

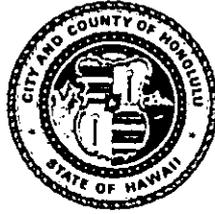
Waianae Equestrian Center

DEPARTMENT OF PUBLIC WORKS  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAII 96813  
PHONE: (808) 523-4341 • FAX: (808) 527-8857

RECEIVED

JEREMY HARRIS  
MAYOR



'98 FEB 11 A8:54

JONATHAN K. SHIMADA, PhD

DIRECTOR AND CHIEF ENGINEER

ROLAND D. LIBBY, JR.

DEPUTY DIRECTOR

ENV 98-036

OFFICE OF  
QUALITY CONTROL

February 10, 1998

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

Dear Mr. Gill:

Subject: Waianae Equestrian Center

The Department of Public Works, City and County of Honolulu, has reviewed the comments received during the 30-day public comment period which began on November 23, 1997. We have determined that this project will not have significant environmental effect and accordingly issued a Finding of No Significant Impact (FONSI). Please publish this notice in the February 23, 1998, Environmental Notice. ✓

Enclosed is a completed OEQC Bulletin Publication Form and four copies of the Final Environmental Assessment. Should you have any questions, please contact Alex Ho at 523-4150.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Shimada".

JONATHAN K. SHIMADA, PhD  
Director and Chief Engineer

Encl.

cc: Roberta Ferreira  
Councilmember DeSoto

13

1998-03-08-0A- FEA- Waianae  
Equestrian Center

MAR 8 1998

**FILE COPY**

**FINAL ENVIRONMENTAL ASSESSMENT**

**FOR**

**WAIANA EQUESTRIAN CENTER**

**WAIANA E, OAHU, HAWAII**

**TAX MAP KEY: 8-5-03:01**

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This environmental document prepared pursuant to Chapter 343, HRS

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**FINAL ENVIRONMENTAL ASSESSMENT FOR PROPOSED WAIANAE  
EQUESTRIAN CENTER**

**Section I - Description of Proposed Project**

**A. Summary of Information.**

- |                                |                                                                 |
|--------------------------------|-----------------------------------------------------------------|
| 1. Proposing Party:            | Roberta Ferreira<br>87-1161 Iiili Road<br>Waianae, Hawaii 96792 |
| 2. Approving Agency:           | Department of Public Works                                      |
| 3. Prepared By:                | Roberta Ferreira                                                |
| 4. Project Location:           | 85-572 Waianae Valley Road<br>Waianae, Hawaii 96792             |
| 5. Tax Map Key:                | 8-5-03:01                                                       |
| 6. Land Area:                  | 29 acres                                                        |
| 7. State Land Use Designation: | Ag-2                                                            |
| 8. Land Owner:                 | City and County of Honolulu                                     |

**B. Agencies to Be Consulted During the Draft Environmental Assessment  
Review Period:**

Federal

U.S. Army Corps of Engineers - Pacific Ocean Division  
U.S. Department of Agriculture - Natural Resources Conservation Service  
U.S. Department of the Interior  
Fish and Wildlife Service  
Geological Survey

State of Hawaii

Department of Land and Natural Resources  
Historic Preservation Office  
Land Division

Department of Health  
Office of Environmental Quality Control  
Environmental Management Division  
Clean Water Branch  
Solid and Hazardous Waste Branch  
Department of Transportation  
University of Hawaii - Environmental Center

City and County of Honolulu

Department of Land Utilization  
Department of Public Works  
Planning Department  
Department of Parks and Recreation

Others

Waianae Neighborhood Board No. 24  
Councilmember John Desoto  
Waianae Rotarians  
Boys and Girls Club  
Senator James Aki  
Representative Merwyn Jones

**C. Introduction.**

This Environmental Assessment has been prepared as a result of the Request for Proposal No. 12048 issued by the City and County of Honolulu. Roberta Ferreira proposes to construct an Equestrian Center on County owned land in the Waianae area for the purpose of developing and perpetuating the equine industry and providing access to equine animals and activities by the people in Hawaii.

Development of the equestrian facility will preserve some of Hawaii's culture, will provide a place for equine sport events to be held, will provide expanding life experiences for such groups as, and including but not limited to, the youth, and the general public of Hawaii. The peaceful, open setting will have picnic and sitting areas in addition to equestrian facilities which will offer a nurturing atmosphere for the people of Hawaii, many of whose living experience is primarily urban, or whose financial capabilities do not provide for the opportunity to encounter the therapeutic aspects of interaction with large animals.

**D. Project Goal.**

The goal of the proposed project is to develop and preserve a land area for equine sports and related outdoor recreational opportunities such as perimeter trail and pleasure riding. Its intent is to also provide an avenue to the youth in the area, to be exposed to the wonderful animal that the horse is and its therapeutic effect on

people. A program will be provided, in conjunction with the Boys and Girls Club, at no cost to the disadvantaged youth in the area. By providing an opportunity for these youth who are financially unable to own their own horses, we will be able to build self confidence, self confidence, self esteem, give them something to do with their time and a project to occupy their minds, which will benefit the child, which in turn will benefit the family, which in turn will benefit the community. Equestrian events strongly promote family participation. Riding lessons and stabling of animals will be available to the public.

**E. Project Objective.**

As mentioned in the Introduction, Roberta Ferreira proposes to construct an equestrian facility located on approximately twenty nine acres in the Waianae area which was previously used as a landfill site except for approximately seven acres.

The proposed project consists of a covered barn, approximately 30-40 stalls, with riding arena, house, storage for feed and equipment, hot walker, wash racks, parking and restrooms to be constructed on the non-landfill area of approximately seven acres, and two open riding arenas, adjoining cattle pens, bleachers, announcers booth, open paddocks, and picnic areas on the landfill area. No enclosed structures will be constructed on the landfill area. The entire twenty-nine acre parcel will be fenced. All enclosed structures on the non-landfill section will include adequate ventilation to eliminate the remote possibility of any methane gas accumulation and gas monitors will be installed. No smoking or open fires will be allowed in enclosed structures.

**F. Permits Required.**

1. Building Permit - Building Department
2. Grading Permit - Department of Public Works
3. Conditional Use Permit - Department of Land Utilization
4. Individual Waste Water Permit - Department of Health

**Section II - Various Site Information**

**A. Description of the Affected Environment.**

**1. Site Location.**

85-572 Waianae Valley Road  
Waianae, Hawaii 96792

The site is located to the west of Kawiwi Stream and the west fork of Plantation Road.

Waianae Intermediate School is located to the south-southeast of the site.

2. **Site and Vacinity Characteristics.**

The subject site is located in a mixed agricultural and residential setting.

3. **Description of Site and Improvements.**

The site consists of twenty nine acres, zoned Ag-2, and is gently sloped down to the southeast over the upper terrace, with a steep grade down to the lower terrace on the perimeters of the landfill area. The surface grade slopes down in all directions from the perimeter of the upper terrace. The non-landfill area, approximately seven acres, is primarily level with a steep gully that bisects the landfill and non-landfill sites. The gully is approximately 16 to 20 feet deep and empties into Kaupuni Channel. There currently are no improvements on the site.

4. **Climate and Physical Setting.**

The Waianae District is semiarid. Along the coastal region, annual rainfall averages 20 inches per year. Much of the rainfall is attributed to a few severe storms. Annual temperatures average between 70° and 90°. The site is surrounded by:

North	-	Undeveloped land
East	-	Dairy farm adjacent to the property
South	-	Convenience Center
West	-	Undeveloped land

5. **Access.**

Twenty feet wide asphalt road was constructed for access to the Waianae Refuse Convenience Center. This roadway accommodates large refuse trucks so passenger trucks and trailers going to the Equestrian Center should pose no problem.

Access to and from the landfill portion and the non-landfill portion will be located behind the Refuse Convenience Center so no bridge will need to be constructed over the gully.

6. **Historical/Archaeological.**

There are no recorded features located within the equestrian site area that could be found.

7. **Utilities.**

Potable water service will be provided by the Board of Water Supply. Electric service will be through Hawaiian Electric Company. As there will be no sewer line service near the site, septic tanks or leach fields that comply with Department of Health regulations will be used.

8. **Vegetation.**

Vegetation on the subject property consists of a mix of various weeds grasses and Kiawe trees.

B. **Control of Pollutants.**

1. **Leachate.**

Leachate has been defined by Cheremisinoff and Gigliello<sup>1</sup> as liquid which has percolated through the solid waste and has extracted, dissolved and/or suspended materials from it. There are three sources of water that may produce leachate:

- a. ground water seepage into the buried refuse,
- b. percolation of surface water, and
- c. moisture originally contained in the refuse.

The Leachate Study, Landfill Inventory Study<sup>2</sup>, prepared for the City and County of Honolulu, indicates that areas "receiving 20-30 inches or less annual precipitation generate little or no leachate." The coastal Waianae region receives approximately 20 inches annually. Occasional storm precipitation flows off site as surface runoff. No leachate is believed to be generated.

There will be landscaped areas, but careful consideration will be given to the types of plants and shrubs chosen so as to use only those that require very little water.

2. **Surface Runoff.**

Surface Runoff is allowed to flow into the existing gully, which acts as a siltation basin. This surface runoff flows from the gully into Kaupuni Channel, and empties into Pokai Bay.

3. **Gas.**

During the decomposition of buried refuse, two gases are produced, carbon dioxide and methane.

4. **Subsidence.**

The major portion of landfill subsidence occurs in the first few years after the completion of the landfill. This landfill was closed in 1984, 13 years ago. Differential settling could create problems such as ponding, which would be filled if and when it occurs. Access to the landfill will be allowed by the Refuse Division at any time to monitor the site. Applicant will be consulting with Department of Public Works and/or Department of Health as to a plan for periodic ground checks.

### **Section III - Effect on Community**

A. **Socio-Economic Characteristics.**

The community of Waianae has a large equestrian community. The project site is only a few blocks from Waianae town and easily accessible to children after school and on weekends. The Boys and Girls Club is within walking distance. Also, the Equestrian Center will provide the equestrian community with a much needed horseback riding area, and reduce the need for roadside and beach riding which involve safety concerns and competition for space with vehicular traffic. This project will also provide a few jobs and job training for people in the area.

B. **Land Use.**

Land use in the project area is currently unused open space. The State Land Use Designation for the site is Agriculture. Adjacent land use located around the proposed project area consists of undeveloped land, residential on one point of the site, and a dairy farm on one side.

## Section IV - Impacts and Mitigation Measures.

### A. Short Term Impacts/Mitigation Measures.

#### 1. Noise.

There will be a short term increase to noise levels with construction of the barn and house. however, the area is far removed from the residential housing section and trucking will be done between the hours of 7:30 a.m. and 4:00 p.m.

#### 2. Air Quality.

There will be no significant effects to the air quality.

#### 3. Water Quality.

There will be minimal grading done in the form of a foundation for the barn. but as there are no free flowing streams in the area this will produce no adverse effect to water quality.

#### 4. Aesthetic Quality.

Aesthetic quality of the area will be greatly improved.

### B. Long Term Impacts.

#### 1. Noise.

There should be no noticeable change in noise level to residents with the few occasional horse or cattle trailers coming to and from the proposed center, as there is already large truck traffic daily with the operation of the Convenience Center.

#### 2. Air Quality.

There should be no noticeable difference in the odors produced by this project, as a dairy farm currently exists and operates on the East boundary of this project.

#### 3. Water Quality.

There should be no effect on water in the area as there are no free flowing streams and a dairy farm has been in operation for many years and has created no known problems.

4. **Vehicular Traffic.**

Daily traffic should be minimal. The following are estimates:

Monday (closed)	-	2 vehicles
Tuesday through Friday	-	5 vehicles
Saturday and Sunday	-	10 vehicles

Periodic show days will bring in more traffic, but these days are few and far between.

5. **Manure Management.**

Manure should not pose a problem as there are no running streams on the subject property to cause water contamination. Manure from stalled horses will be picked up daily and outdoor paddocks will be picked up 2-4 times weekly. The daily pickup of manure from the stalls will be placed out in the open for several days and then piled in an area that is elevated. This process will allow the manure to "digest" and rid itself of the nutrients which the flies require for breeding purposes. Manure will be stored for pickup by local farmers.

6. **Solid Waste.**

A private refuse collection company will be retained for regular trash pickup.

7. **Hours of Operation.**

The Center will be open to the public from 7:00 a.m. to 7:00 p.m. Tuesday through Sunday.

**Section V - Alternative Analysis**

The no action alternative would mean that a vacant, unattractive landfill would remain where motorcyclists ride and possibly put the City and County of Honolulu in the position of being sued for injury and invites dumping of trash when the Convenience Center is closed. There would be negative impacts associated with the no action option due to the lack of new employment opportunities, lack of a park-like setting, lack of learning experiences for youth and the general public, and lack of a place for equestrian events where the public could spectate or participate.

5. **Manure Management.**

Manure should not pose a problem as there are no running streams on the subject property to cause water contamination. Manure from stalled horses will be picked up daily and outdoor paddocks will be picked up 2-4 times weekly. Manure will be stored for pickup by local farmers.

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**Section VI - Determination, Findings and Reasons for Supporting Determination**

The subject property is zoned Ag-2 and as such the proposed project is compatible with the surrounding land use and will not affect the current characteristics of the area. There will be minimal disruption of the natural environment. The proposed project is consistent with, and totally support the Environmental Policies established in Chapter 344, HRS. The proposed project will provide a significant contribution to the equine community as well as Leeward residents by maintaining and enhancing the natural environmental characteristics of the land. Impacts to public health may be affected by short term noise and traffic implications, however, this will be insignificant when weighed against the positive economic, social, and quality of life implications associated with the project. The proposed project will have no secondary impacts such as population changes or effects on public facilities, but on the positive side, will generate a few employment opportunities. The proposed project will utilize existing currently undeveloped, vacant, landfill property. With the development of the subject property, the landscaping only will improve the visual environmental quality. This project will have no cumulative effect or involve no future commitment for further action involving the environment. Current vegetation on the

property consists of weeds, grasses and Kiawe trees and are not a hazard to any endangered species. There will be no detrimental effects to air and water quality, or noise level resulting from this project. The subject property is not located in an environmentally sensitive area such as a tsunami zone or an erosion-prone area, as such shorelines, valleys, or ridges will not be impacted. Due to topographical characteristics of the subject property, views of the property to be developed will not be visible except to the adjoining property. The proposed project requires minimal energy consumption and so poses no environmental concern in this area.

### Summary

As a result of developing the proposed project site, the presently unusable landfill can be transformed into a landscaped area of open space where the equestrian community could be assured of a place to perpetuate their interest other than depending on privately owned facilities. Recreational areas are available for numerous other forms of sports, but there's so far nothing for the equine sector.

The proposed project will have a very minor impact on the environment. As a result of the factors presented in this Assessment, it is recommended that an Environmental Impact Statement not be required.

---

### References

<sup>1</sup> Cheremisinoff, Paul N. and Kenneth A. Gigliello, Leachate From Hazardous Waste Sites. Technomic Publishing Company, Inc., 1983.

<sup>2</sup> Emcon Associates, Leachate Study, Landfill Inventory Study. Prepared for the City and County of Honolulu, July 1977.

PHONE (808) 594-1888



FAX (808) 594-1865

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

December 22, 1997

DEC 31 P3:49  
QUALITY

Roberta Ferreira  
87-1161 Iliili Road  
Waianae, Hawaii 96792

Subject: Draft Environmental Assessment for The Waianae  
Equestrian Center, Island of Oahu

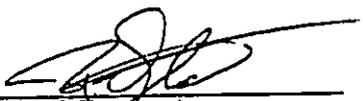
Dear Ms. Ferreira:

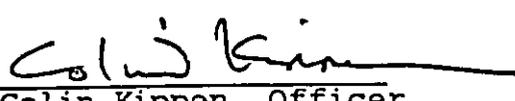
Thank you very much for the opportunity to review the above-referenced Draft Environmental Assessment (DEA). The applicant proposes to construct an equestrian facility on approximately 29 acres in the Waianae area. Its intent is to develop and preserve a land area for equine sports and provide a program for the youth in the area, in conjunction with the Boys and Girls Club, at no cost to disadvantaged youths.

The Office of Hawaiian Affairs has no objections to the proposed project at this time. Based on the information contained in the DEA, the project bears no significant long-term adverse impacts on adjacent areas or existing flora and fauna habitats. Furthermore, no known archaeological remains exist, and the proposed project will not significantly affect scenic resources.

If you have any questions or comments regarding this matter please contact Colin Kippen, Land and Natural Resources Division Officer, or Richard Stook, EIS Planner at 594-1755.

Sincerely yours,

  
Randall Ogata  
Administrator

  
Colin Kippen, Officer  
Land and Natural Resources

cc: John Lee, Dept. of Public Works  
✓ Gary Gill, Director, OEQC  
Board of Trustees

## Section VI - Determination

After preparing an Environmental Assessment, it has been determined that the proposed project will not have a significant impact on the environment, and an environmental impact statement will not be prepared.

## Section VII - Reasons Supporting the Determination

Based on an analysis of the significance criteria in Section 11-200-12 of the 1996 Hawaii Environmental Impact Statement Rules, the reasons supporting the Negative Declaration determination are that the proposed project will not:

- result in the loss or destruction of any natural or cultural resources;
- curtail the range of beneficial uses of the environment;
- conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, Hawaii Revised Statutes;
- affect public health;
- displace any residences or businesses;
- have significant long-term effects on air quality, water quality or ambient noise levels;
- adversely affect rare or endangered species of flora or fauna;
- be in close proximity to any known natural, historic or archaeological sites;  
and
- affect the economic or social welfare of the community.

ok!  
Draft EA  
findings &  
reasons  
more complete.  
OK!  
-JTL

---

## References

<sup>1</sup> Cheremisinoff, Paul N. and Kenneth A. Gigliello, Leachate From Hazardous Waste Sites. Technomic Publishing Company, Inc., 1983.

<sup>2</sup> Emcon Associates, Leachate Study, Landfill Inventory Study. Prepared for the City and County of Honolulu, July 1977.

**APPENDIX A**  
**LOCATION MAP**



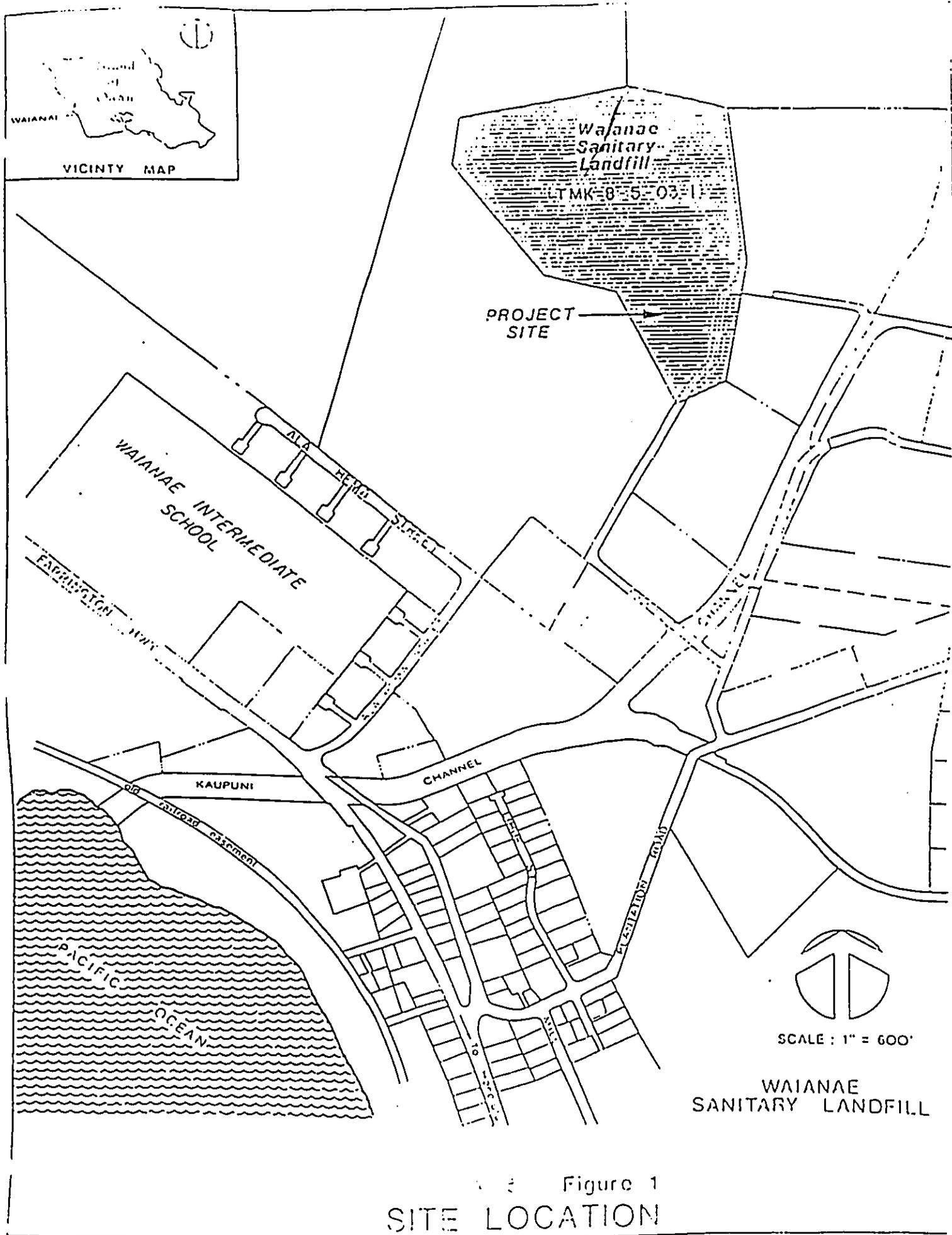
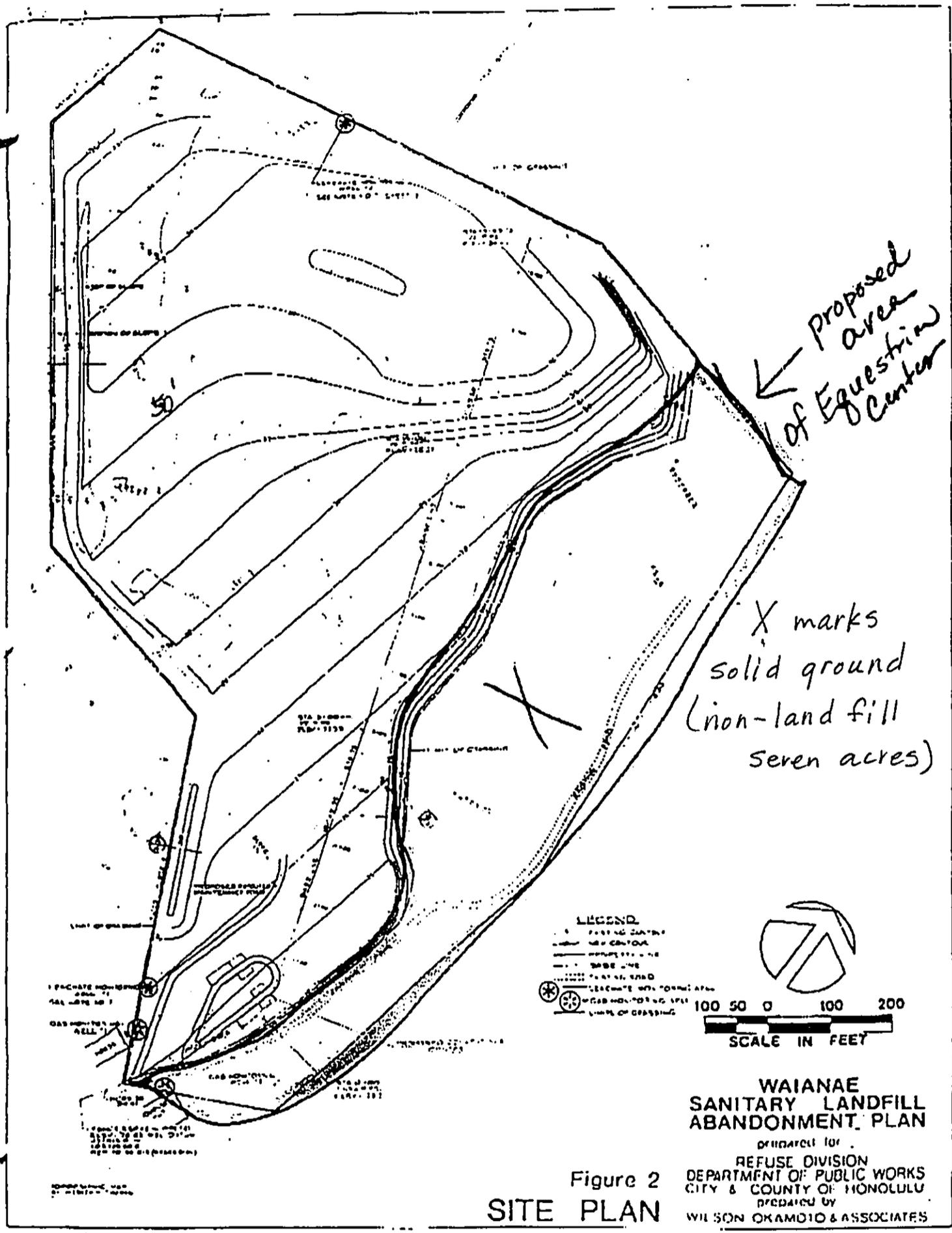


Figure 1  
SITE LOCATION

# APPENDIX B

## SITE PLAN



Proposed area of Equestrian Center

X marks solid ground (non-land fill seven acres)

**LEGEND**

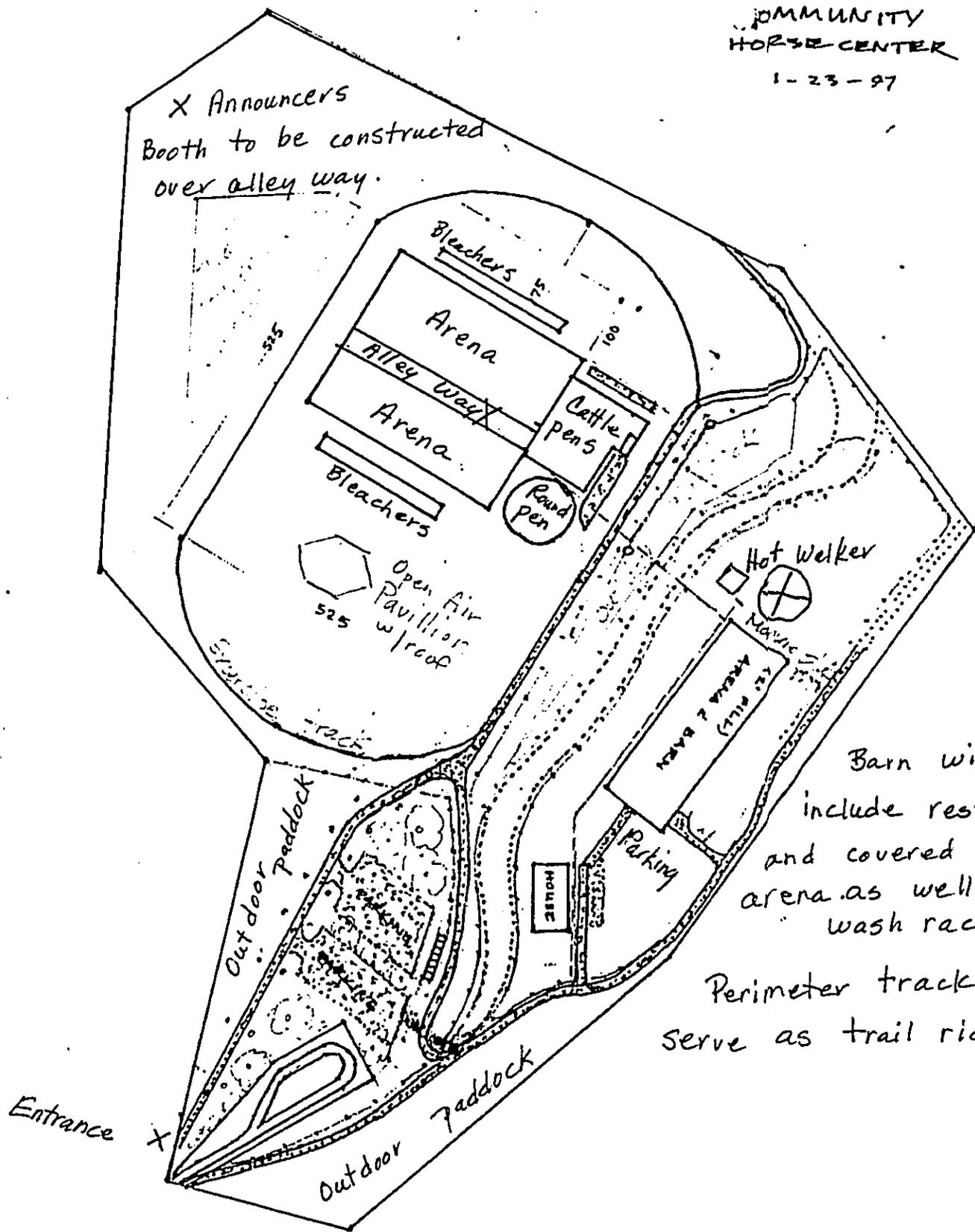
- PROPOSED GRADE
- - - - - EXISTING GRADE
- ROAD
- BASE LINE
- LIMIT OF GRADING
- ⊗ EXISTING WELL
- ⊕ EXISTING WATER TOWER
- ⊙ EXISTING WATER TOWER

100 50 0 100 200  
SCALE IN FEET

Figure 2  
SITE PLAN

**WAIANAE  
SANITARY LANDFILL  
ABANDONMENT PLAN**  
 prepared for  
 REFUSE DIVISION  
 DEPARTMENT OF PUBLIC WORKS  
 CITY & COUNTY OF HONOLULU  
 prepared by  
 WILSON OKAMOTO & ASSOCIATES

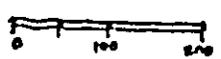
COMMUNITY  
HORSE CENTER  
1-23-97



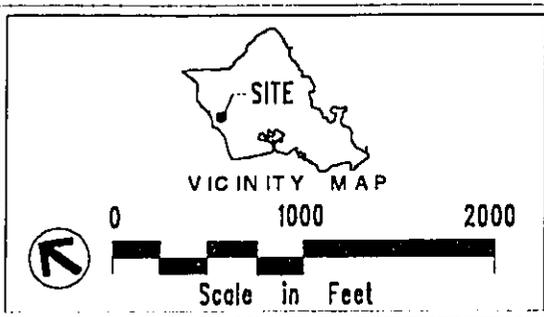
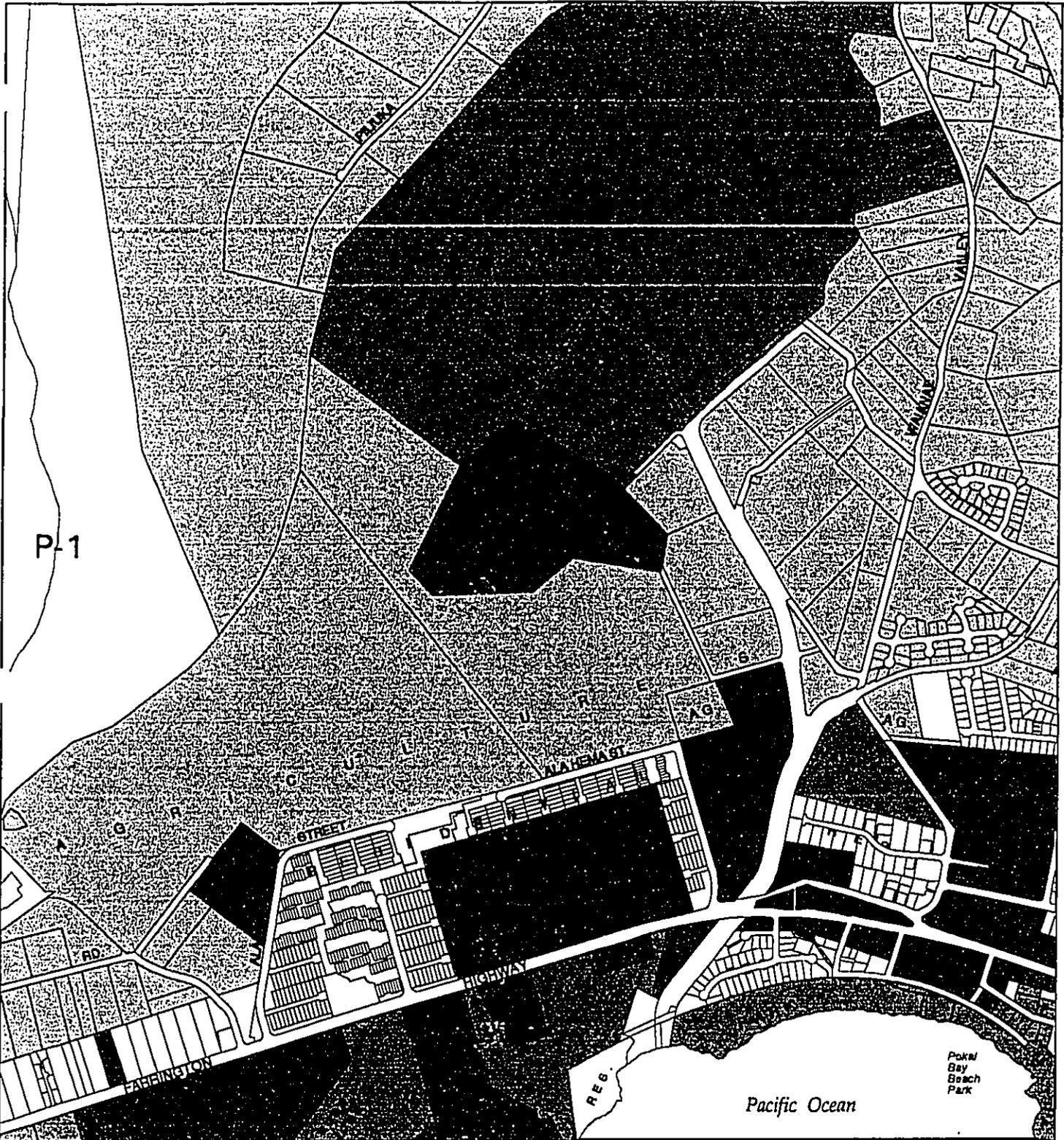
X Announcers  
Booth to be constructed  
over alley way.

Barn will  
include restrooms  
and covered riding  
arena as well as  
wash racks.

Perimeter track will  
serve as trail ride.



**APPENDIX C**  
**LAND USE MAP**



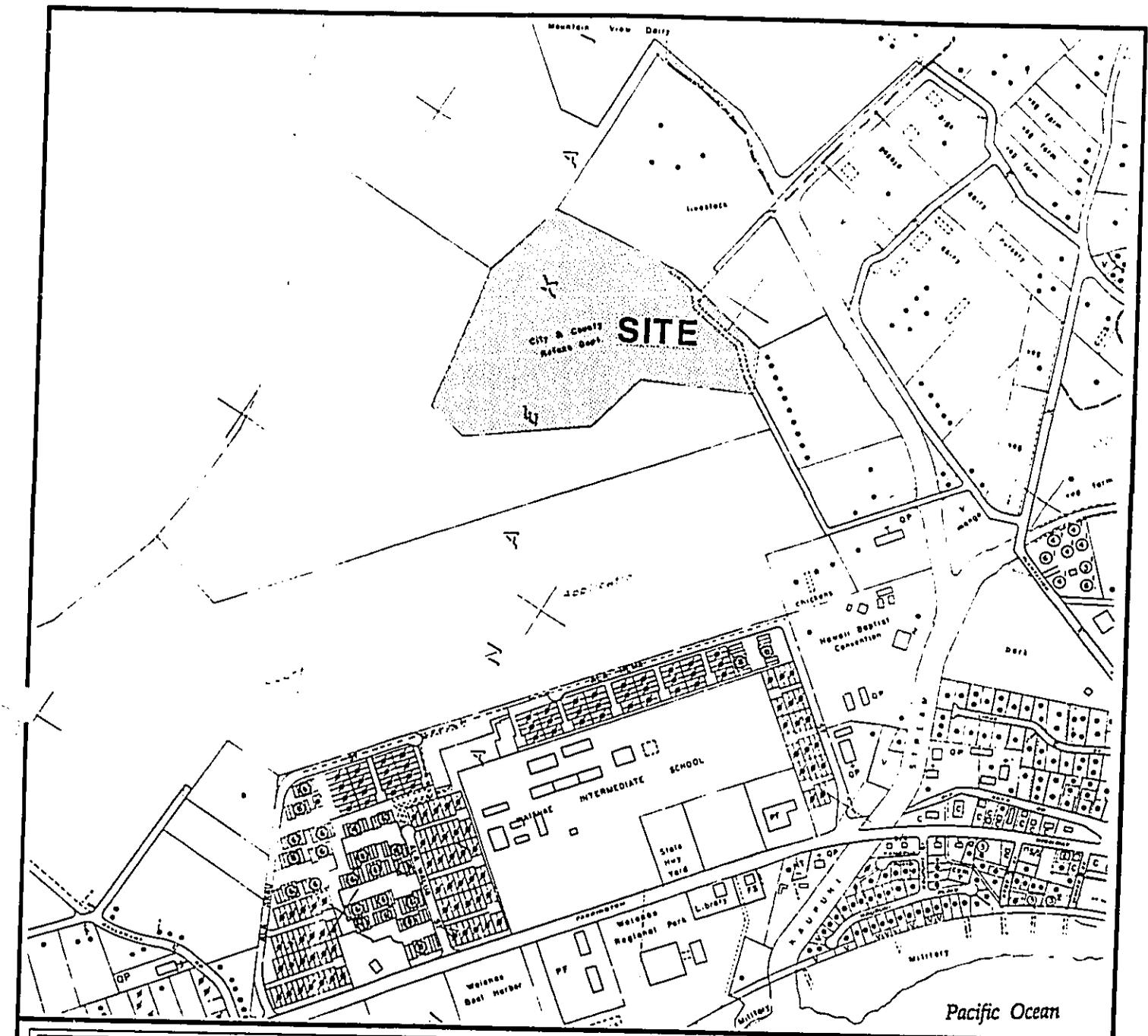
**PORTION OF WAIANAE  
DEVELOPMENT PLAN  
LAND USE MAP  
EQUESTRIAN CENTER**

TAX MAP KEY: 8-5-03: 01

Prepared By: Department of Land Utilization  
City and County of Honolulu

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All Rights Reserved 1996

Date Prepared: November 1996



**LEGEND**

	RESIDENTIAL SINGLE-FAMILY		QUASI-PUBLIC FACILITIES
	TWO-FAMILY		PARKS & RECREATION
	MULTI-FAMILY		CEMETERY
	MOTEL & HOTEL		TRANSPORTATION
	COMMERCIAL		UTILITIES
	INDUSTRIAL		MILITARY
	AGRICULTURAL		VACANT
	PUBLIC FACILITIES		UNDER CONSTRUCTION

**PORTION OF LUALUALEI-MAKAHA  
EXISTING LAND USE MAP  
EQUESTRIAN CENTER**

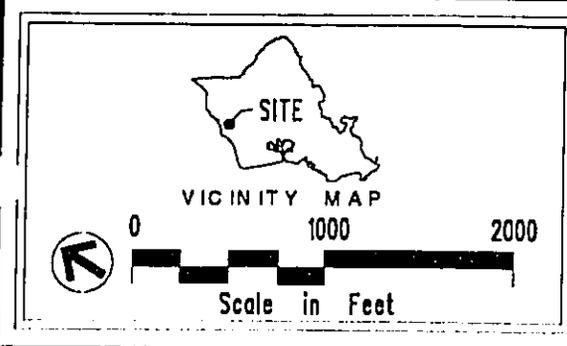
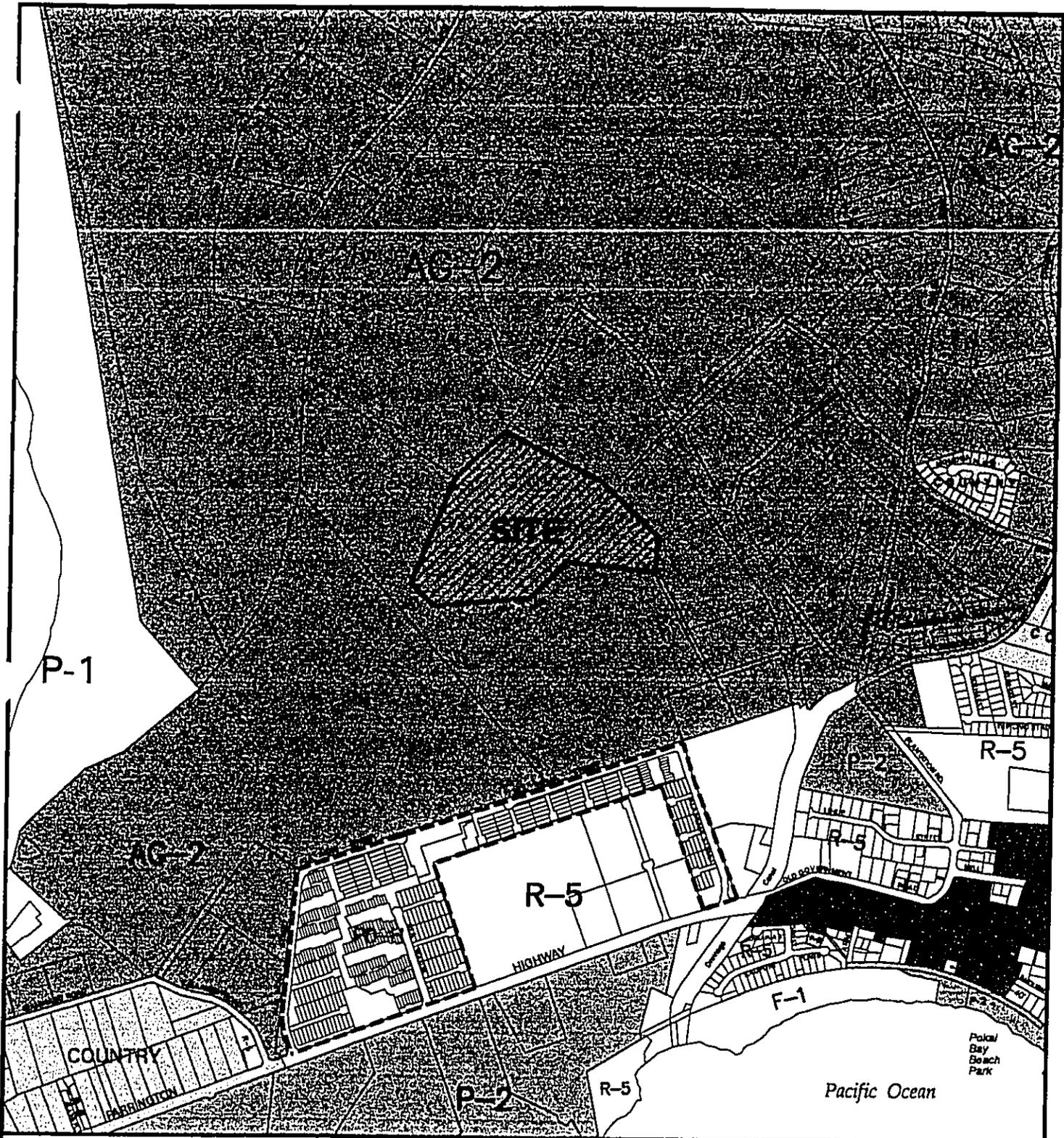
TAX MAP KEY: 8-5-03: 01

Scale in Feet

DATA COMPILED BY: DEPARTMENT OF GENERAL PLANNING  
 MAP PREPARED BY: DEPARTMENT OF LAND UTILIZATION  
 CITY AND COUNTY OF HONOLULU

DATE OF DATA: DECEMBER 1988  
 DATE PREPARED: NOVEMBER 1986

**APPENDIX D**  
**ZONING MAP**



**PORTION OF LUALUALEI-MAKAHA  
EXISTING ZONING MAP  
EQUESTRIAN CENTER**

TAX MAP KEY: 8-5-03: 01

Prepared By: Department of Land Utilization  
City and County of Honolulu

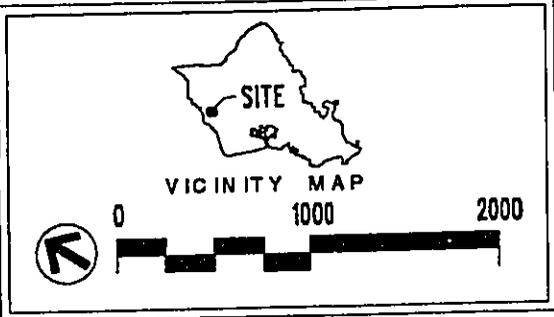
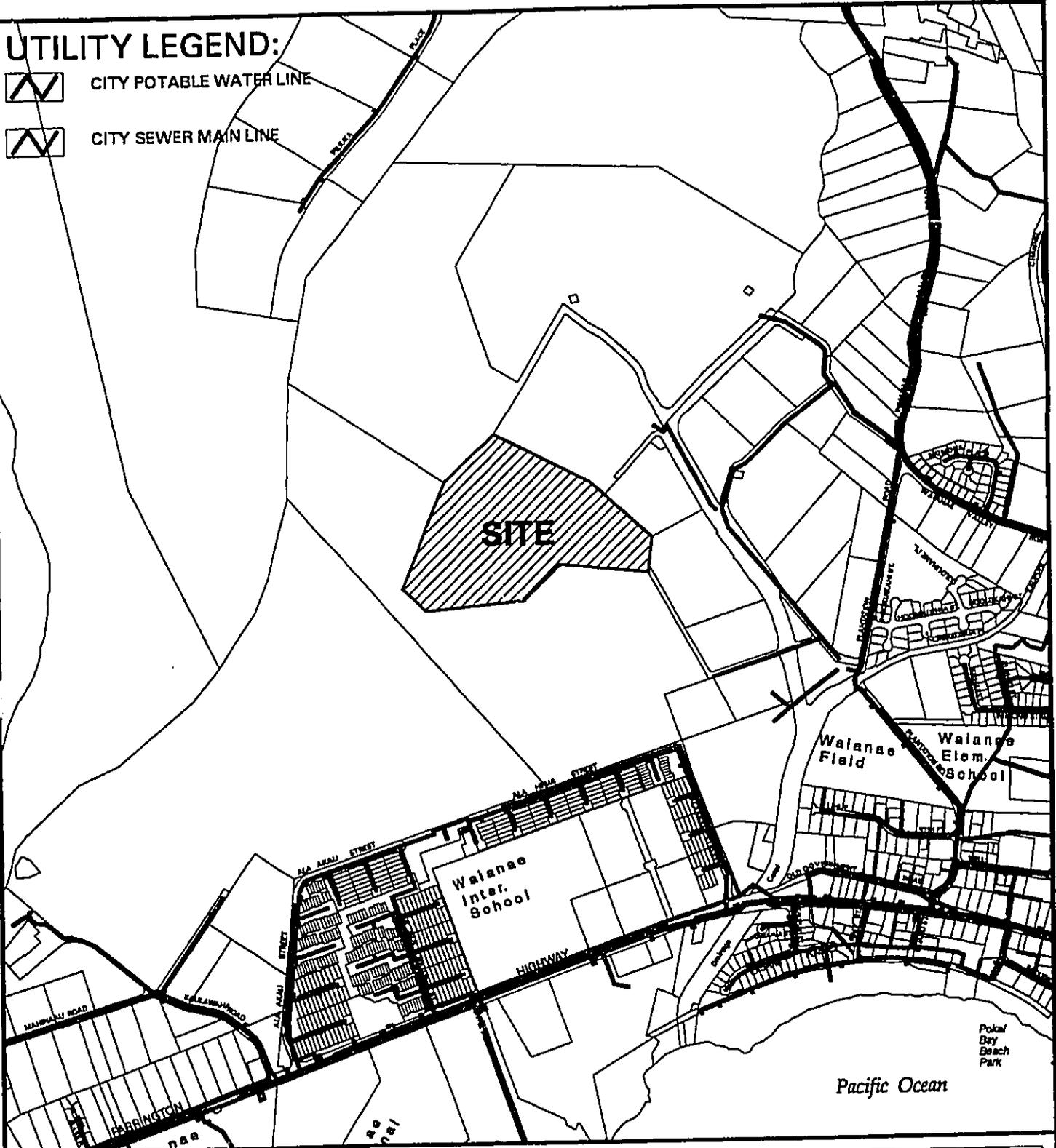
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Date Prepared: November 1998

**APPENDIX E**  
**UTILITY MAP**

**UTILITY LEGEND:**

-  CITY POTABLE WATER LINE
-  CITY SEWER MAIN LINE



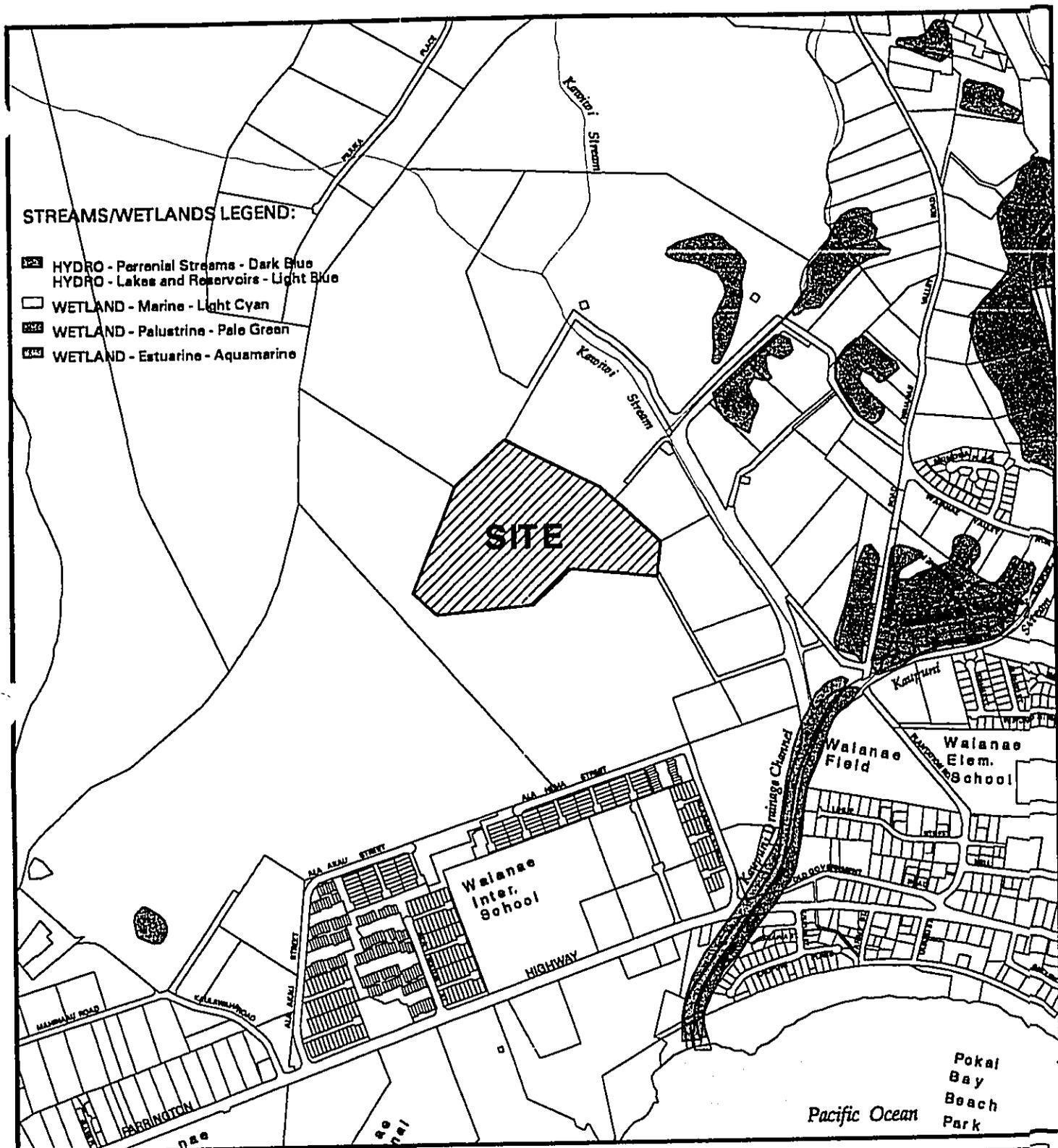
**UTILITY MAP  
WAIANAE  
EQUESTRIAN CENTER**  
TAX MAP KEY: 8-5-03: 01

Prepared By: Department of Land Utilization  
City and County of Honolulu

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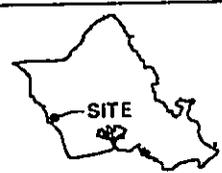
Date Prepared: November 1986

**APPENDIX F**  
**STREAMS/WETLAND MAP**



**STREAMS/WETLANDS LEGEND:**

-  HYDRO - Perennial Streams - Dark Blue
-  HYDRO - Lakes and Reservoirs - Light Blue
-  WETLAND - Marine - Light Cyan
-  WETLAND - Palustrine - Pale Green
-  WETLAND - Estuarine - Aquamarine




0 1000 2000  
Scale in Feet

## STREAMS/WETLANDS MAP WAIANAE EQUESTRIAN CENTER

TAX MAP KEY: 8-5-03: 01

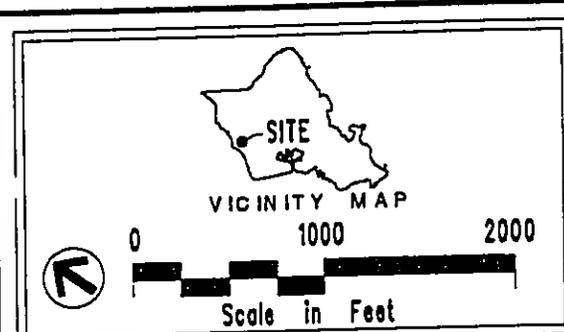
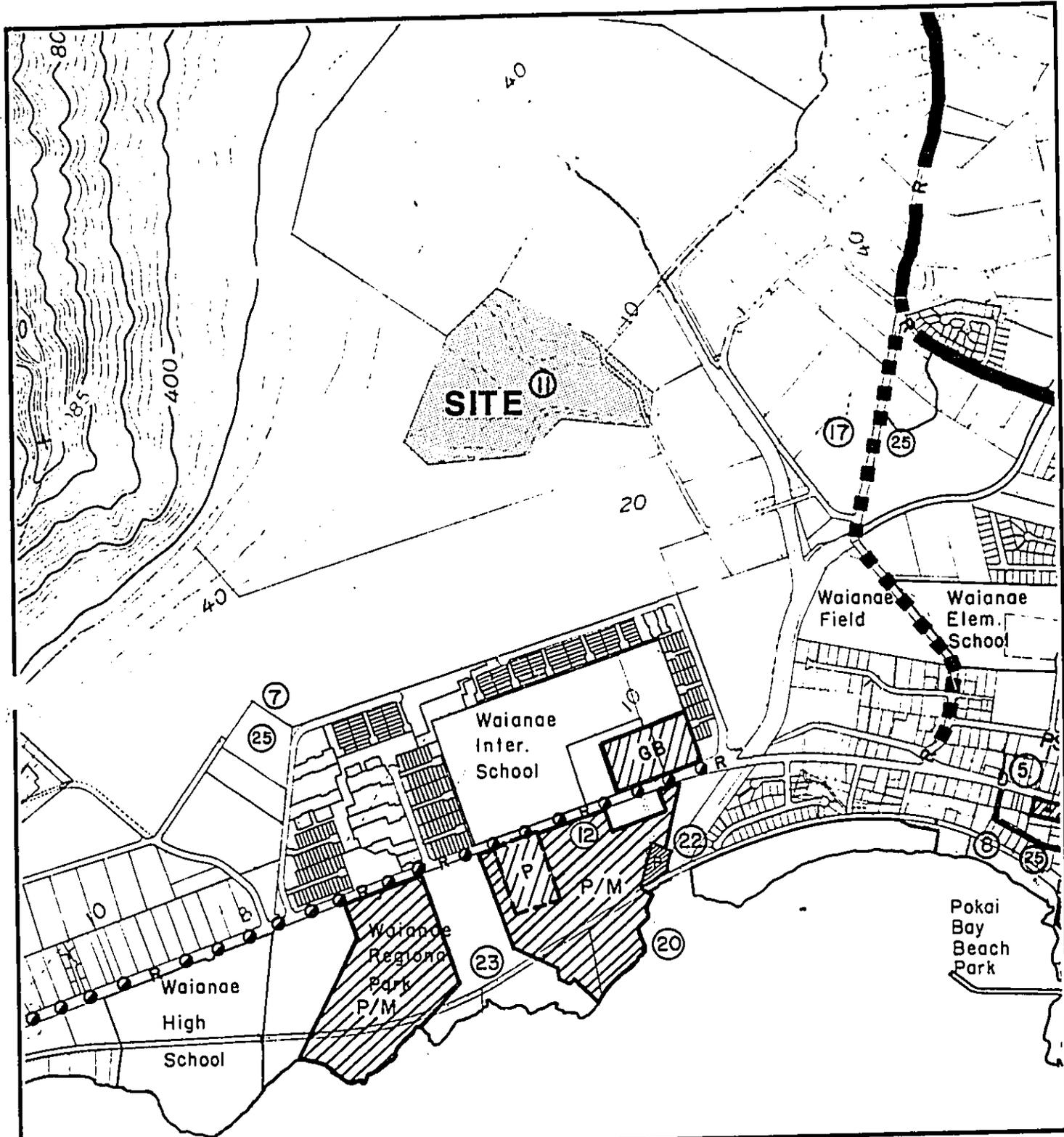
Prepared By: Department of Land Utilization  
City and County of Honolulu

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Date Prepared: November 1996

**APPENDIX G**

**DEVELOPMENT PLAN PUBLIC  
FACILITY MAP**



**PORTION OF WAIANAE  
DEVELOPMENT PLAN  
PUBLIC FACILITIES MAP  
EQUESTRIAN CENTER**

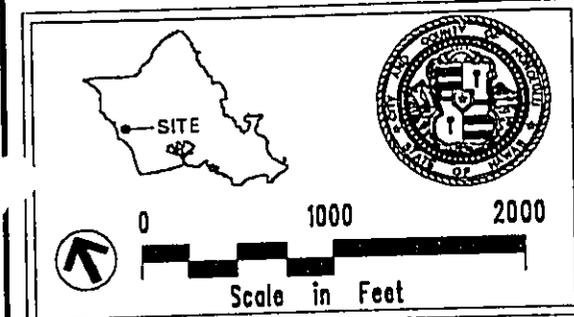
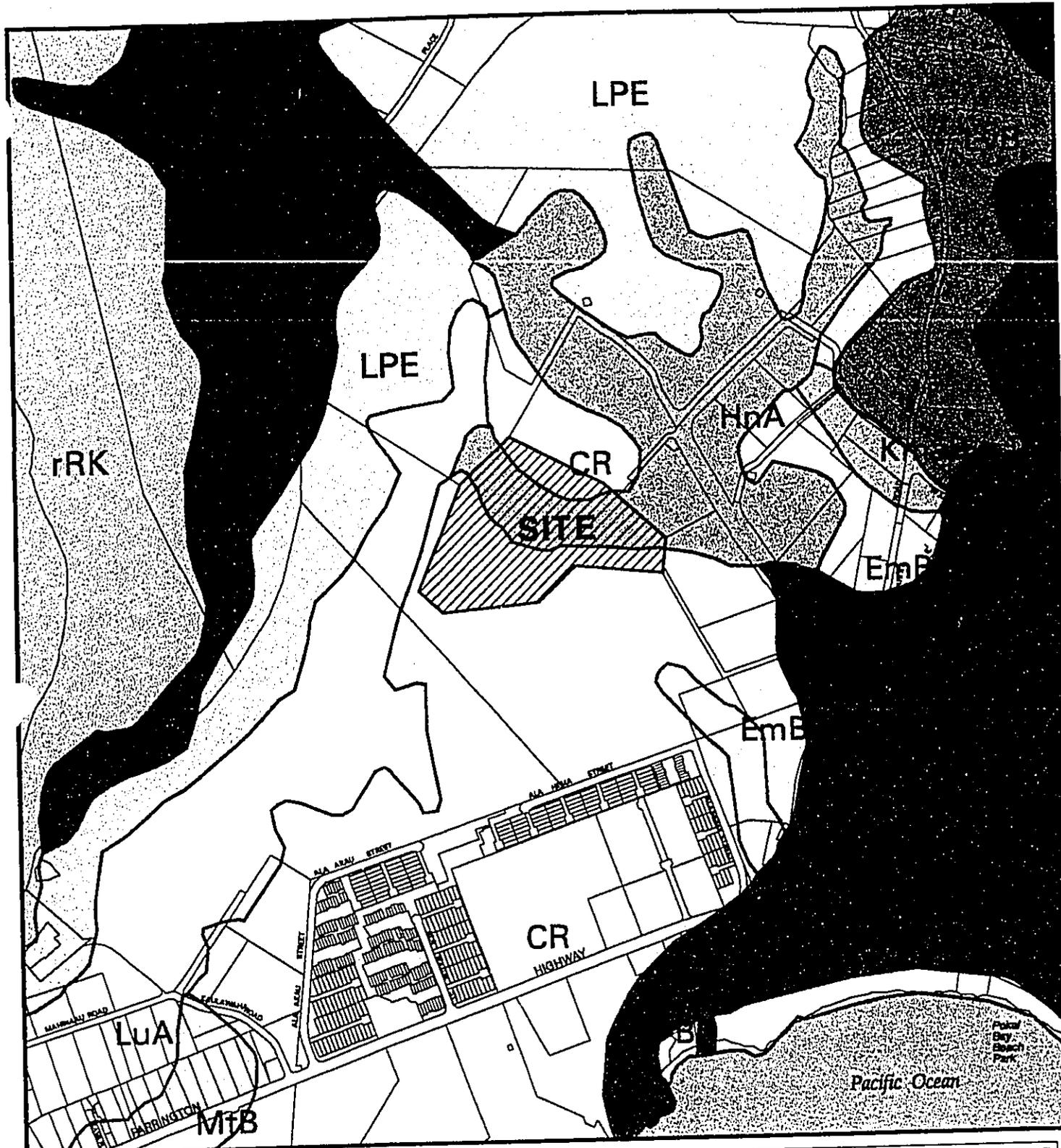
TAX MAP KEY: 8-5-03: 01

Prepared By: Department of Land Utilization  
City and County of Honolulu

Date Prepared: November 1996

# APPENDIX H

## SOIL MAP



**SOILS MAP**  
**WAIANAE**  
**EQUESTRIAN CENTER**  
 TAX MAP KEY: 8-5-03: 01

Prepared By: Department of Land Utilization  
 City and County of Honolulu

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Date Prepared: November 1996

## SOILS LEGEND:

-  BS Beaches
-  CR Coral Outcrop
-  EmB Ewa silty clay loam,  
Moderately shallow/2 to 6 % slopes
-  Hna Hanalei silty clay,  
0 to 2 % slopes
-  KmaB Keaau stony clay,  
2 to 6 % slopes
-  LPE Lualualei extremely stony clay,  
3 to 15 % slopes
-  LuA Lualualei clay,  
0 to 2 % slopes
-  LvB Lualualei stony clay,  
2 to 6 % slopes
-  MtB Mōkuleia clay
-  PsA Pulehu clay loam,  
0 to 3 % slopes
-  rRK Rock land
-  W Water

## **APPENDIX J**

### **COMMENT/RESPONSE LETTERS**

January 28, 1998

Mr. Paul Mizue, P.E.  
Planning Chief  
Planning and Operations Division  
Department of the Army  
U.S. Army Engineer District, Honolulu  
Ft. Shafter, Hawaii 96858-5440

Dear Mr. Mizue:

Thank you for your comments on the Draft Environmental Assessment for the Waianae Equestrian Center. I have contacted Mr. Alan Everson and per his request I will be sending him a copy of the grading plans when they are available.

Sincerely,

Roberta Ferreira



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

REPLY TO  
ATTENTION OF

December 19, 1997

Planning and Operations Division

Mr. Robert Ferreira  
87-1161 Iliili Road  
Waianae, Hawaii 96792

Dear Mr. Ferreira:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment (DEA) for the Proposed Waianae Equestrian Center, Waianae, Oahu (TMK 8-5-3: 1). The following comments are provided in accordance with Corps of Engineers authorities to provide flood hazard information and to issue Department of the Army (DA) permits.

a. Based on the preliminary information provided, it appears that the project will not impact waters of the U.S. and will not require a DA permit. However, in order to provide you with a final determination, we will need additional information such as construction and engineering plans. Please contact Mr. Alan Everson of our Regulatory Section at 438-9258<sup>ext. 11</sup> for further information and refer to file number 980000043.

b. The flood hazard information provided on page 9 of the DEA is correct.

Sincerely,

A handwritten signature in cursive script, appearing to read "Paul Mizue", is located below the word "Sincerely,".

Paul Mizue, P.E.  
Acting Chief, Planning  
and Operations Division

January 28, 1998

Mr. Patrick T. Onishi  
Chief Planning Officer  
City and County of Honolulu  
Planning Department  
650 South King Street, 8<sup>th</sup> Floor  
Honolulu, Hawaii 96813-4950

Re: Draft Environmental Assessment for the Waianae Equestrian Center

Dear Mr. Onishi:

Thank you for your comments on the Draft Environmental Assess for the Waianae Equestrian Center.

1. The subject site is within the State Land Use Agricultural District which may require a change to Urban, given the active commercial and recreational nature of the proposed use of the land.

Consideration was given by the City and County of Honolulu to this matter before the Request for Proposal No. 12048 was issued.

2. The Waianae DP Land Use Map designation is Public Facility for this site and may require a change in DP designation to Commercial to reflect the proposed use of the site.

Consideration was given by the City and County of Honolulu to this matter before the Request for Proposal No. 12048 was issued.

3. There is a public safety issue concerning this site. The site is a public landfill that may experience significant safety issues as the landfilled materials decompose over time. The applicant therefore should consult with the City's Department of Public Works and State's Department of Health with regard to the nature of the safety issues and risks involved in using the site for commercial activities.

Consultation will be made with the City's Department of Public Works and/or State's Department of Health with regard to periodic ground checks.

4. The proposed use also should be reviewed by the City's Department of Parks and Recreation with regard to the appropriateness of equestrian recreation at this site versus other City-owned sites.

Consideration was given by the City and County of Honolulu to this matter before the Request for Proposal No. 12048 was issued.

5. We note that the question of liability concerning the maintenance and use of the site should be reviewed and approved by the City's Corporation Counsel.

Consideration was given by the City and County of Honolulu to this matter before the Request for Proposal No. 12048 was issued.

Sincerely,

Roberta Ferreira

PLANNING DEPARTMENT  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET, 8TH FLOOR • HONOLULU, HAWAII 96813-3017  
PHONE: (808) 523-4711 • FAX: (808) 523-4950

JEREMY HARRIS  
MAYOR



PATRICK T. ONISHI  
CHIEF PLANNING OFFICER

DONAL L. HANAIKE  
DEPUTY CHIEF PLANNING OFFICER

RR 11/97-2175

December 8, 1997

Ms. Roberta Ferreira  
87-1161 Iliili Road  
Waianae, Hawaii 96792

Dear Ms. Ferreira:

Draft Environmental Assessment (EA) for  
Waianae Equestrian Center, Tax Map Key: 8-5-03: 01

We have reviewed the above EA with regard to the proposed project's impacts on the City and County of Honolulu's General Plan and the Development Plan (DP) for Waianae and its special provisions and offer the following comments:

1. The subject site is within the State Land Use Agricultural District which may require a change to Urban, given the active commercial and recreational nature of the proposed use of the land.
2. The Waianae DP Land Use Map designation is Public Facility for this site and may require a change in DP designation to Commercial to reflect the proposed use of the site.
3. There is a public safety issue concerning this site. The site is a public landfill that may experience significant safety issues as the landfilled materials decompose over time. The applicant therefore should consult with the City's Department of Public Works and State's Department of Health with regard to the nature of the safety issues and risks involved in using the site for commercial activities.
4. The proposed use also should be reviewed by the City's Department of Parks and Recreation with regard to the appropriateness of equestrian recreation at this site versus other City-owned sites.

Ms. Roberta Ferreira  
December 8, 1997  
Page 2

5. We note that the question of liability concerning the maintenance and use of the site should be reviewed and approved by the City's Corporation Counsel.

If you have any questions or require clarification you may contact Rob Reed of my staff at 523-4402.

Yours very truly,



PATRICK T. ONISHI  
Chief Planning Officer

PTO:ft

January 28, 1998

Bruce S. Anderson, Ph.D.  
Deputy Director for Environmental Health  
State of Hawaii  
Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801

Re: Draft Environmental Assessment for the Waianae Equestrian Center

Dear Mr. Anderson:

Thank you for your comments addressed to Dr. Shimada, Director and Chief Engineer of the Honolulu Department of Public Works. We provide the following response in the same order as your letter:

Wastewater.

A licensed engineer will be used to draw up a suitable wastewater plan. All Department of Health guidelines will be complied with.

Solid Waste.

1. Fire Control.

A periodic check of the ground cover will be worked out with the Department of Public Works and/or Department of Health.

2. Ground Water.

Being that the Waianae District is semiarid and that the landfill area is an elevated plateau, what little rain that falls will result in surface run off mainly into the gully. Water use for irrigating landscaped areas will be minimal. Care will be given in the choice of plants used, using only those that require very little water.

3. Landfill Gas Migration.

Enclosed structures will be monitored for gas build-up.

4. Settlement.

A periodic check of the ground cover will be worked out with the Department of Public Works and/or Department of Health.

Vector Control.

Your recommendations on the handling of horse manure will be followed.

Sincerely,

Roberta Ferreira

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



LAWRENCE MIKE  
DIRECTOR OF HEALTH

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

In reply, please refer to

January 14, 1998

97-258/epo

Jonathan K. Shimada, Ph.D.  
Director and Chief Engineer  
Department of Public Works  
City & County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Dr. Shimada:

Subject: DRAFT ENVIRONMENTAL ASSESSMENT  
Project: Waianae Equestrian Center  
Location: 85-572 Waianae Valley Road  
Waianae, Hawaii 96792  
TMK: (1) 8-5-03: 1

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

Wastewater

The majority of the subject area is located in the Pass Zone, below the underground injection control (UIC) line and within the critical wastewater disposal area. No new cesspools will be allowed in the subject area.

Our two major concerns with the proposed project are in regard to the treatment and disposal of domestic and animal wastewater. As there is no sewer line service near the site, septic tanks with an acceptable soil absorption field will be required for domestic wastewater. Plans must be developed by a licensed engineer and submitted to the Wastewater Branch for approval and use. The owners and operators will be required to comply with the animal waste handling guidelines as stated in the Department of Health's "Guidelines for Livestock Waste Management," dated July 1996.

All wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems." We reserve the right to review the detailed wastewater plans for conformance to applicable rules.

Should you have any questions on these comments, please contact Ms. Lori Kajiwara of the Wastewater Branch, Planning/Design Section at 586-4294.

Solid Waste

The subject site is a closed landfill, and a closure plan has been accepted. However, the closure plan does not recommend any post-closure use for the site except as open space. The following concerns should be addressed in the proposal to use the former landfill as an equestrian center:

1. **Fire control.** There is a potential for underground fires due to the nature of the waste buried at the site. Because the area is dry, organic waste in the site will decompose slowly; municipal solid waste (MSW), such as paper waste, may be in a combustible state. The old MSW is currently buried under two feet of soil. This soil layer may need additional protection to prevent exposure of MSW should the site be used in a manner that could affect the performance of the cover. The site may also need additional soil cover to prevent vector and sanitation problems, as the buried MSW serves as a harborage for vectors.
2. **Ground water.** The subject site has no underground liner to aid in the collection of leachate. Ground water contamination could result from water percolating through the covered waste to create leachate.
3. **Landfill gas migration.** Methane is a combustible gas which is lighter than air and is known to be explosive at certain concentrations in the air. We concur that proposed structures to be constructed on the landfill section must be open to prevent problems from methane migration. Enclosed structures on the non-landfill portion need to be monitored for possible gas migration and collection. Additional methane monitors may be required to detect gas build-up.
4. **Settlement.** Due to the high organic content and the loose nature of the previously disposed MSW, settlement is expected during the post-closure period.

Due to the above concerns, open fires and smoking activities should not be allowed inside or around either the enclosed structures or the picnic area. Proper precautionary measures must be taken as the buried waste is combustible.

Jonathan K. Shimada, Ph.D.  
January 14, 1998  
Page 3

97-258/epo

The project developer should also investigate local sources of compost and mulch for landscaping purposes. Mulch and compost can improve water retention and prevent unnecessary pesticide and fertilizer usage.

If there are any questions regarding these comments, please contact Mr. Gary Siu of the Office of Solid Waste Management at 586-4240.

#### Vector Control

Our concern is mainly with the handling and storage of the horse manure from the horse stalls. The horse manure which is to be picked up 2-4 times weekly from the outdoor paddocks (see *Manure Management*, page 8) should not pose too much of a problem.

We recommend that the horse manure that is recovered daily from the horse stalls be spread out and dried for several days out in the open and then piled in an area that is elevated. This will ensure that the manure pile will not be flooded during heavy rains, and the process will allow the manure to "digest" and rid itself of the nutrients which the flies require for breeding purposes.

The manure from the outdoor paddocks that is to be collected 2-4 times a week can be added directly to the elevated manure pile without undergoing the spreading out and drying process.

If the horse manure is not handled and stored properly, a biting stable fly (*Stomoxys calcitrans*) problem may become a reality.

Any questions regarding these matters should be directed to Mr. George Kitaguchi of the Vector Control Branch at 831-6767.

Sincerely,



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

c: WWB  
OSWM  
VCB  
Rdarta Ferreira ✓

January 28, 1998

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

Re: Draft Environmental Assessment for the Waianae Equestrian Center, Oahu

Dear Mr. Gill:

Thank you for your comments addressed to Dr. Shimada, Director of the Honolulu Department of Public Works. We provide the following response in the same order as your letter:

1. Please describe whether the potential accumulation of methane gas in the enclosed areas will be monitored. If so, describe how the gas will be monitored and who will be responsible for the monitoring.

The applicant is responsible for monitoring the potential accumulation of methane gas in the enclosed areas she intends to construct at the site. She is responsible to ensure the health and welfare of visitors to the center and of the people and livestock that will reside on the premises. The City retains responsibility for monitoring for possible underground, lateral migration of methane gas off the landfill site.

2. A steep gully bisects the landfill and non-landfill areas. How will people and vehicles cross the gully? Will a bridge be constructed? If so, describe any impacts associated with the bridge.

There is an area behind the Refuse Convenience Center that vehicles, horses, etc. can go from one side to the other. There will be no bridge constructed.

3. As there are no sewer lines near the site, septic tanks or leach fields will be used. Any individual wastewater system built for the project must meet Department of Health regulations.

A licensed engineer will be used to draw plans that comply with the Department of Health regulations on wastewater.

4. The site was previously a City landfill. Who would be responsible for any liability which can be traced to the former landfill use?

The City is liable for damages or injuries which result solely to the former landfill activities.

Sincerely,

Roberta Ferreira

BENJAMIN J. CAYETANO  
GOVERNOR



GARY GILL  
DIRECTOR

STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

236 SOUTH BERETANIA STREET  
SUITE 702  
HONOLULU, HAWAII 96813  
TELEPHONE (808) 586-4186  
FACSIMILE (808) 586-4186

December 17, 1997

Dr. Jonathan K. Shimada, Director  
Honolulu Department of Public Works  
650 South King Street  
Honolulu, Hawaii 96813

Dear Dr. Shimada:

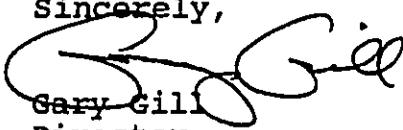
Subject: Draft Environmental Assessment for the Waianae  
Equestrian Center, Oahu

Thank you for the opportunity review the subject document. We have the following comments and questions.

1. Please describe whether the potential accumulation of methane gas in the enclosed areas will be monitored. If so, describe how the gas will be monitored and who will be responsible for the monitoring.
2. A steep gully bisects the landfill and non-landfill areas. How will people and vehicles cross the gully? Will a bridge be constructed? If so, describe any impacts associated with the bridge.
3. As there are no sewer lines near the site, septic tanks or leach fields will be used. Any individual wastewater system built for the project must meet Department of Health regulations.
4. The site was previously a City landfill. Who would be responsible for any liability which can be traced to the former landfill use?

If you have any questions, call Jeyan Thirugnanam at 586-4185.

Sincerely,

  
Gary Gill  
Director

c: ~~Roberta~~ Ferreira