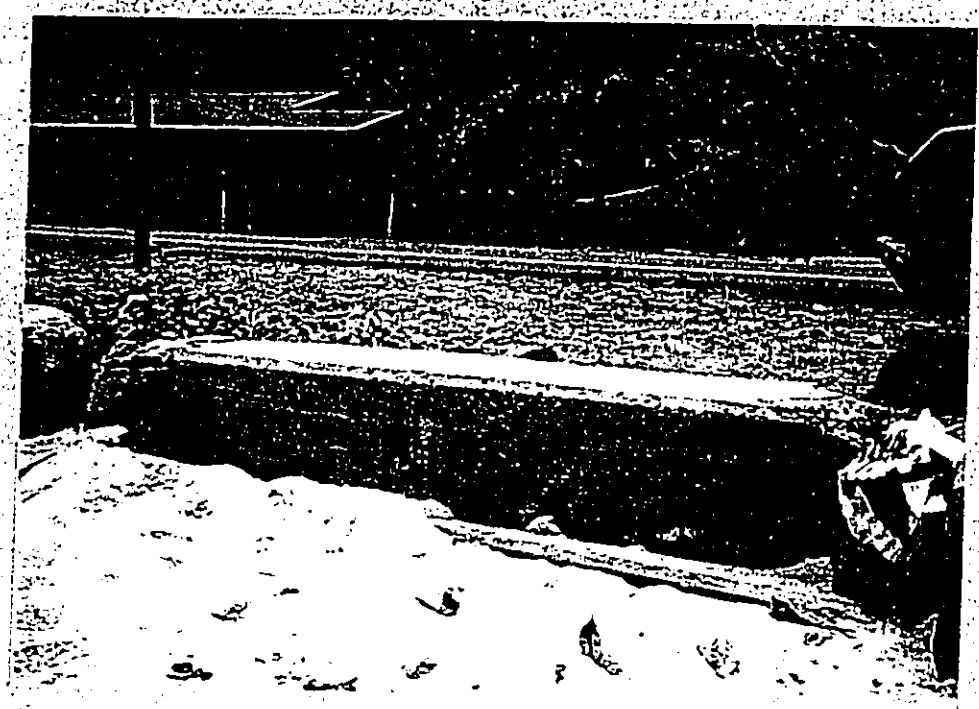


Photo 6

Shoreline Survey
for Kamehameha Highway Drainage Improvements
Project No 830-01-08

TMK 5-1-12 1 (Portion)

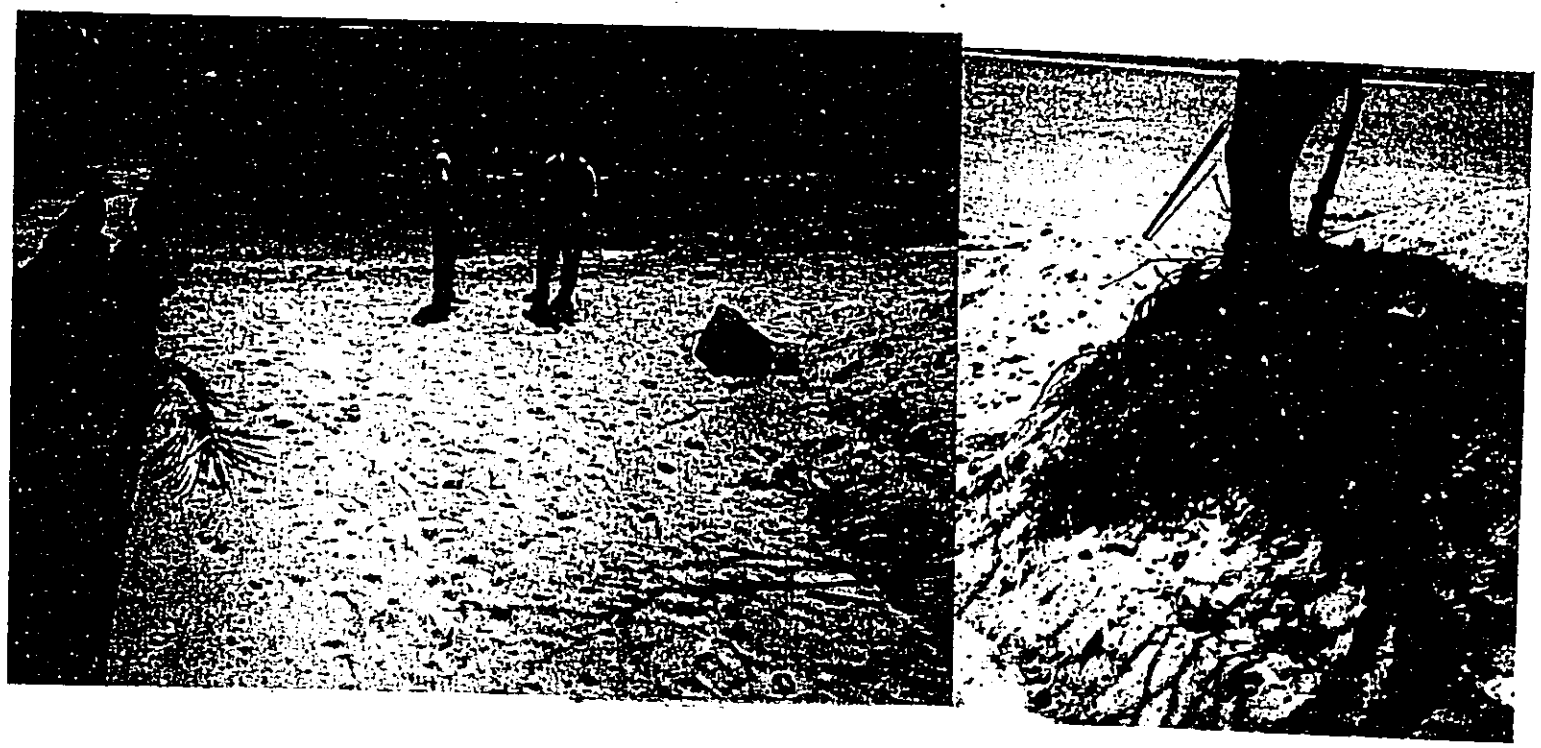
September 17, 1998 1 00 pm



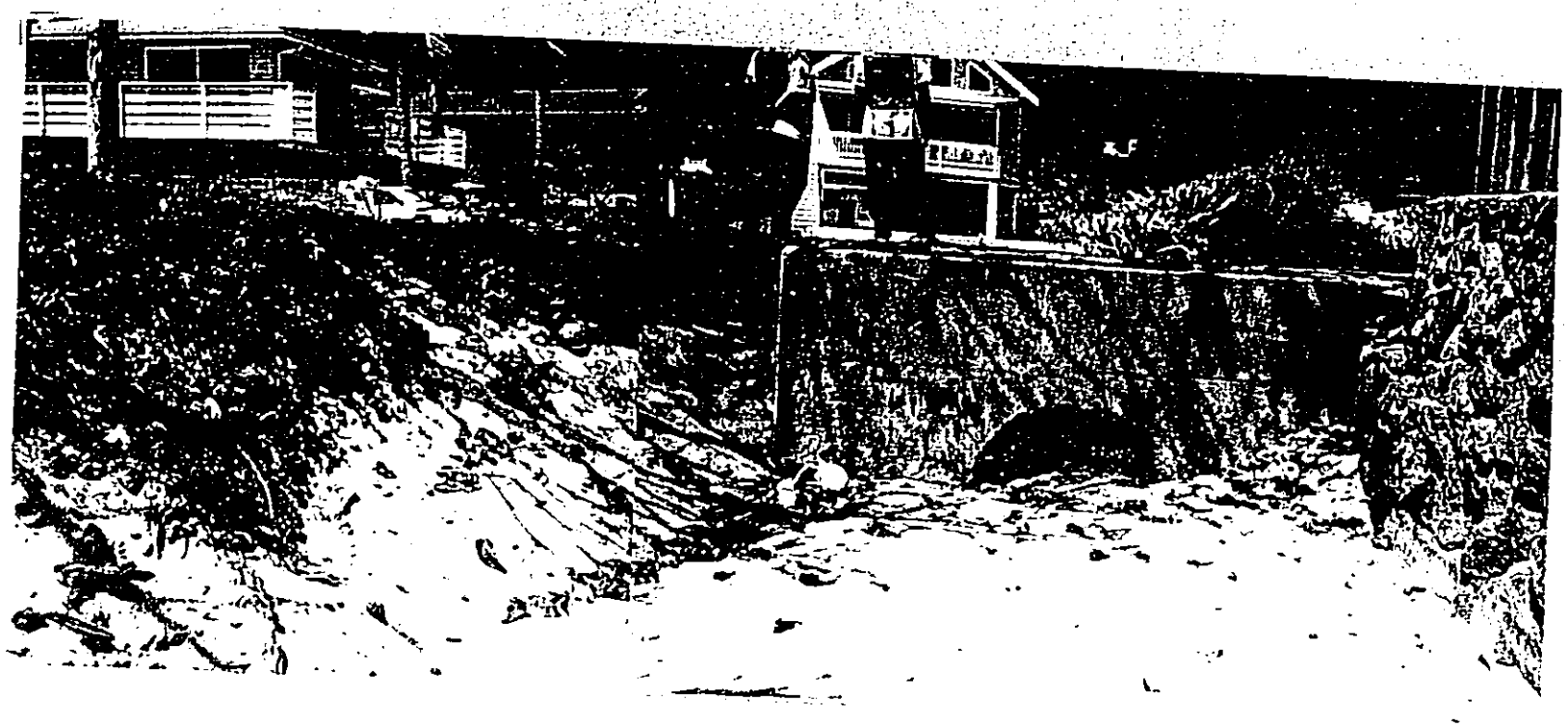
Location of Proposed Outlet of New 8'x4' Concrete Box Culvert,
Vicinity of Kaaawa Elem. School, Facing Mauka

Outlet Headwall of Existing 48" RCP, Facing Makai

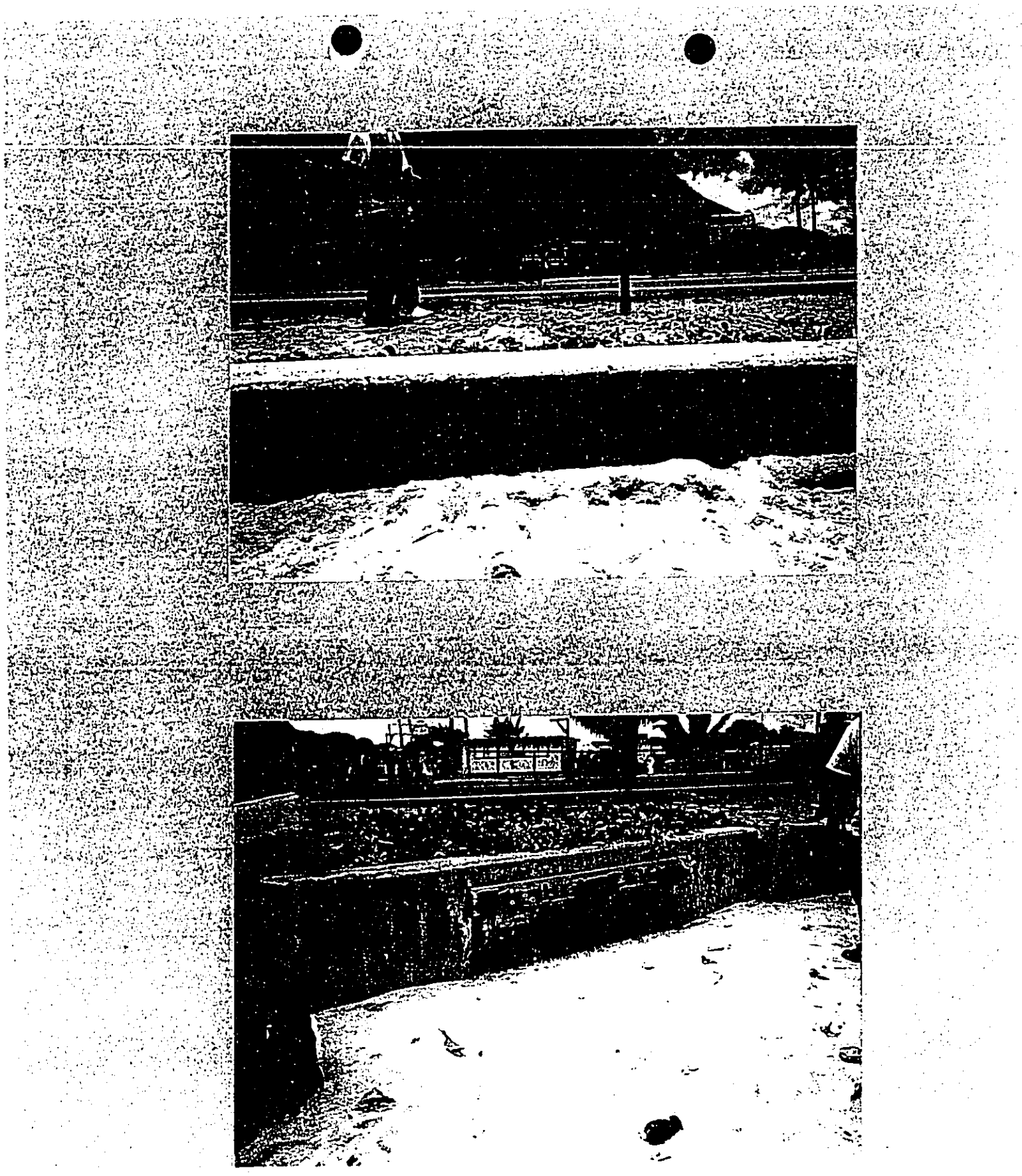
Outlet Headwall of Existing 48" RCP, Facing toward Laie



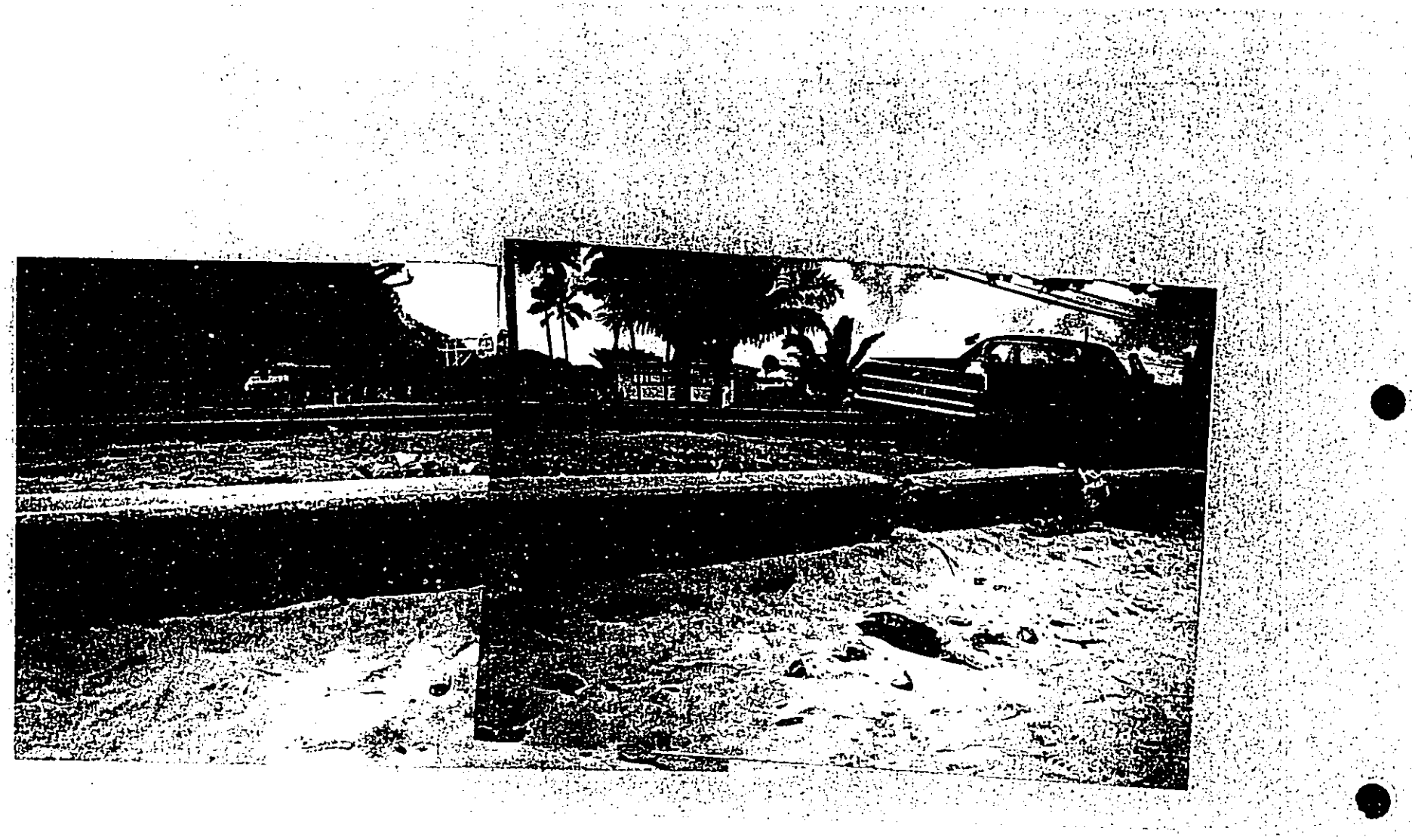
Outlet of Existing 48" RCP, Facing Makai



Outlet Headwall of Existing 48" RCP
Vicinity of Polinalina Rd. Looking Mauka



Outlet of Existing 6'x2' Concrete Box
Culvert, Facing Mauka



Location of Proposed Outlet of New 8'x4' Concrete Box Culvert,
Vicinity of Kaaawa Elem. School, Facing Mauka

Comments to
Pre-Draft and Draft Environmental Assessment

GTE Hawaiian Tel
Beyond the call

GTE Hawaiian Telephone Company Incorporated
P.O. Box 2200 • Honolulu, HI 96841 • 808 546-4511

August 11, 1998

Mr. Ross Hironaka
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Hironaka

Subject: KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS
VICINITY OF POLINALINA ROAD, KAAAWA, OAHU, HAWAII

We have reviewed the location and as-built plans that were submitted to our office and it appears that our existing facilities will not be affected by the construction of the proposed box culvert. The U.S. Army signal corps cable shown on the plans is inactive and has been abandoned in place. The cable can be cut and removed if it interferes with your work.

GTE Hawaiian Tel has no immediate or future construction work planned within the project area.

Should there be any questions, please call Nils Ito at 840-5847.

Sincerely,

Wayne L. Cabral

Wayne L. Cabral
Section Manager-Access Design & Construction

cc: N. Ito
File (KAAA)

DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

13 AUG 1998

MEMORANDUM FOR STATE DEPARTMENT OF TRANSPORTATION
ATTN: MR. ROSS HIRONAKA
869 PUNCHBOWL STREET
HONOLULU HI 96813-5097

FROM: 15 CES/CECC
75 H Street
Hickam AFB, HI 96853-5233

SUBJECT: Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road, TMK 5-1-8, Kaaawa, Oahu, Hawaii (Your HWY-DD 2.0438 Ltr, 3 Aug 98)

1. We have reviewed the plans for subject project and found no existing facilities that will be affected.

2. Furthermore, the Air Force has no immediate future construction work planned within the project area.

3. If you have any questions, please call Mr. Brian Akimoto at 449-2105.

ROSS W. J. LUM, P.E.
Chief, Engineering Flight
15th Civil Engineer Squadron

DEPARTMENT OF THE NAVY
PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
(MAKALAPA, HI)
PEARL HARBOR, HAWAII 96860-7300

11011
Ser 241C/ 2995
12 AUG 1998

State of Hawaii
Department of Transportation
Attn: Mr. Ross Hironaka
869 Punchbowl Street
Honolulu, HI 96813-5097

Gentlemen:

Your letter of August 3, 1998, requested verification of Navy facilities in the vicinity of Polinalina Road, Kaaawa Oahu. Upon review of documents, we were able to determine the Navy has no real estate interests or existing facilities within the project limits. We do not anticipate any future construction in these areas.

Any questions regarding this matter may be referred to Mr. Ronald Darlington at 474-5930.

Sincerely,

J. M. KILIAN
Director, Real Estate Division

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809

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

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HIGHWAYS DIVISION

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HIGHWAYS DIVISION

October 6, 19988

LD-NAV
HWY JOB No. 83D-01-98
Ref.:HWYDD208.RCM

Mr. Pericles Manthos, Administrator
Highways Division
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Manthos:

SUBJECT: Draft Environmental Assessment Preconsultation for Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road, Kaaawa, Oahu, Hawaii TMK 1st/5-1-8

Thank you for the opportunity to review and comment on the subject matter.

The Department of Land and Natural Resources has no comment to offer on the proposed project at this time.

Should you have any questions, please feel free to contact Nicholas Vaccaro of the Land Division Support Services Branch at 587-0438.

Very truly yours,

DEAN Y. UCHIDA
Administrator

c: Oahu Land Board Member
Oahu District Land Office

Oceanic CABLE
200 Akamainui Street • Mililani, Hawaii 96789-3999 • Telephone: (808) 625-2100

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HIGHWAY DIVISION
DEPT. OF TRANSPORTATION

August 5, 1998

State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813-5097

Subject: Kam Highway Drainage Improvements, Vicinity of Polinalina Road, TMK 5-1-8, Kaaawa, Oahu, Hawaii

Dear Mr. Leopardi,

In reviewing your request of cable facilities for the subject(s) mentioned above, we have found that all of our facilities are aerial. If you have any questions or concerns, Please contact me at 625-8443.

Sincerely yours,

Lori Cooper
Engineering Assistant

10/12/98 JJJ.

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HIGHWAYS DIVISION

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

JEREMY HARRIS
Mayor

KENNETH E. SPRAGUE, P.E., Ph.D.
Director

CHERYL K. OKUMA-SEPE, ESQ.
Deputy Director

ENV 98-193

October 7, 1998

Mr. Pericles Manthos
Administrator
Highway Division
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, HI 96813-5097

Dear Mr. Manthos:

Subject: Draft Environmental Assessment (DEA)
Kamehameha Highway Drainage Improvements
TMK: 5-1-8

We have reviewed the subject DEA and have no comments to offer at this time.

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

Sincerely,

for KENNETH E. SPRAGUE
Director

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 10TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4182 • FAX: (808) 523-4054

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HIGHWAYS DIVISION

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HIGHWAYS DIVISION

JEREMY HARRIS
MAYOR

WILLIAM D. BALFOUR, JR.
DIRECTOR

MICHAEL T. AMII
DEPUTY DIRECTOR

September 30, 1998

Mr. Pericles Manthos, Administrator
Highways Division
State Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Manthos:

Re: HWY-DD 2.0865
Draft Environmental Assessment for Kamehameha Highway
Drainage Improvements, Vicinity of Polinalina Road,
TMK 5-1-8, Kaaawa, Oahu, Hawaii

We have reviewed the subject document and have no comment to offer at this time.

Thank you for the opportunity to review and comment on the draft environmental assessment.

If you have any questions, please contact Mr. John Eveland, Executive Assistant, at 527-6038.

W. D. Balfour, Jr.

WILLIAM D. BALFOUR, JR.
Director

WDB:cu
(98-2247GT)

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4341 • Fax: (808) 527-5857

DIRECTOR'S OFFICE
TRANSPORTATION
SEP 30 10 27 AM

SEP 30 P2:15

JEREMY HARRIS
MAYOR

JONATHAN K. SHIMADA, PhD
DIRECTOR AND CHIEF ENGINEER

ISIDRO M. BAQUILAR
DEPUTY DIRECTOR

IN REPLY REFER TO:
PRO 98-192

September 23, 1998

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Hayashida:

Attention: Mr. Ross Hironaka, Project Manager

Subject: Draft EA for Kamehameha Highway Drainage Improvements,
Vicinity of Polinalina Road, TMK: 5-1-8, Kaaawa, Oahu, Hawaii

We have no comments. If you have any questions, please call Laverne Higa at 527-6246.

Very Truly Yours,

Jonathan K. Shimada, PhD
Director and Chief Engineer

LH

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4341 • Fax: (808) 527-5857

JEREMY HARRIS
MAYOR

JONATHAN K. SHIMADA, PhD
DIRECTOR AND CHIEF ENGINEER

ISIDRO M. BAQUILAR
DEPUTY DIRECTOR

IN REPLY REFER TO:
PRO 98-192

September 23, 1998

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Hayashida:

Attention: Mr. Ross Hironaka, Project Manager

Subject: Draft EA for Kamehameha Highway Drainage Improvements,
Vicinity of Polinalina Road, TMK: 5-1-8, Kaaawa, Oahu, Hawaii

We have no comments. If you have any questions, please call Laverne Higa at 527-6246.

Very Truly Yours,

Jonathan K. Shimada, PhD
Director and Chief Engineer

LH

BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96843
PHONE (808) 527-6180
FAX (808) 533-2714

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October 19, 1998

DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

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DEPT. OF TRANSPORTATION
HIGHWAYS DIVISION

Mr. Pericles Manthos
Administrator, Highways Division
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Manthos:

Subject: Your Letter of September 8, 1998 Regarding the Draft Environmental Assessment for the Kamehameha Highway Drainage Improvements Project, TMK: 5-1-08, Kaaawa, Oahu, Hawaii

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the proposed Kamehameha Highway drainage improvements project.

Our previous comments of July 27, 1998 regarding the submission of construction drawings, are still applicable.

If there are any questions, please contact Barry Usagawa at 527-5235.

Very truly yours,

CLIFFORD S. JAMILE
Manager and Chief Engineer

MEMO

To: file
From: Todd Nishioka
Subject: Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road
Date: September 28, 1998

Telephone Conversation with **Dept. of the Interior (Fish and Wildlife)**

· No Comment on the Draft Environmental Assessment ·

BENJAMIN J. CAYETANO
GOVERNOR
STATE OF HAWAII

KALI WATSON
CHAIRMAN
HAWAIIAN HOMES COMMISSION

E M. K. M. YAMAGUCHI
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P.O. BOX 1879
HONOLULU, HAWAII 96805

September 25, 1998

To: Pericles Manthos, Administrator, Highways Division
Department of Transportation

Attn: Ross Hironaka, Project Manager

From: Kali Watson, Chairman
for Hawaiian Homes Commission Darrell Yagodich

Subject: Draft Environmental Assessment for Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road, TMK 5-1-8, Kaaawa, Oahu, Dated September, 1998

Thank you for the opportunity to review the subject application. The Department of Hawaiian Home Lands has no comment to offer.

If you have any questions, please call Daniel Ornellas at 586-3837.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

LAWRENCE MIIKE
DIRECTOR OF HEALTH

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

AUG 0 6 1998

In reply, please refer to:

August 6, 1998

98-152/epo

Mr. Ross Hironaka
Project Manager
State Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Hironaka:

Subject: Pre-Draft Environmental Assessment
Kamehameha Highway Drainage Improvements
Polinalina Road
Kaaawa, Oahu
TMK: 5-1-8

Thank you for allowing us to review and comment on the subject project. We do not have any comments to offer at this time, however, we would like to receive a copy of the Draft Environmental Assessment. Thank you.

Sincerely,

BRUCE S. ANDERSON, Ph.D.
Deputy Director for
Environmental Health

BENJAMIN J. CAYETANO
GOVERNOR
SEIJI F. NAYA
DIRECTOR
BRADLEY J. MOSSMAN
DEPUTY DIRECTOR
RICK EGGED
DIRECTOR, OFFICE OF PLANNING

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

OFFICE OF PLANNING

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

Tel.: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-7721

September 30, 1998

MEMORANDUM

TO: Kazu Hayashida, Director
Department of Transportation

ATTN: Ross Hironaka
Project Manager, Highways Division

FROM: Bradley J. Mossman
Director, Office of Planning

SUBJECT: Draft Environmental Assessment for Kamehameha Highway Drainage Improvements, Vicinity of Poiinalina Road, TMK 5-1-8, Kaaawa, Oahu, Hawaii

We are aware that flooding due to poor drainage has been a chronic problem at the project site. Promoting coastal hazard mitigation is a principal objective of the Coastal Zone Management (CZM) Program. We, therefore, support the proposed project as it promises to help reduce property damage and health and safety risks associated with coastal flooding.

To further assist the City and County of Honolulu's Department of Planning and Permitting in reviewing applications for the required Shoreline Setback Variances and Special Management Area Use Permit, an assessment of the proposed project's compliance with the CZM objectives and policies should be included in the environmental assessment document in conformance with the Office of Environmental Quality Control's administrative rules.

If there are any questions or concerns, please contact Jeffrey Walters of our CZM Program at 587-2883.

HAWAII REVISED STATUTES
CHAPTER 205A
COASTAL ZONE MANAGEMENT

Part I. Coastal Zone Management
Section

Part II. Special Management Areas
Section

Post-it® Fax Note 7671	Date 10/14/98	# of pages ▶ 6
To TODD NISHIOKA	From JEFF WATERS	
Co./Dept	Co.	
Phone #	Phone # 7-2883	
Fax # 7-2343	Fax # 7-2899	

Part III. Shoreline Setbacks
Section

Part IV. Marine and Coastal Affairs
Section

PART I. COASTAL ZONE MANAGEMENT

§205A-1 Definitions

As used in this chapter, unless the context otherwise requires:

"Advisory group" means the marine and coastal zone management advisory group established in section 205A-3.5;

"Agency" means any agency, board, commission, department, or officer of a county government or the state government, including the authority as defined in part II;

"Coastal zone management area" means all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea;

"Coastal zone management program" means the comprehensive statement in words, maps, or other permanent media of communication, prepared, approved for submission, and amended by the State and approved by the United States government pursuant to Public Law No. 92-583, as amended, and the federal regulations adopted pursuant thereto, which describes objectives, policies, laws, standards, and procedures to guide and regulate public and private uses in the coastal zone management area, provided however the "coastal zone management program" is consistent with the intent, purpose, and provisions of this chapter;

"Land" means the earth, water, and air above, below, or on the surface;

"Lead agency" means the office of planning;

"Person" means an individual, corporation, or partnership, and an organization or association, whether or not incorporated;

"Shoreline" means the upper reaches of the wash of the waves, other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limit of debris left by the wash of the waves. [L 1977, c 188, pt of §3; am L 1979, c 200, §1; am L 1983, c 124, §7; am L 1986, c 258, §2; am L 1987, c 336, §7; am L 1988, c 352, §4; am L 1989, c 356, §4; am L 1990, c 126, §7; am L 1993, c 91, §2; am L 1995, c 104, §4; am L 1996, c 299, §3]

§205A-2 Coastal zone management program; objectives and policies

(a) The objectives and policies in this section shall apply to all parts of this chapter.

(b) Objectives

(1) Recreational resources;

(A) Provide coastal recreational opportunities accessible to the public.

(2) Historic resources;

(A) Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

(3) Scenic and open space resources;

(A) Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

(4) Coastal ecosystems;
(A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.
(5) Economic uses;
(A) Provide public or private facilities and improvements important to the State's economy in suitable locations.
(6) Coastal hazards;
(A) Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.
(7) Managing development;
(A) Improve the development review process, communication, and public participation in the management of coastal resources and hazards.
(8) Public participation;
(A) Stimulate public awareness, education, and participation in coastal management.
(9) Beach protection;
(A) Protect beaches for public use and recreation.
(10) Marine resources;
(A) Implement the State's ocean resources management plan.
(c) Policies
(1) Recreational resources;
(A) Improve coordination and funding of coastal recreational planning and management; and
(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:
(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
(ii) Requiring replacement of coastal resources having significant recreational value, including but not limited to surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
(v) Ensuring public recreational use of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
(vi) Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and

(viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, county planning commissions; and crediting such dedication against the requirements of section 46-6.

(2) Historic resources;
- (A) Identify and analyze significant archaeological resources;
- (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- (C) Support state goals for protection, restoration, interpretation, and display of historic resources.

(3) Scenic and open space resources;
- (A) Identify valued scenic resources in the coastal zone management area;
- (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- (C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and
- (D) Encourage those developments which are not coastal dependent to locate in inland areas.

(4) Coastal ecosystems;
- (A) Improve the technical basis for natural resource management;
- (B) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (C) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (D) Promote water quantity and quality planning and management practices which reflect the tolerance of fresh water and marine ecosystems and prohibit land and water uses which violate state water quality standards.

(5) Economic uses;
- (A) Concentrate coastal dependent development in appropriate areas;
- (B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and
- (C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:
  - (i) Use of presently designated locations is not feasible;

(ii) Adverse environmental effects are minimized; and
(iii) The development is important to the State's economy.

(6) Coastal hazards;
(A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;
(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;
(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program;
(D) Prevent coastal flooding from inland projects; and
(E) Develop a coastal point and nonpoint source pollution control program.

(7) Managing development;
(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
(B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and
(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life-cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

(8) Public participation;
(A) Maintain a public advisory body to identify coastal management problems and to provide policy advice and assistance to the coastal zone management program;
(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal-related issues, developments, and government activities; and
(C) Organize workshops, policy dialogues, and site- specific mediations to respond to coastal issues and conflicts.

(9) Beach protection;
(A) Locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion;
(B) Prohibit construction of private erosion- protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and
(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.

(10) Marine resources;
(A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
(B) Assure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;

(C) Coordinate the management of marine and coastal resources and activities management to improve effectiveness and efficiency;
(D) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;
(E) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
(F) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources. [L 1977, c 188, pt of §3; am L 1993, c 258, §1; am L 1994, c 3, §1; am L 1995, c 104, §5]

§205A-3 Lead agency

The lead agency shall:

(1) Receive, disburse, use, expend, and account for all funds that are made available by the United States and the State for the coastal zone management program;
(2) Provide support and assistance in the administration of the coastal zone management program;
(3) Review federal programs, permits, licenses, and development proposals for consistency with the coastal zone management program;
(4) Consult with the counties and the public in preparing guidelines to further specify and clarify the objectives and policies of the chapter to be submitted twenty days prior to the convening of any regular session of the legislature for review, modification, or enactment by the legislature;
(5) Conduct a continuing review of the administration of the coastal zone management program and of the compliance of state and county agencies with the objectives and policies of this chapter;
(6) Facilitate public participation in the coastal zone management program;
(7) Prepare and periodically update a plan for use of coastal zone management funds to resolve coastal problems and issues that are not adequately addressed by existing laws and rules;
(8) Advocate agency compliance with chapter 205A;
(9) Monitor the coastal zone management-related enforcement activities of the state and county agencies responsible for the administration of the objectives and policies of this chapter;
(10) Prepare an annual report to the governor and the legislature which shall include recommendations for enactment of any legislation necessary to require any agency to comply with the objectives and policies of this chapter and any guidelines enacted by the legislature; and
(11) Coordinate the implementation of the ocean resources management plan. [L 1977, c 188, pt of §3; am L 1979, c 200, §2; am L 1989, c 356, §5; am L 1993, c 258, §2; am L 1995, c 104, §6]

HWY-DD
2.1465

November 9, 1998

Mr. Bradley J. Mossman, Director
Department of Business,
Economic Development and Tourism
Office of Planning
P.O. Box 2359
Honolulu, Hawaii 96804

Attention: Jeffrey Walters

Dear Mr. Mossman:

Subject: Kamehameha Highway Drainage Improvements,
Vicinity of Polinalina Road, Project No. 83D-01-98
District of Kaaawa, Island of Oahu, TMK 5-1-12 and TMK 5-1-9

Thank you for your letter dated August 3, 1998, commenting on the Draft Environmental Assessment for the subject project. Your interest and support in this project is greatly appreciated.

We hope incorporating the Coastal Zone Management policies and objectives into the Final Environmental Assessment will adequately address your comments to the Draft Environmental Assessment.

If you have any questions, please contact Todd Nishioka at 587-2243 or Ross Hironaka at 587-2250.

Very truly yours,

for PERICLES MANTHOS
Administrator
Highways Division

TN:mf

Enclosure

bc: HWY-DD (TN)

COASTAL ZONE MANAGEMENT PROGRAM
OBJECTIVES AND POLICIES

1. Recreational resources

   The construction of the box culvert at both sites will not prevent public use of coastal recreational resources.

2. Historic resources

   During construction of the box culvert, an archaeological monitoring plan will be implemented to protect and preserve natural and manmade historic resources that are significant to Hawaiian and American history and culture.

3. Scenic and open space resources

   The construction of the box culvert at both sites will not impact the quality of coastal scenic and open space resources.

4. Coastal ecosystems

   The construction of the box culvert at both sites will not impact the quality of coastal ecosystems.

5. Economic uses

   The construction of the box culvert at both sites will reduce the tendency for flooding in the area allowing local businesses greater growth potential.

6. Coastal Hazards

   The primary concern of this project is to increase the capacity of the existing drainage system and reduce the possibility of flooding in the project area. Reducing the possibility of flooding in the area will increase public safety and decrease potential property damage.

7. Managing development

   This item does not apply to this project.

8. Public participation

   The construction of this project will increase awareness of the local residences to the flooding situation occurring in their community.

9. Beach Protection

The construction of the box culvert at both sites will not prevent public use of coastal recreational resources.

10. Marine resources

The State's ocean resources management plan does not apply to this project.

HWY 2012

...MIN J. CAYETANO
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

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

DEPUTY
GILBERT COLOMA-AGARAN

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

August 3, 1998

Pericles Manthos, Administrator
Highways Division
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

LOG NO: 21998
DOC NO: 9807EJ51

Dear Mr. Manthos:

SUBJECT: Chapter 6E-8 Historic Preservation Review -- Pre-Draft Environmental Assessment for Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road and Ka'a'awa Elementary School
Ka'a'awa, Ko'olauloa, O'ahu
TMK: 5-1-8

Thank you for the opportunity to review the pre-draft EA for the proposed drainage improvements to two areas along Kamehameha Highway at Ka'a'awa. The proposed improvements include replacement of an existing 48" pipe with an 8' X 4' concrete box culvert in the vicinity of Polinalina Road and construction of a new 8' X 4' concrete box culvert adjacent to an existing 6' X 2.5' culvert in the vicinity of Ka'a'awa Elementary School. A review of our records shows that several human burials have been inadvertently discovered in the beach sands near the proposed highway improvements. Excavation activities within your project thus have the potential to have an "adverse effect" on buried historic sites that might be located at either location. Therefore, in order to ensure that the proposed highway drainage improvements will not have an "adverse effect" on significant historic sites, we request that on-site archeological monitoring be conducted by a qualified archaeologist in areas where ground disturbance will occur.

Prior to any ground disturbance, we recommend that an acceptable archaeological monitoring plan be submitted to this office for review and acceptance. An archaeological monitoring plan must contain the following eight specifications:

1) The kinds of remains that are anticipated; 2) Where in the construction area the remains are likely to be found; 3) How the expected types of remains will be treated, if found; 4) The archaeologist conducting the monitoring has the authority to halt construction in the immediate area of a find in order to carry out the plan; 5) A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan; 6) What laboratory work will be done on remains that are collected; 7) A schedule for report preparation; and 8) Details concerning the archiving of any collections that are made.

If an acceptable monitoring plan is implemented, then we believe that the proposed improvements will have "no adverse effect" on significant historic sites which may be present.

If you have any questions please call Sara Collins at 587-0013 or Elaine Jourdane at 587-0014.

Aloha,

Don Hibbard, Administrator
State Historic Preservation Division

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HIGHWAYS DIVISION

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

October 7, 1998

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

DEPUTIES

GILBERT COLOMA-AGARAN

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

MEMORANDUM

LOG NO: 22264 ✓
DOC NO: 9810SC04

TO: Pericles Manthos, Administrator
Highways Division
Department of Transportation

FROM: Don Hibbard, Administrator
Historic Preservation Division

83D-01-98

SUBJECT: **(File No. HWY-DD 2.0865) Chapter 6E-8 Historic Preservation Review of a Draft Environmental Assessment for Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road, Ka'a'awa, Ko'olauloa, O'ahu**
TMK: 5-1-008

We have reviewed the draft environmental assessment (DEA) prepared for the proposed drainage improvements to be carried out in the vicinity of Polinalina Road in Ka'a'awa, O'ahu. The proposed improvements include the replacement of an existing drainage pipe at Polinalina Road with a box culvert, and replacement of the existing box culvert near Kaaawa Elementary School with a larger box culvert.

We concur with the DEA's summary of the affected environment with regard to historic sites. It correctly states that significant historic sites, such as human burials and subsurface cultural deposits, may be inadvertently disturbed by the proposed undertakings. We further concur with the DEA's recommendation that archaeological monitoring of the drainage improvements will be carried out in accordance with an approved archaeological monitoring plan. Consequently, we believe that if an acceptable archaeological monitoring plan, reviewed and approved by our office prior to construction, is implemented, then the subject undertakings will have "no adverse effect" on significant historic sites which may be present in the project areas.

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

SC:jk

HWY 2872
HWY-DD
2.0588

August 18, 1998

TO: DON HIBBARD, Ph.D., ADMINISTRATOR
STATE HISTORIC PRESERVATION DIVISION
DEPARTMENT OF LAND AND NATURAL RESOURCES

FROM: PERICLES MANTHOS, ADMINISTRATOR
HIGHWAYS DIVISION

SUBJECT: KAMEHAMEHA HIGHWAY, DRAINAGE IMPROVEMENTS,
VICINITY OF POLINALINA ROAD, PROJECT NO. 83D-01-98
DISTRICT OF KAAAWA, ISLAND OF OAHU, TMK 5-1-8

Thank you for your letter dated August 3, 1998, commenting on the pre-draft environmental assessment (EA) for the subject project. Your interest and support in this project is greatly appreciated.

We hope the following Archaeological Monitoring Plan will adequately address your comments to the pre-draft environmental assessment.

If you have any questions, please contact Todd Nishioka at 587-2243 or Ross Hironaka at 587-2250.

TN:ra

bc: HWY-DD(RH)
HWY-DH(CM)

ARCHAEOLOGICAL MONITORING PLAN
FOR
KAMEHAMEHA HIGHWAY, DRAINAGE IMPROVEMENTS
PROJECT NO. 83D-01-98
DISTRICT OF KAAAWA, ISLAND OF OAHU
TMK 5-1-8

I. Introduction

There is a possibility that historic sites could once have extended into the project area. However, the construction of Kamehameha Highway and residential housing makes it likely that any sites that were once in the area have been severely damaged or destroyed. Still, there is a chance that remnant pieces of subsurface habitation deposits with some burials could be present near the project site. This plan is a contingency measure to cover such a possibility, establishing a process to identify and treat any such remnant that might be found.

II. Monitoring Plan

1. A professional archaeologist (minimally having a M.A. in Archaeology) shall be hired to monitor subsurface construction activities of the project.

   A. The areas to be monitored may include only parts of the project area:

      (1) If the State of Hawaii Department of Transportation (HDOT) submits information to the State Historic Preservation Division (SHPD) showing deep disturbance of prior road, canal, or bridge construction that would have exceeded the depth of habitation deposits and makes the presence of deposits highly unlikely, then these areas will not need monitoring if it is agreeable with SHPD.

      (2) Similarly, if HDOT submits information to the SHPD indicating construction will not penetrate fill areas and thus not damage depths where sites might be present and if SHPD agrees, then these areas will not need monitoring.

2. Before monitoring begins, the monitor shall ensure that archaeological information on the immediately adjacent sites reviewed. Reports containing this information are on file at the SHPD library. The monitor shall call SHPD's Archaeologist and consult on the nature of the sites in the area, to ensure that this background material has been reviewed and the monitor is adequately prepared for any sites that are found.

3. If subsurface habitation deposits and/or burials are uncovered, the monitor shall have the authority to halt construction in the immediate vicinity of the find. The monitor shall immediately contact the SHPD and advise the SHPD on the nature of the find and its potential significance and shall recommend mitigation treatment.

   A. If the find is determined to be significant by the SHPD and is solely a subsurface habitation deposit (and not a burial) and if archaeological data recovery (salvage) is merited, an archaeological data recovery scope shall be prepared by the SHPD in consultation with the monitor and HDOT. That scope shall then be carried out. Once the fieldwork portion of the scope is carried out satisfactorily and SHPD concurs, then construction may continue within the site area.

   B. If the find is not significant or if no mitigation is needed and if SHPD concurs, then construction may continue within the site area.

   C. If the find is significant and is a burial, then the contingency burial treatment plan shall be followed. The plan must allow for archaeological documentation of the context of the remains. Once the remains are removed, then construction may continue. Alternatively, if the remains are to be preserved in-place, once preservation measures are in place, then construction may continue.

4. Monitored findings, even if negative, shall be submitted to SHPD as a draft report. This report must be accepted by the SHPD as meeting the scope and SHPD guidelines on minimal standards of reporting. If revisions are requested, these revisions shall be made or a consultation meeting shall be held to resolve disagreements, and then a final report shall be submitted. The report shall include (as relevant), but not be restricted to, the following:

   A. Maps showing monitoring locations;

   B. Stratigraphic profiles of any subsurface habitation deposits, burials, or other archaeologic features;

   C. Photographs of archaeological features, excluding burials;

   D. Line drawings of all burials showing context with any archaeological features (e.g., pits) and deposits;

   E. Documentation of the nature of the deposits (a functional assessment of the nature of habitation, etc.);

   F. Documentation of the age of any habitation sites, using radiocarbon dates where possible;

G. Documentation on the findings of the nature, age and ethnicity of the burials (not using photographs); and

H. Discussion of archaeological data recovery research questions, as stated in any data recovery plans developed.

5. If the monitor or HDOT believes that monitoring is no longer necessary in part or all of the project area, because initial monitoring found no historic sites, found evidence of extensive and deep disturbance, or due to another reason, the monitor or HDOT shall notify the SHPD and request that monitoring be stopped in that area (supplying justification). If the SHPD agrees, then monitoring shall be concluded in those areas. However, should new finds of historic sites occur later in those areas, then item three (3) of the monitoring plan shall be immediately implemented.

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HIGHWAYS DIVISION

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809

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

August 10, 1998

LD-NAV

Ref.:PM98012.RCM

Mr. Pericles Manthos
Administrator, Highways Division
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Manthos:

SUBJECT: Review Draft Environmental Assessment for Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road, Kaaawa, Oahu TMK: 1st/ 5-1-08

Thank you for the opportunity to review and comment on the proposed project.

Our Commission on Water Resource Management informs us that if the proposed project performs any work within the bed and banks of a stream channel, the project may need to obtain a stream channel alteration permit and a petition to amend the interim instream flow standard for the affected stream(s).

Please be informed that any construction within the Conservation District will require a Conservation District Use Permit. The Department of Land and Natural Resources has no other comments to offer on the subject matter at this time. Should you have any questions, please contact Nick Vaccaro at 587-0338.

Very truly yours,

DEAN Y. UCHIDA
Administrator

c: Oahu District Land Office
Oahu Land Board Member

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

Highways Division
FAX No. 587-2343

DATE: October 20, 1998

No. of Pages 1
(including this sheet)

TO: *Mr. Samuel J. Lemmo*
Department of Land and Natural Resources
Land Division
1151 Punchbowl Street, Room 220
Honolulu, Hawaii 96813

FAX NO. 587-0455

FROM: DOT-HWY-DD, Glenn Kurashima (587-2243)

SUBJECT: Meeting: Conservation District Use Application for "Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road"

COMMENTS:

Attendance:
Samuel Lemmo, DLNR
Bryan Toda, DOT-HWY-DH
Todd Nishioka, DOT-HWY-DD
Glenn Kurashima, DOT-HWY-DD

Copies of Shoreline Survey (dated 10/12/98) and photographs (dated 9/17/98) shown to Sam. Discussed scope of work and area to be affected by construction. Determination made that a Conservation District Use Application will not be necessary as construction is limited to the mauka side of the shoreline.

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

JEREMY HARRIS
MAYOR

CHERYL D. SOON
DIRECTOR

JOSEPH M. MAGALDI, JR.
DEPUTY DIRECTOR

PT-8/98-4653
HWY-DD 2.0438

August 13, 1998

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
869 Punchbowl Street
Honolulu, Hawaii 96813

Attention: Mr. Ross Hironaka
Highway Design

Dear Mr. Hayashida:

Subject: **Kamehameha Highway Drainage Improvements,**
Vicinity of Polinalina Road, TMK 5-1-8, Kaaawa, Oahu, Hawaii

This is in response to your letter of August 3, 1998, regarding the subject project and confirms the telephone conversation of August 10 between our Public Transit Division's Fixed Route Operations staff and Mr. Curtis Matsuda.

As Mr. Matsuda informed our staff, your concern regarding TheBus operations is whether we are planning any construction work at our bus stops within the project limits which would impact underground utilities. We have no immediate plans for construction work at the bus stops within the project limits. Mr. Matsuda also informed us that Highway Design has identified all bus stops, benches, and shelters and a copy of the plan and profile of our existing facilities is not required.

We request that you include the following Public Transit Division, DTS note in your construction plans to insure advance notice to Oahu Transit Services, Inc. so that our bus operations will not be adversely affected:

Public Transit Division, DTS Note:

The contractor shall notify Oahu Transit Services, Inc. (OTS), TheBus contractor, Ed Sniffen (848-4571) or Lowell Tom (848-4578), two weeks prior to construction, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stops.

If there are any questions, please call John Feirer at 527-6397.

Sincerely,

CHERYL D. SOON
Director

cc: Oahu Transit Services, Inc.

MEMO

To: FILE
From: Todd Nishioka
Subject: Kamehameha Highway Drainage Improvements Vicinity of Polinalina Road
Date: October 1, 1998

Telephone Conversation with Jeyan Thirugnanam of OEQC

He asked that maps and Technical Diagrams be implemented into the Final Environmental Assessment. Furthemore, he asked where the water is going and how will the sedimentation be handled?

I told him that the water will be discharged into the ocean as it already is and the sedimentation will be handled using Best Management Practices as approved by the Department of Health.

HWY-DD
2.1466

November 9, 1998

TO: GARY GILL, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: for PERICLES MANTHOS
ADMINISTRATOR, HIGHWAYS DIVISION

ATTENTION: JEYAN THIRUGNANAM

SUBJECT: KAMEHAMEHA HIGHWAY, DRAINAGE IMPROVEMENTS,
VICINITY OF POLINALINA ROAD, PROJECT NO. 83D-01-98
DISTRICT OF KAAAWA, ISLAND OF OAHU, TMK 5-1-12 AND TMK 5-1-9

Thank you for your comment on October 1, 1998, on the Draft Environmental Assessment for the subject project. Your interest and support in this project is greatly appreciated.

We hope incorporating the location map, conceptual drawings and Best Management Practices into the Final Environmental Assessment will adequately address your comments to the Draft Environmental Assessment.

If you have any questions, please contact Todd Nishioka at 587-2243 or Ross Hironaka at 587-2250.

TN:mf

Enclosure

bc: HWY-DD (TN)

SITE-SPECIFIC BEST MANAGEMENT PRACTICES

I. SITE 1: CONCRETE BOX CULVERT IN THE VICINITY OF POLINALINA ROAD

A. Pre-Construction:

The work crews (Contractor and State) shall be briefed on the requirements of the Water Quality Certification (WQC) prior to construction to ensure that the BMPs are implemented properly.

The Project Engineer (State) shall assign at at least one person(s) to be familiar with the WQC Permit requirements and to oversee the construction activities to assure that these requirements are followed.

B. During Construction:

1. All loose debris such as litter and vegetation in the vicinity of the construction site shall be removed prior to the start of construction activities. These include areas along the Kaaawa beach fronting the proposed culverts.

2. Installation of Structural Best-Management Practices:

a. Sand or gravel-filled bags wrapped with filter fabric shall be installed at the outlet of the proposed culverts as shown in Figure 1 and 2. Each bag shall weigh at least 25 pounds.

b. The bags shall be inspected at the beginning and end of each working day. If repairs are necessary, construction activities shall cease until the bags are repaired and in good working order.

c. All construction vehicles and machinery shall be allowed in the sandy beach area.

3. Construction Activities:

a. Construction shall begin at the mauka side (inlet) and progress towards the makai side (outlet).

b. Excavated material (soil, concrete, asphalt, etc.) from backhoes shall be transfered into dumped trucks and disposed of off-site as soon as possible. Temporary stockpilling of excavated material shall be allowed only along the mauka side and away from the existing drainageway. All stockpiled material shall be removed by the end of each working day. There shall be no stockpiled material (excavated/backfill) left overnight.

c. Concrete pouring for the headwall structure at the inlet shall be done when the upstream channel is dry.

d. Aggregate gradation of the bed course material shall be equivalent to "#3B Fine" as specified in the Specifications. The "3B Fine" bed course will not have to be compacted therefore eliminating construction dewatering.

e. Concrete box culvert shall be pre-cast as specified on the Contract Plans. Installing pre-cast sections will lessen the potential discharge of poured concrete into State waters.

f. Concrete pouring for the headwall structure at the outlet shall be done when the upstream channel is dry, and during periods of calm ocean tides where there will be little or no ocean water entering construction site.

4. All loose debris such as litter and vegetation, shall be removed from the construction site after each days work.

C. Post-Construction:

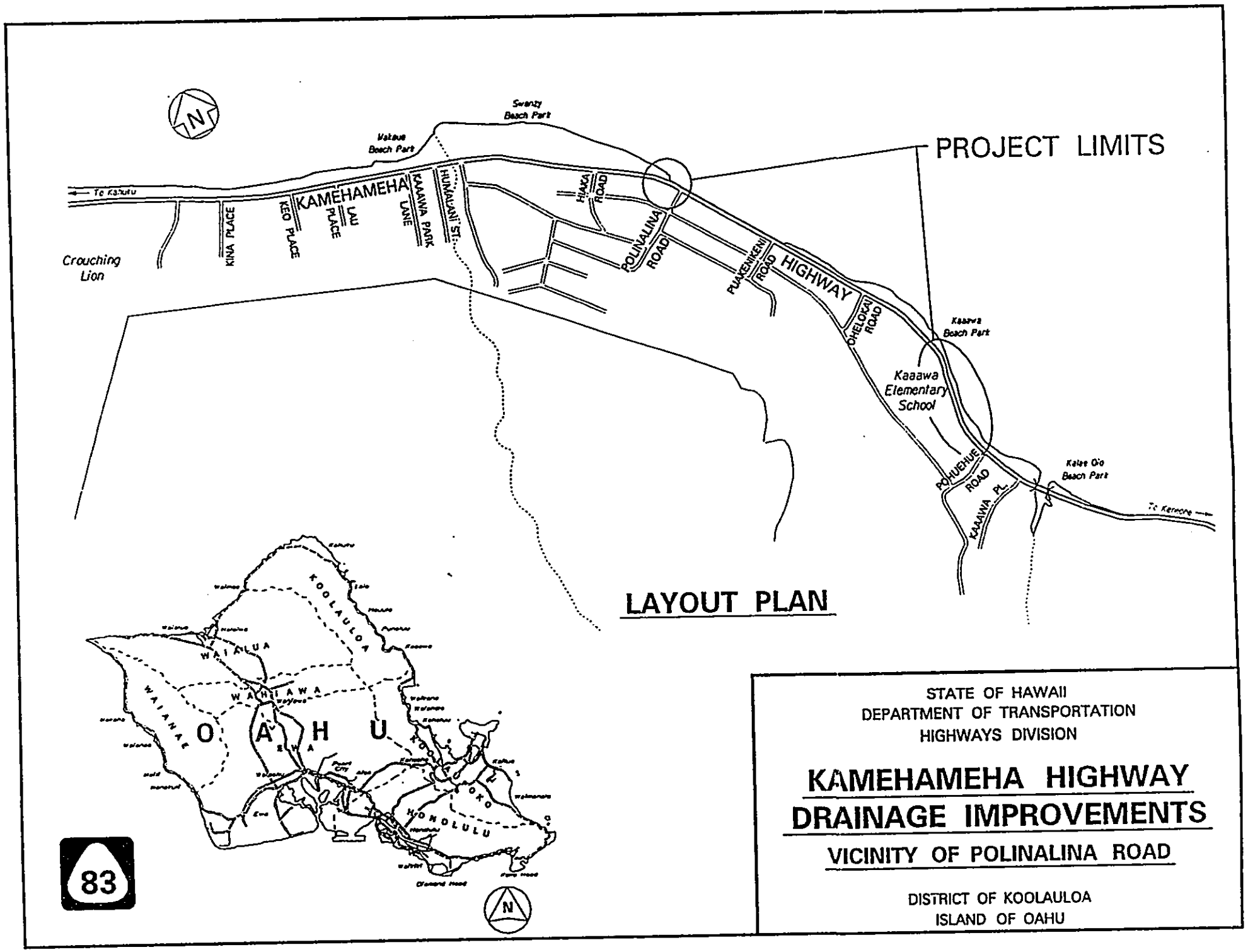
All loose debris, litter, excess material from construction activities shall be removed in and around the project area prior to removing the structural BMPs.

The roadway embankments and the sandy beach area affected by the construction activities shall be restored to its original condition.

Other BMPs:

No construction activities shall be conducted during inclement weather, and/or during high surf where ocean water will splash onto the roadway.

Dump trucks hauling material from the construction site will be covered with a tarpaulin.



LAYOUT PLAN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

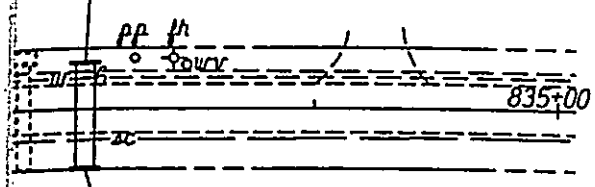
KAMEHAMEHA HIGHWAY
DRAINAGE IMPROVEMENTS

VICINITY OF POLINALINA ROAD

DISTRICT OF KOOLAULOA
ISLAND OF OAHU

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83D-01-98	1999	0	0

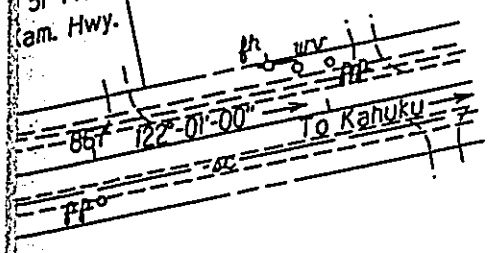
Kamehameha Hwy. @ Sta. 833+05, o/s 20' Lt.
Drainage Improvements at
Type "1" Concrete Headwall
(For Details see Sht. No. x)



Kamehameha Hwy. @ Sta. 833+05, o/s 20' Rt.
Type "2" Concrete Headwall
(For Details see Sht. No. x)

a. 865+63, o/s 20' Lt.
lwall
o. x)

51-448
am. Hwy.



y @ Sta. 865+63, o/s 20' Rt.
te Headwall
Sht. No. x)

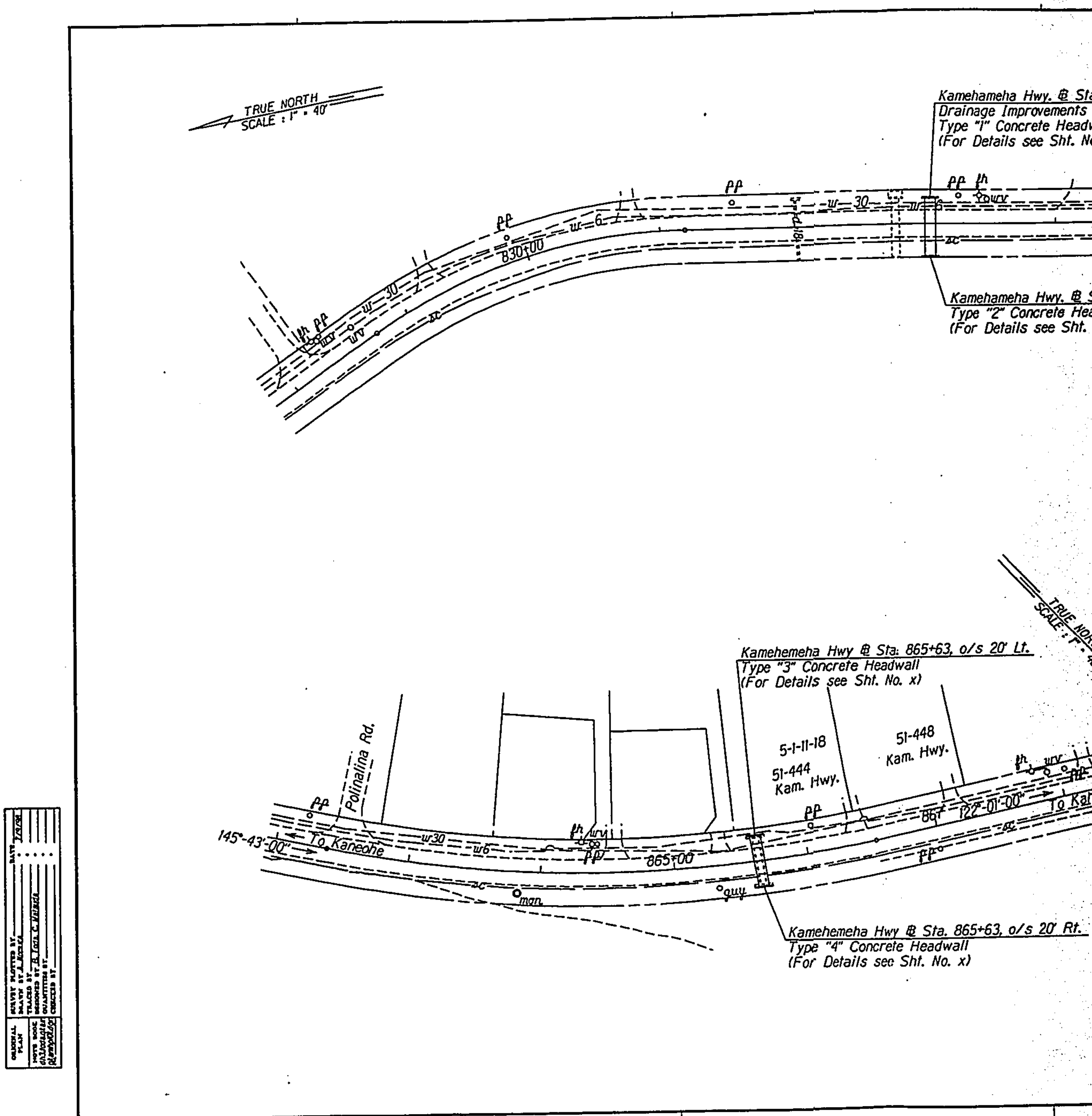
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN

KAMEHAMEHA HIGHWAY DRAINAGE IMP.
In The Vicinity of Polinalina Road
Proj. No. 83D-01-98

Scale: 1"=40' Date: Sept, 1998

SHEET No. HX OF X SHEETS


TRUE NORTH
SCALE : 1" = 40'
Kamehameha Hwy. @ Sta
Drainage Improvements
Type "1" Concrete Head
(For Details see Sht. N
Kamehameha Hwy. @ S
Type "2" Concrete Hea
(For Details see Sht.
830+00
Kamehemeha Hwy @ Sta. 865+63, o/s 20' Lt.
Type "3" Concrete Headwall
(For Details see Sht. No. x)
5-1-11-18
51-444
Kam. Hwy.
51-448
Kam. Hwy.
Polinalina Rd.
145°-43'-00"
To Kaneohe
865+00
867
122°-01'-00"
Kamehemeha Hwy @ Sta. 865+63, o/s 20' Rt.
Type "4" Concrete Headwall
(For Details see Sht. No. x)

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

LAWRENCE MIIKE
DIRECTOR OF HEALTH

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

COPY

In reply, please refer to:
EMD/CWB

October 28, 1998

Mr. George P. Young, P.E.
Chief, Operations Branch
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440

Dear Mr. Young:

Subject: Kamehameha Highway Drainage Improvements in the Vicinity of Polinalina Road, Project No.: 83D-01-98 Kaaawa, Oahu, Hawaii
File No. WQC 0000427/Department of the Army File No. 960000115

The Department of Health has reviewed the revised Pre-Construction Notification (PCN) dated October 1998 for the subject project submitted by the State Department of Transportation, Highways Division ("applicant"). Based on our review of the revised PCN, the Department has no objections to the issuance of an individual authorization under the December 13, 1996 Federal Register, Final Notice of Issuance, Reissuance and Modification of Nationwide Permits, No. 3, Maintenance, provided that the applicant:

1. Complies with plans, reports, specifications, and other related materials submitted to the Department;

2. Submits all monitoring results (photo documentation) on a weekly basis;

3. Notifies the Department's Clean Water Branch:

   a. via facsimile of the date on which construction activities will commence at least three (3) working days prior to commencement; and

   b. in writing of the date on which construction activities were completed within 14 days of completion;

4. Allows Department representatives to make periodic inspections in accordance with Section 342D-8 of the Hawaii Revised Statutes;

5. Reviews the effectiveness of the applicable monitoring and assessment plan, site-specific best management practices, and/or other environmental protection measures as often as needed;

6. Modifies the applicable monitoring and assessment plan, site-specific best management practices, and/or other appropriate environmental protection measures when found to be necessary or upon request from the Director of Health; and

7. Submits for review and comment any modifications made to information previously submitted to the Department and properly addresses all comments and concerns regarding the modifications to the Director of Health's satisfaction.

Section 401 WQC coverage authorized under File No. WQC 0000335 becomes effective on the date of this letter and shall expire under any of the following conditions: (1) two years from the date of this letter; (2) when applicable State Water Quality Standards are revised unless the subject project complies with the revisions; (3) when the applicable Department of the Army nationwide permit expires or is revised; or (4) when the subject project is completed.

The Department of Health may, on a case-by-case basis and upon the written request from the applicant, administratively extend the period of coverage if the Director of Health determines that there are no significant changes to the project scope and the changes will not, either individually or cumulatively, cause adverse impact to State water quality.

Coverage may be modified or revoked when the Director of Health has reason to believe that it is in the public interest.

Enclosed is a copy of the PCN. Should you have any questions, please contact Ms. Kris Poentis, Engineering Section of the Clean Water Branch, at 586-4309.

Sincerely,

Denis R. Lau

DENIS R. LAU, P.E., CHIEF
Clean Water Branch

KP/cr
Enclosure
c: Curtis Matsuda, Highways Division, Department of Transportation (w/o encl.)

HWY-DH
2.0895

September 9, 1998

TO: THOMAS E. ARIZUMI, P.E., CHIEF
DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
CLEAN WATER BRANCH

FROM: PERICLES MANTHOS, ADMINISTRATOR
HIGHWAYS DIVISION

SUBJECT: SECTION 401 - WATER QUALITY CERTIFICATION
KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS
IN THE VICINITY OF POLINALINA ROAD

We are submitting an application for a Section 401 permit for your approval. Enclosed for your review are two copies of the application as requested.

In accordance with the State of Hawaii, Department of Health, Water Quality Standards, there is a reasonable assurance that the proposed activity will be conducted in such a manner which will not violate the basic water quality criteria applicable to all waters and the specific water quality criteria applicable to the class of receiving waters where the proposed, "discharge," would take place.

Your cooperation on this matter will be greatly appreciated. If you have any questions, please call Mr. Curtis Matsuda of the Hydraulic Design Section at 587-2204.

CM:ra

Enclosure

bc: HWY-DH
HWY-DD

Department of Health Comments and DOT Responses:

Comment #1: The classification of the receiving water is incorrect.
Response: Complied. Classification revised to "Class A" as shown in Section IIA and IIB of the Application.

Comment #2: The PCN should mention where the "wet" excavated material will be disposed.
Response: "Wet" excavated material will be transferred into trucks and disposed of off-site. See attached Site-Specific Best Management Practices (Sites 1 and 2), Section B.3.b.

Comment #3: The PCN should mention where dewatering effluent will be disposed.
Response: We do not anticipate discharge due to dewatering activities. However, in an event that discharging into State Waters become necessary, a pumped silt control devise will be used. See attached Site-Specific Best Management Practices (Sites 1 and 2), Section D.

Comment #4: The Site-Specific BMPs states that temporary stockpiling of excavated material shall be allowed only along the makai side and away from the existing drainageway. Temporary stockpiling should occur on the mauka side.
Response: Complied. See attached Site-Specific Best Management Practices (Sites 1 and 2), Section B.3.b.

Comment #5: The Non-Structural BMPs described maintenance of a silt fence, sediment basin, and diversion dike. However, these measures were not previously mentioned as mitigative measures.
Response: The Non-Structural BMPs was originally intended to be "generic"; BMPs have been revised specifically for the project.

Comment #6: As required by File No. WQC 0000335, Item 5, evidence that the structure to be repaired or rehabilitated was previously authorized by the Honolulu Engineer District or the Department of Health. and that the structure is currently serviceable should be included in the PCN.
Response: See Section X of the Application.

HWY-DH
2.1441

October 19, 1998

TO: THOMAS E. ARIZUMI, P.E., CHIEF
DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
CLEAN WATER BRANCH

FROM: for PERICLES MANTHOS, ADMINISTRATOR
HIGHWAYS DIVISION

SUBJECT: SECTION 401 - WATER QUALITY CERTIFICATION
KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS
IN THE VICINITY OF POLINALINA ROAD

Enclosed for your review and approval are two copies of the revised Water Quality Certification (WQC). We have addressed your comments (letter no. C1003KP dated October 2, 1998) and have incorporated them into the revised WQC.

In accordance with the State of Hawaii, Department of Health, Water Quality Standards, there is a reasonable assurance that the proposed activity will be conducted in such a manner which will not violate the basic water quality criteria applicable to all waters and the specific water quality criteria applicable to the class of receiving waters where the proposed, "discharge," would take place.

Your cooperation on this matter will be greatly appreciated. If you have any questions, please call Mr. Curtis Matsuda of the Hydraulic Design Section at 587-2204.

Enclosure

CM:ra

bc: HWY-DH
HWY-DD

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

RECEIVED
'98 SEP 30 A10:01
DESIGN BRANCH
HIGHWAYS DIVISION
DEPT. OF TRANSPORTATION

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

98-07202(DT)
'98 EA Comments Zone 5

September 29, 1998

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
Aliiaimoku Hale
869 Punchbowl Street
Honolulu, Hawaii 96813

Attn: Ross Hironaka

Dear Mr. Hayashida:

Draft Environmental Assessment (EA)
Drainage Improvements, Kaaawa, Oahu
Tax Map Key: 5-1-8

Thank you for the opportunity to review your Draft EA. Earlier, we reviewed your Pre-Draft EA and prepared comments for the project. We are awaiting the outcome of your shoreline survey to determine whether the new box culvert near Kaaawa Elementary School will require a Shoreline Setback Variance. As mentioned in your EA, the culvert will also require a Special Management Area Use Permit. We have no further comments on your EA.

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

Very truly yours,

for JAN NAOE SULLIVAN
Director of Planning
and Permitting

JNS:am

g:zd\9807202.djt

DEPARTMENT OF PLANNING AND PERMITTING

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
Phone: (808) 523-4414 • Fax: (808) 527-6743

RECEIVED
AUG 12 3 53 PM '98
DEPARTMENT OF TRANSPORTATION
SERVICES

'98 AUG 13 AM 8:33

JEREMY HARRIS
MAYOR

JAN NAOE SULLIVAN
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

98-05383(DT)
'98 EA Comments Zone 5

August 11, 1998

Mr. Kazu Hayashida, Director
Department of Transportation
State of Hawaii
Aliiaimoku Hale
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Hayashida:

Preliminary Review For Kamehameha Highway
Drainage Improvements, Kaaawa, Oahu
Tax Map Key: 5-1-8

We have reviewed your proposal to replace an existing 48-inch drainage pipe with a 8-foot by 4-foot concrete box culvert to improve the current drainage capacity and minimize flooding potential. Also, a new 8-foot by 4-foot concrete box culvert is proposed near Kaaawa Elementary School to minimize the flooding potential at the school and adjacent lots. We understand that all work will be within Kamehameha Highway.

The replacement of the existing 48-inch drainage pipe with the concrete culvert is within the Special Management Area (SMA), however, is exempt from Chapter 25, Revised Ordinances of Honolulu, under Section 1.3(2)(B)(D). The new box culvert near Kaaawa Elementary School will require a Special Management Area Use Permit.

The Drainage Plan you submitted does not indicate the location of the ocean and the distance the proposals are from the shoreline. The Drainage Plan should be revised to indicate the proposals and their distance from the shoreline. If the proposals are less than 40 feet from the shoreline, a Shoreline Setback Variance (SV) will be required. An SV will not be required if the proposals are between 40 to 55 feet from the shoreline and a current certified shoreline survey is submitted.

We would like to review the DEA when it becomes available.

If you have any questions regarding this letter, please contact Dana Teramoto of our staff at 523-4648.

Very truly yours,

LORETTA K.C. CHEE
Acting Director of Planning
and Permitting

LKCC:am

g:zd\9805383.djt

CORRECTION

THE PRECEDING DOCUMENT(S) HAS
BEEN REPHOTOGRAPHED TO ASSURE
LEGIBILITY
SEE FRAME(S)
IMMEDIATELY FOLLOWING

We would like to review the DEA when it becomes available.

If you have any questions regarding this letter, please contact Dana Teramoto of our staff at 523-4648.

Very truly yours,

LORETTA K.C. CHEE
Acting Director of Planning
and Permitting

LKCC:am

g:zd\9805383.djt

HWY-DD
2.1996

DEC 1 8 1998

Ms. Jan Naoe Sullivan, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Attention: Ms. Dana Teramoto

Dear Ms. Sullivan:

Subject: Kamehameha Highway Drainage Improvements, Vicinity of Polinalina Road
Project No. 83D-01-98, Kaaawa, District of Koolauloa, Island of Oahu

Thank you for reviewing the Pre-Draft Environmental Assessment and Draft Environmental Assessment. We are currently waiting on the Right-of-Entry from Kualoa Ranch to proceed with the Certification of the Shoreline Survey by the Department of Land and Natural Resources. The Department of Transportation intends to apply for a Shoreline Setback Variance and a Minor Special Management Area Use Permit as per your comments.

Should you have any questions regarding this letter, please contact Todd Nishioka at 692-7571 or Ross Hironaka at 692-7575.

Very truly yours,

KAZU HAYASHIDA
Director of Transportation

TN:ra

bc: HWY-DD(RH)

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

REPLY TO
ATTENTION OF

October 2, 1998

Civil Works Branch

Mr. Pericles Manthos
Administrator
State of Hawaii
Department of Transportation
Highways Division
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Manthos:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (DEA) for the Kamehameha Highway Drainage Improvements Project, Vicinity of Polinalina Road, Kaaawa, Oahu (TMK 5-1-8). The following comments are provided in accordance with U.S. Army Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

a. Based on the information provided, a DA permit will be required for the project. For further information, please contact Ms. Lolly Silva of our Regulatory Section at 438-9258 and refer to file number 980000340.

b. The drainage information provided on page 4 of the DEA is correct.

Due to the recent 1998 reorganization of the local Corps of Engineers office, all correspondence concerning comments to environmental and planning documents should be sent to the Honolulu Engineer District, Attention: CEPOH-ED-C. Thank you for your attention to this matter.

Sincerely,

Paul Mizue, P.E.
Chief, Civil Works Branch

HWY-DH
2.0836

September 3, 1998

Department of the Army
U. S. Army Engineer District, Honolulu
Regulatory Branch
Building T-1, First Floor
Fort Shafter, Hawaii 96858

Attention: Ms. Lolly Silva

Gentlemen:

Subject: Kamehameha Highway Drainage Improvements in the Vicinity of Polinalina Road, Project No. 83D-01-98

Enclosed is our ENG FORM 4345 application for the processing of a 404 permit or applicable Nationwide Permit.

We are enclosing the following items for your review.

1. One copy of the 404 Permit Application;
2. One copy of the 404 Permit Environmental Questionnaire; and
3. One set of Preliminary Plans of the Project.

Please send a determination on which type of permit is required, or if 401 permit is required, to the Department of Health, Clean Water Branch. Please also inform us of your determination or if any additional requirements are necessary to process our application.

Your prompt response regarding this application will be greatly appreciated. In response to this request, please reply to the attention of Mr. Ross Hironaka. Should you have any questions, please call Curtis Matsuda at 587-2204.

Very truly yours,

for PERICLES MANTHOS
Administrator
Highways Division

CM:ra

Enclosures

bc: HWY-DH
HWY-DD

BENJAMIN J. CAYETANO
GOVERNOR

DIRECTOR'S OFFICE
DEPT. OF
TRANSPORTATION
FEB 26 10 38 AM '99

GARY GILL
DIRECTOR

RECEIVED
MAR 2 1999
DEPARTMENT OF TRANSPORTATION
HIGHWAY-DO

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

February 22, 1999

RECEIVED
'99 MAR -2 A10:36

Kazu Hayashida, Director
Department of Transportation
869 Punchbowl St.
Honolulu, HI 96813

Attention: Ross Hironaka

Dear Mr. Hayashida:

Subject: Draft Environmental Assessment (EA) for Kamehameha Highway Drainage Improvements, Polinalina Road and Kaaawa Elementary School

In order to reduce bulk and conserve paper, we recommend printing on both sides of the pages in the final document. In addition we have the following comments:

Proximity to shoreline: In the final EA include a copy of the certified shoreline with a notation showing how close the facilities will be to the shoreline. If the facilities are indeed in the shoreline setback, please also include a discussion of those questions from the enclosed **Shoreline Hardening Policy and Environmental Assessment Guidelines** which apply to this project.

Increased sedimentation: Increased sedimentation in coastal waters is a possible impact of this project. The draft EA states that impacts from runoff will be mitigated by Best Management Practices, but the BMP attachment does not address runoff or sedimentation. In the final EA list the Best Management Practices that specifically deal with this.

Timeframe: What are the anticipated start and end dates of this project?

If you have any questions, call Nancy Heinrich at 586-4185.

Sincerely,

for Gary Gill
Interim Director

Enc.

SHORELINE HARDENING POLICY AND ENVIRONMENTAL ASSESSMENT GUIDELINES
OFFICE OF ENVIRONMENTAL QUALITY CONTROL, DECEMBER 1998

It is the policy of the State of Hawaii under HRS Chapter 205A to discourage all shoreline hardening that may affect access to, or the configuration of, our island beaches.

Any Environmental Assessment prepared in conjunction with an application to construct a seawall, revetment or similar structure, or an activity that will alter in any way littoral processes affecting the shoreline, should be accompanied by appropriate justification and detailed studies including, but not limited to, the following:

1. Historical shoreline analysis of coastal erosion and accretion rates

This should include a description of all movements of the neighboring shoreline over at least the past 30 years. This analysis should be based, at least in part, on aerial photographs available through government agencies and private vendors.[1] The analysis should provide a detailed history of erosion and accretion patterns using all available evidence. This analysis should include descriptions of shoreline erosion rates, a map (with scale, north arrow, and title) showing past positions of the shoreline in the project area, and an analysis of the causes of erosion. It is especially important to describe how the project will mitigate the cause(s) of erosion, and avoid exacerbating erosion on the adjacent shoreline.

2. Shoreline type

A description of the nature of the affected shoreline, whether sandy, rocky, mud flats or any other configuration. The history and characteristics of adjoining sand dunes, streams and channels, and reefs should be included.

3. Site maps

Submit maps with title, north arrow and scale, and photographs that clearly show the current certified shoreline, previous certified shorelines, the private property line and the location of the proposed structure. Any nearby public access right-of-way should also be depicted. Applicants should also include a color copy of a color vertical aerial photograph[2] that shows the project area and the adjacent offshore region. The applicant may wish to identify important components of the project on the color photo. Color aerial photos exist for most of the shoreline area of Hawaii and often clearly show

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[1]Aerial photographs may be obtained from Air Surveys Hawaii, Inc.; Towill, R.M., Corp.; City and County of Honolulu, Coastal Lands Program, Department of Planning and Permitting; DBEDT, Office of Planning; and the various planning and permitting departments in each county.

[2]Color vertical aerial photographs usually can be purchased at reasonable price from Air Surveys Hawaii, Inc.

important geologic and geographic features that are critical to fully evaluating the environmental context, and even the likelyhood of success, of a proposed project. Evaluation of an aerial photo of a project site can be an important tool yielding significant information relevant to the applicants planning efforts.

4. Beach profiles

Submit beach profiles that extend offshore at appropriate intervals along the beach indicating the width and slope of both the submerged and dry portions of the beach and showing major features of the beach. Profiles should extend from the mauka toe of the primary dune to the offshore depth of closure of profile fluctuations.[3]

5. Existing walls

Submit an analysis of any existing nearby walls or revetments and their cumulative impacts on the shoreline.

6. Description of improvements

A description of structures and improvements (such as homes or swimming pools) on the subject property, their distance from the property line and shoreline, how they may be affected by the construction of the proposed hardening project, and the specific feasibility of relocating them as a hazard mitigation activity.

7. Coastal hazard history

A coastal hazard analysis for the area in question. This should include any relevant coastal processes such as hazardous currents and seasonal wave patterns, including a description of the recent incidence of damaging high waves, high winds or water levels from storms, vulnerability to tsunami, and the best estimate of Base Flood Elevations and flood zone designation as mapped by the FEMA Flood Insurance Rate Maps.

8. Waves and currents

A description of the wave and current regime acting along the shoreline in question, including, a wave refraction analysis (one simple form of this analysis is to describe wave crest patterns as shown in an aerial photograph), a description of littoral currents and their seasonal patterns and the impact of the proposed activity on these patterns.

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[3] Note: Please refer to U.S. Army Corps of Engineers Coastal Engineering Technical Notices II-31 (11/93), II-40, 3/98, and other relevant documents for guidance.

9. Sediment movement

If the proposed activity involves any action that may interfere with the normal pattern of sediment transport along the coast, or alter in any way the morphology of the shoreline or the resident sand volume, applicants must submit a description of these alterations and their impact on shoreline processes including an estimate of the annual volume of sediment in transport and seasonal patterns of transport, and whether these impacts may have any deleterious effects on neighboring shoreline segments.

10. Thirty-year erosion hazard

An analysis that uses annual erosion rate data to project the location of the 30-yr erosion hazard zone as measured from the certified shoreline or vegetation line in the absence of any shoreline stabilization structures. This information should be provided in the form of a mapped line or zone, and accompany text descriptions. The analysis may be combined with items 1 or 3, or submitted independently.

11. Photographs

Eye-level (taken by an individual standing on the ground) photos of the site that illustrate past and present conditions and locate the proposed structure.

12. Alternatives

All alternatives to shoreline hardening should be thoroughly researched and analyzed. These alternatives should include beach and/or dune restoration using sand replenishment, retreat from the shoreline by moving existing structures inland, and a no action alternative.

13. P.E. Seal

The seal of a Professional Engineer (P.E.) with experience in the area of coastal engineering should be included with any technical plans for a shoreline hardening structure that accompany the application.

The inclusion of this information will help make an Environmental Assessment complete and meet the requirements of Chapter 343, HRS. Only after thorough study and analysis should any permit for shoreline hardening be considered.

4-16 KH

HWY-DD
2.3337

APR 16 1999

TO: GARY GILL, INTERIM DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

FROM: KAZU HAYASHIDA
DIRECTOR OF TRANSPORTATION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA) FOR KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS VICINITY OF POLINALINA ROAD, TMK 5-1-9 AND 5-1-12, KOOLAULOA, OAHU

Thank you for attending the meeting held on March 10, 1999, at the Department of Transportation conference room, 869 Punchbowl Street, Honolulu, Hawaii. This meeting helped to clarify the shoreline hardening comments to the DEA. Attached is a copy of the responses to the thirteen (13) questions listed in the Shoreline Hardening Policy and Environmental Assessment Guidelines to be implemented into the Final Environmental Assessment.

If you have any questions, please call Ross Hironaka at 692-7575. Please address future correspondence to the attention of Ross Hironaka and reference HWY-DD 2.3337 as noted above.

Attachment

TN:ra

bc: HWY-DD(RH)

Shoreline Hardening Policy and Environmental Assessment Guidelines
Office of Environmental Quality Control, December 1998

1. Historical shoreline analysis of coastal erosion and accretion rates.

   In general, the Kaaawa shoreline in the vicinity of the project sites has had a history of erosion and instability. Between 1967 and 1975, the installation of rock revetments and other types of seawalls has stabilized the area. From 1975 to 1988, the shoreline has receded approximately 1 foot.

   The proposed drainage improvement project will not have an adverse impact on the shoreline. Concrete outlet headwalls constructed at both project sites will be located in areas where there are already existing shoreline protection.

2. Shoreline type

   The shoreline fronting the project sites is predominantly sandy. Adjacent to the project sites are rock revetments and/or concrete pillars originally installed to minimize erosion of the highway embankment.

3. Site maps

   See attached.

4. Beach Profiles

   Based on field observations, the high water mark will extend up to the proposed outlet headwalls. During low tides, the shoreline is situated between 20-50 feet away from the headwalls. Depending on the tide, the profile of the sandy area fronting the proposed outlet headwalls appears to fluctuate.

5. Existing walls.

   Presently, there are rock revetments and concrete piles along the highway embankment to minimize erosion. Also, adjacent to one of the proposed outlets, a rock masonry wall was constructed around a residential property. The revetments, piles, and rock walls appear to stabilize the erosion and protect the highway from washing out. However, the highway is susceptible to damage during periods of heavy storms and/or high wave action.

6. Description of movements

   This project involves the improvement of drainage facilities at two areas along Kamehameha Highway in the district of Kaaawa, island of Oahu. The first project area is located in the vicinity of Polinalina Road. The project location consists mainly of private

lots, businesses and city roads. The State of Hawaii Department of Transportation (DOT) is proposing to replace the existing 48" reinforced concrete drainage pipe with an 8' x 4' concrete box culvert to increase the capacity of the existing drainage system and alleviate flooding of the highway and the mauka residents.

The second project area is located near Kaaawa Elementary School. The existing drainage system is comprised of a 6' x 2' - 6" box culvert. The DOT is proposing to construct an additional 8' x 4' box culvert to minimize flooding of the school grounds and adjacent properties.

The concrete outlet structures will be constructed near the States' right-of-way. The proposed construction will not create any additional adverse impact on the shoreline. The proposed concrete headwalls to be constructed will be situated within an area where shoreline protection already exists.

7. Coastal Hazard History

The project area has occasionally experienced damage in the past. The most severe cases occur during storm events combined with high surf action. After a major storm subsides, the Department of Transportation, Highways Divisions maintenance personnel are called upon to clear debris from the highway and repair any damage to existing shoreline protection.

The Base Flood Elevations of the project sites are shown on the attached FEMA Flood Insurance Maps.

8. Waves and currents

Tradewinds waves occur throughout most of the year but are most frequent from April to September, the summer season, when they usually dominate the local wave climate. They result from the strong and steady tradewinds blowing from the northeast quadrant over long fetches of open ocean. Typically, the deepwater tradewind waves have periods of 6 to 8 seconds and heights of 4 to 10 feet.

Northeast trade winds are the most significant factor effecting the littoral processes along the east shore of Oahu, from Kahuku Point to Makapuu Point. Although these waves are relatively small and short in period, the frequency of currents, which over a course of time can transport a large amount of sediment along coast. The direction of the long shore current varies from location to location, depending upon the direction of the wave front relative to the shoreline.

The littoral currents is predominantly towards the south. We do not anticipate any adverse impacts on the existing current and wave patterns due to the proposed drainage improvements.

9. Sediment Movement

We do not anticipate any impact on the normal pattern of sediment transport along the shoreline. The proposed concrete outlet headwalls will be constructed within an area where shoreline protection already exists.

10. Thirty year erosion hazard

Not Applicable. The proposed concrete outlet headwalls will be located within an area where shoreline protection are already in place.

11. Photographs

See attached photos taken on June 5, 1998.

12. Alternatives

Not Applicable. There are no alternatives for the project except for the no-action alternative. However, if the proposed improvements are not implemented, properties surrounding the project site as well as Kamehameha Highway will continue to experience flooding during storm events.

13. P.E. Seal

The project will be approved by the Larry Leopardi, Design Branch Head of the Highways Division, Department of Transportation.

Resolution to OEQC comments concerning shoreline hardening. 13 responses to be sent to OEQC and added to Final EA.

Increased sedimentation

The proposed project will not increase sedimentation in the coastal waters fronting Kaaawa Beach. The proposed drainage systems at both locations will not alter the existing runoff discharge conditions. The purpose of the drainage system is merely to increase the existing culvert's capacity, and alleviate runoff from overtopping the highway.

The Best Management Practices (BMP's) stated in the Environmental Assessment will be implemented only during construction activities.

Timeframe

Start: May 2000
End: August 2000

SIERRA CLUB, HAWAI'I CHAPTER

Jeffrey Mikulina
Director
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Ross Hironaka
Highways Division
Department of Transportation
601 Kamokila Blvd. #609
Kapolei, HI 96707

OEQC
35 S. Beretania #702
Honolulu, HI 96813

RE: KAMEHAMEHA HIGHWAY DRAINAGE IMPROVEMENTS

The Environmental Assessment for drainage improvements in the vicinity of Polinalina Road should fully discuss the impacts on nearshore water quality. While "improving" drainage may decrease flooding, it can have devastating impacts on marine life. The increased turbidity and sedimentation associated with rapid runoff can injure corals and other marine life. For far too long, DOT has neglected to address the problems associated with nonpoint source water pollution. DOT should consult with both DOH's Clean Water Program (Randy Rush) and CZM's Polluted Runoff expert (Carolyn Stewart) to come up with a better strategy for dealing with runoff.

Thank you for the opportunity to comment.

4/29/99

HWY-DH 2.3077

March 25, 1999

Mr. Jeffrey Mikulina
Sierra Club, Hawaii Chapter
P. O. Box 2577
Honolulu, Hawaii 96803

Dear Mr. Mikulina:

Subject: Kamehameha Highway, Drainage Improvements
Vicinity of Polinalina Street

Thank you for your concerns on the Draft Environmental Assessment for the subject project. Our staff has consulted with Randall Rush, Department of Health (DOH) and Steve Olive, Coastal Zone Management Program, regarding the project's potential impacts on marine life.

Per telephone conversations with Steve Olive and Randall Rush, obtaining a Water Quality Certification (WQC) from the Department of Health is sufficient in addressing the potential problems associated with nonpoint source water pollution. The Highways Division has obtained a WQC from the DOH for this project.

If you have any questions, please contact Curtis Matsuda or Francis Nishioka, Hydraulic Design Section, Highways Division at 692-7563 or 692-7561, respectively.

Very truly yours,

for PERICLES MANTHOS
Administrator
Highways Division

c: DOH (R. Rush)
CZM (S. Olive)

CM:ky

bc: HWY-DD
HWY-DH (CM)