

1998-06-08-HI-~~FEA~~-Island Dairy
Long Term Lease for Dairying Purposes

JUN 8 1998

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FINAL ENVIRONMENTAL ASSESSMENT

Prepared for:

ISLAND DAIRY, INC.
Ookala, North Hilo
HAWAII

May 1998

Table of Contents

SUMMARY

1.0 IDENTIFICATION OF APPLICANT AND APPROVING AGENCY

- 1.1 Identification of Applicant
- 1.2 Identification of approving agency

2.0 LIST OF AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED

3.0 DESCRIPTION OF PROPOSED ACTION

- 3.1 Background
- 3.2 Buildings and leasehold improvements
- 3.3 Use
- 3.4 Financial projections
- 3.5 Further Design and Process Details

4.0 DESCRIPTION OF ACTION'S TECHNICAL, ECONOMIC, SOCIAL AND ENVIRONMENTAL CHARACTERISTICS

- 4.1 Physical Environment
- 4.2 Social Characteristic
- 4.3 Economical Characteristics
- 4.4 Public Facilities
- 4.5 Relationship to Land Use Plans and Policies
- 4.6 State Land Use Law
- 4.7 County Development Plan and Zoning
- 4.8 Required Approvals

5.0 SUMMARY OF MAJOR IMPACTS

- 5.1 Short Term
- 5.2 Long Term
- 5.3 The Direct, Indirect and cumulative impacts of Dairy Waste Management Activities

6.0 ALTERNATIVES CONSIDERED

- 6.1 Private Lands
- 6.2 State Owned Lands

7.0 PROPOSED MITIGATION MEASURES

- 7.1 Soil Erosion
- 7.2 Waste Managements
- 7.3 Natural & Physical Environment

Table of Contents Cont.

8.0 DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

8.1 Significance Criteria

9.0 APPENDICES:

9.1 Site Maps

9.2 Soil Map

9.3 Soil Suitability Reports

9.4 Site Map and Pictures of Proposed Action

9.5 Pictures of type of facility (Existing Location)

9.6 Topographic Map

9.7 Locations of Regional Wells and Springs

9.8 Waste Management Concept Flow Chart

9.9 Comments from various agencies

SUMMARY

Applicant: Island Dairy, Inc.
P.O.Box 2626, Kamuela, Hawaii 96743.

Project Location: Ookala, North Hilo
Hawaii

Parcel Identification: Tax Map Keys: 3-9-1:1,2
3-9-2:7,8
4-1-05:1
4-1-01:6

Area: Approx. 2,400 Acres

Ownership: State of Hawaii, DLNR
Ceded Lands

Existing Use: Abandoned Sugar cane Land

Proposed Use: Dairy Farm and Pasturage

State Land Use District: Agriculture

County Zoning: Agriculture

1.0 IDENTIFICATION OF APPLICANT AND APPROVING AGENCY

1.1 Identification of Applicant

Island Dairy, Inc.
P.O.Box 2626,
Kamuela, Hawaii 96743.

1.2 Identification of Approving Agency

Department of Land & Natural Resources
Division of Land Management
75 Aupuni Street, Room 204,
Hilo, Hawaii 96720.

2.0 LIST OF AGENCIES ,ORGANIZATIONS AND INDIVIDUALS CONSULTED

Federal: Natural Resource Conservation Service (NRCS)

State: Department of Agriculture
Department of Health
Department of Land & Natural Resources, Historical Preservation
Department Hawaiian Home Lands
Office of Hawaiian Affairs
Hawaii Department of Transportation

County: Planning Department
Department of Public Works
Department of Water Supply
Police Department

Individuals: Tom Young, Diversified Agriculture Services, North Hilo Community
Council Director

3.0 DESCRIPTION OF PROPOSED ACTION

3.1 Background

Island Dairy is currently in operation in Ahualoa, Hawaii. The dairy site has been in existence nearly 40 years. Island Dairy purchased this operation in 1990, and prior to this was raising dairy heifers in Kohala and Hamakua area.

Island Dairy is producing approximately 1,100 gallon of milk per day and holds quota to produce up to 1,250 gallons per day. The operation consists of approximately 1,050 acres with total head of 750 Holsteins. The lease on this facility will expire in year 2002.

Big Island dairy farmers are currently producing the least expensive milk in the state, and over the last few years have been exporting milk to Oahu and Guam on a regular basis. It is a fact that the dairy industry on the Big Island is progressing while shrinking on Oahu. Dairy farming is among the 4 largest diversified agriculture in the State.

Island Dairy has currently reached maximum capacity and has recently purchase 80 acres of fee simple land adjacent to the property as a temporary relief. The future of Island Dairy depends on securing a suitable lease to relocate in the next 2 to 3 years.

Island Dairy has also over the last few years developed the first cow milk cheese manufacturing in the State. This was initiated as a solution to surplus periods during school breaks and or other factors that prohibit exporting to Oahu. This has been met with success and hope to be developed as a new avenue for the Big Island milk producers.

3.2 Buildings and Leasehold Improvements

The facility that Island Dairy is proposing at this site will be confined to approximately 10 acres. This will be centrally located on the site (1400' elevation) and will consist of :

- 1- Milking barn and holding pen.
- 2- Milk processing room and milk loading bay.
- 3- Feed Storage building.
- 4- Calf housing.
- 5- Free Stalls.
- 6- Waste management system
- 7- The infrastructures.

1- Milking Barn and Holding Pen. This structure will be approximately 200' X 60'. In this area the cows will be washed and milked. All milking and barn feeding equipment and systems will be housed in this building. An office area as well as a storage room is also located in this structure.

2- Milk Processing Room and Loading Bay. The milk storage room, equipment room and the small cheese processing room will be located in this building of approximately 50' X 60'. The milk loading bay is also part of this building. This building will be attached to the barn.

3- Feed Storage Building. This will be approximately 100' X 40' and consist of 8 Bays for unloading and or storage of various feed commodities.

4- Calf Housing. This is a 60' X 30' structure for housing calves in individual stalls.

5- Free Stalls. This is a structure of 200' X 100' which will house lactating cows during adverse weather. This building provides resting stalls for 200 cows and a feed alley to feed the same number.

6- Waste Management System. This will a system of collecting all manure at the barn, holding pen, concrete surfaces and free stalls into a collecting pit. This will be agitated and pumped over a manure separator located above the pit. The solids which will be separated will be conveyed to a curing area for production of compost. The effluent is used for (1) flushing lanes (recycled) and (2) as a nutrient for the pastures. (See Section 3.5 for further design and process details)

7- The Infrastructures. These will include:

- 3 phase power at the facility.
- Improving and paving some of the existing roads.
- Extensive cross fencing of pastures.
- Water system.

See appendix 9.4 for lay out of the above mentioned structures.

3.3 USE

The use of this property will be for grazing of lactating and non lactating dairy cattle and the facility to milk, and conduct activities of a dairy farm. The total number of cattle will be approximately 800 head and grow to an estimated number of 1,200 (from birth to mature 1300# cows) in approximately 10 years. The initial low carrying capacity of these lands will require the relocation plans to take place incrementally.

3.4 Financial Projections

The estimated cost of improvements are as follow:

Planning costs:	\$30,000
Fencing:	\$90,000
Infrastructures:	\$200,000
Buildings and Structures:	\$350,000
Milking and Support Equipment:	\$250,000
Pasture Improvement	\$280,000
Other Equipment:	\$120,000
 Total Costs:	 \$1,320,000

3.5 Further Design and Process Details

The design and construction of the waste management system will be carried out with the assistance of NRCS and the final approval by the Department of Health, wastewater Branch. However in principal the flow chart in appendix will highlight the steps necessary in order to address this topic. The size of the facility will have to meet the waste generated as well as allowance for future expansion and waste handling requirements. In brief the wastewater and manure will be collected in appropriate size concrete pits. This is agitated and pumped over mechanical separators to separate the solids for compost and the effluent is then either recycled to "flush" surfaces (to remove manure from concrete surfaces) and or is diverted into holding lagoons which are lined for further anaerobic digestion and eventually used for irrigation.

The total acreage under irrigation will have to be determined by NRCS and Department of health. However from both management and economical stand point the larger the area the higher the benefits from the nutrients and the lower the possibility of high Nitrate levels.

4.0 DESCRIPTION OF ACTION'S TECHNICAL, ECONOMICAL, SOCIAL AND ENVIRONMENTAL CHARACTERISTICS.

4.1 Physical Environment

Pasturage and dairy farming on former sugar cane land would be one of the best uses. Pastures would be one of the least disturbing crop with minimal to no cultivation. The proposed use would have no new impact on the physical environment and will enhance the esthetics of the region.

The ownership of these parcels are with the State of Hawaii, Department of Land and Natural Resources. These are ceded lands and were formerly in sugar cane cultivation.

The soils at the site are predominantly Honokaa and Ookala series.

<u>Tax Map Key</u>	<u>Soil Type</u>
3-9-01:1	AkD, KaC, KaD, KaE, RB
3-9-01:2	OoD, HsD, RB
3-9-02:7	HsC, HsD, HsE, Kad, KaE, RB
3-9-02:8	HsC, HsE, KaD, RB
4-1-01:6	HsC, HsE, KaD, RB
4-1-05:1	HsC, HsE, KaD, RB

As any large site the soil and terrain are varied. However without exception except for the gulches all soil varieties are suitable for pasture use (see Appendix 9.2 and 9.3). The annual rain fall is from 90-120 inches depending on the elevation. The elevation of the site is from 500 to 2000 feet above sea level and the proposed location of the dairy will be at 1200 feet elevation.(see Appendix 9.6)

4.2 Social Characteristics

The life style of North Hilo and Hamakua region is distinctly rural with deep ties to agriculture. The warm friendly atmosphere is an integral part of the community. A dairy farm and pastures would be consistent with the rural character of the region and would have no new impact on social environment.

4.3 Economical Characteristic

A dairy farm would have a very positive impact on the economy of the region in the improvement and construction phase as well as the operation phase.

On a daily basis a dairy operation of this size would require approximately 80-100 man hours per day, 365 days per year. There would also be other secondary positive impacts such as delivery of feed and supplies, repair and maintenance, at the processing level at the plant, retail level and other support needs that their positive impact would be difficult to estimate.

The labor for a dairy farm is typically drawn from the immediate neighborhoods. In the construction phase there would be surges of labor need throughout. A dairy operation would bring the highest demand for labor on a regular basis.

4.4 Public Facilities

On this site, at any one point in time, there would be 8-10 employees. There would be no new impact on public facilities, traffic, flood and drainage associated with the proposed use.

4.5 Relationship to Land Use Plans and Policies

Dairy operation and pasturage are consistent with Hawaii State plan as outlined in chapter 266-6:

(a) (1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people.

(a) (2) A growing and diversified economic base that is not overly dependant on a few industries.

and chapter 266-7:

(a) (2) Continued growth and development of diversified agriculture throughout the State.

(b) (5) Enhance agricultural growth by providing public incentives and encouraging private initiatives.

(B) (10) Promote economically competitive activities that increase Hawaii's agricultural self-sufficiency.

4.6 State Land Use Law

The site is in Agricultural District. The proposed use is permitted within the Agricultural District. A district boundary amendment is not required.

4.7 County Development Plan and Zoning

The current County zoning of the site is agriculture. Under current county zoning, no zone change for the proposed use is required.

4.8 Required Approvals

State of Hawaii:

Department of Health

All constructions have to comply with Title 11, Hawaii Administrative Rules, Chapter 15, Milk, Chapter 20 Potable Water Systems, Chapter 26 Vector Control, and Chapter 62 Wastewater. A wastewater management plan to address the animal waste will need to be submitted to Waste water Branch to be reviewed and approved.

County of Hawaii:

Department of Public Works

All construction shall conform to all requirements of code and statues of County of Hawaii.

Solid waste management plan shall conform to the rules and regulations of the County of Hawaii, solid waste division.

Planning Department

All construction shall conform to all requirements of code and statues of County of Hawaii.

Department of Water Supply

Any water meters provided by the Department must be installed in accordance to the requirements of the department.

5.0 SUMMARY OF MAJOR IMPACTS

5.1 Short Term

Erosion- There will be slight increase in possibility of erosion during the construction phase, and a minimal amount during fencing. The facility will be nearly centrally located on existing roads to minimize the need to develop additional roads and therefore the possibility of increased erosion. Furthermore as a practical and prudent management practice the construction will be carried out in phases in the driest period during the year. The total area of the construction will be less than 1/2% of the total acreage.

Soil- There will be no effect on the soil during the construction phase. The site will be such a small fraction of the total acreage that it will have little to no effect on the landscape.

Traffic- There will be a slight increase in traffic in and out of the property, however as the site is on the main highway its effect is negligible to the community.

5.2 Long Term

Erosion- Pasture usage would be one of the best uses in terms of erosion. The cow traffic at the dairy site will be concrete surfaces. In excessive rainfall period the herd will be housed in free stalls (exhibit 8.5) which will aid in good herd health as well as reduce erosion.

Soil- Initially the soil will be analyzed and any deficiency will be corrected to produce the best possible pastures. Rotational grazing as well as constant supplementation of dairy cattle's diet with high protein concentrates, vitamins and minerals will improve the quality of the pasture on regular basis. This type of high input is only typical of a dairy operation.

Air- No effect on air quality is foreseen.

Water- The water supply will consist of (1) Approximately 7,000 gallon per day by a county water meter which will be arranged with the Department of Water Supply as the project progresses. (2) All of the structures will be designed with a catchment system. This will also avoid any run off. (3) in coordination with the Department of Water Supply and Department of Land and Natural Resources other possible water sources will be explored.

Flora & Fauna- Little impact on flora and fauna is foreseen. The site is already primarily grassland, and there will be little alterations. The primary location of any flora & Fauna will be in the gulch areas. These areas have little feed value and are a problem from the management stand point. Therefore all of these areas will be fenced off to the cattle. No effect on the wildlife in the area is foreseen.

Noise- The dairy will generate very little increase in noise levels. The location of the facilities on the site will also provide a buffer zone.

Archeological/ Historical Site- No site of historical or archeological significance are known to exist on the site.

Aesthetic- The dairy facility will be nearly centrally located and therefore will be some distance from any public roads, residences, or commercial sites. This location is one the most rural sites available in Hamakua or North Hilo districts. The construction will be designed with the philosophy that this is one of the most beautiful sites in the county. The development of the pastures, fences, building and roads are to conform and enhance this beauty. It is therefore prudent as well as satisfying to develop this land with this philosophy in mind.

Economic- The dairy will have a distinct positive economical input on the community. The dairy will provide steady well paid employment. The positive impact will be rippled into supporting suppliers, service providers, processing plant and retail end of the industries. This will also help keep Revenues within the state rather than to mainland producers. There will also be increased tax revenue for the state.

Social- Secure employment in a local agriculture will have a positive social impact. This conforms to the region's history. Island dairy has always supported community activities and provides tours for elementary schools on a regular basis.

5.3 The Direct, Indirect and Cumulative Impacts of Dairy Waste Management Activities

A sound waste management plan and facility is a fundamental and integral part of a dairy. Such a plan will both eliminate potential environmental problems as well as increase efficiency of the nutrient replenishment. This dairy will have to meet the most current standards and requirements in waste management. The overall objective is to minimize waste volume, collect waste, in process avoid any possibility of leaching, separate solids and process the effluent and use the use the effluent for irrigation over sufficient acreage

to avoid accumulation of nutrient. This design and adequacy of the facilities will be carried out by the NRCS and Department of Health. The operation of the system will also be monitored by regulatory agencies.

The waste from dairy cattle can be a great asset to the land. This is due to extensive supplemental feeding that is required. Today the most productive pasture lands are existing and former dairy sites. A sound management system will enhance the return and supplementation of nutrients to the land .

6.0 ALTERNATIVES CONSIDERED

A suitable site for a dairy must meet the following criteria.

Size- In order to meet the current demand as well as projected growth a suitable site should be 2,000 to 2,500 acres. This would allow a total herd of 1,500.

Soil & Climate- A suitable site requires the right type of soil for productive pastures. The rain fall should also be sufficient through out the year, however not excessive. The temperature should be cool to avoid heat stress and fly problems.

Infrastructure- Roads, water and power should be in proximity.

Lay out- The site must have sufficient buffer zone to avoid negative impacts of agricultural operations such as noise, smell, insect pests or aesthetic impacts.

Availability of Long Term Lease- The substantial investment required will make any lease term under 30 years impractical, and 50 years is preferred.

Topography- Low gradient slope are desirable due to reduced erosion and water problems

The following sites have been considered:

6.1 State Owned Lands

Tax map keys: 4-1-04:31,32,33 and 4-2-07:2

The problem with this site was the size and the fact that the parcels were not contiguous.

6.2 Private Lands

Parker Ranch: The old parker ranch dairy site.
No decision was made by the board of trustees of Parker Ranch.

Bishop Estate: 1400 acres near Waipio
This site was too small, close to the residential area, at low elevation, and erodible terrain. Also lease arrangements were not quiet clear.

7.0 PROPOSED MITIGATION MEASURES

7.1 Soil Erosion Control Measures

Ground cover and native trees will be retained to avoid run off and soil erosion. The pastures will be laid out to minimize traffic and rotational grazing practices will be adopted to further minimize soil erosion. High traffic area near the barn will be concreted.

The use of Free Stalls is excessive rain fall periods will further reduce exposure of pastures to cattle in sensitive times. The run off water on the facility will be captured and utilized to increase efficiency and minimize risks of erosion. Drainage ditches shall be maintained on a regular basis.

7.2 Waste Management

A pasture operation will minimize waste management problems. However an extensive system of collection, separation of solids, and use of effluent shall be designed to convert waste into nutrient. This shall be designed to best management practice standards and shall meet the Department of Health regulation and standards.

7.3 Natural & Physical Environment

The structures will be centrally located to improve cow traffic and provide a buffer zone to eliminate the possibility of any nuisance such as noise, smell or fly problems. The higher elevation and cooler temperatures will also aid in the fly control program.

The gulches will be fenced off to avoid the cattle entering these areas and possibly destroying any native plants.

The design, construction and use of the facility shall be conducted with aesthetic in mind. The trees will be preserved and even increase when ever possible as they will also provide shade for the cattle. The roads through the property to the forest reserve shall be kept open and improved. The Objective for this operation is not only to blend in the region and community but also enhance it.

8.0 DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

8.1 Significance Criteria

According to the Department of Health Rules (11-200-12), an applicant or agency must determine whether an action may have a significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. In making the determination, the Rules establish "Significant Criteria" to be used as a basis for identifying whether significant environmental impact will occur. According to the rules, an action shall be determined to have significant impact on the environment if it meets any one of the following criteria:

(1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resources:

The proposed use is in conformity to its past and designated use. No significant archaeological or historic sites are known.

(2) Curtails the range of beneficial uses of environment:

This site is designated for agricultural use and most desirably for diversified agriculture.

(3) Conflicts with the State's long term environmental policies or goals and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed use is consistent with the Environmental policies established in Chapter 344, HRS, and National Environmental Policy Act.

(4) Substantially affects the economical or social welfare of the community or state:

The dairy will have a positive impact on economical and social welfare of the community. The economical benefits will be further rippled in the county as well as state as Big Island dairies produce more and more of the Oahu milk.

(5) Substantially affect Public Health

The design, construction and use of the facility will be carried out with supervision and approval of the Department of Health. The dairy will not be allowed to operate if it is deemed to affect public health.

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

The proposed use is compatible with region's history and will not create significant secondary impacts.

(7) Involves a substantial degradation of environmental quality:

Proper design and utilization of a dairy facility will not have a substantial impact on the degradation of environmental quality. This dairy will be constructed to the most modern and best managements practices to date and will have a positive impact on the overall environmental quality.

(8) Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions:

An efficient dairy operation has to conform to its environment and any conflicts will translate to operational problems for a dairy. Therefore in order to establish a long term profitable operation all the details must be considered in the design, construction and use of the facility. Therefore there are no significant cumulative impacts are anticipated.

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

The site is former sugar can land and all gulches will be fenced off. There are no known endangered plant or animal species on the cultivated region of the site.

(10) Detrimentially affects air or water quality or ambient noise levels.

A waste management plan is required and its design and use are to prevent any air (smell) and water quality hazards. The noise level will be negligible from such an operation.

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

The site does not fall into the above categories. However soil erosion concerns are an integral part of most farming operations. Pasture is the most suitable use in this regard. The design and the location of the facilities are to minimize soil erosion.

(12) Substantially affects scenic vistas and view planes identified in county or state plans or studies:

Pastures will not significantly affect the scenery. This use will enhance the aesthetics of the region.

(13) Require substantial energy consumption.

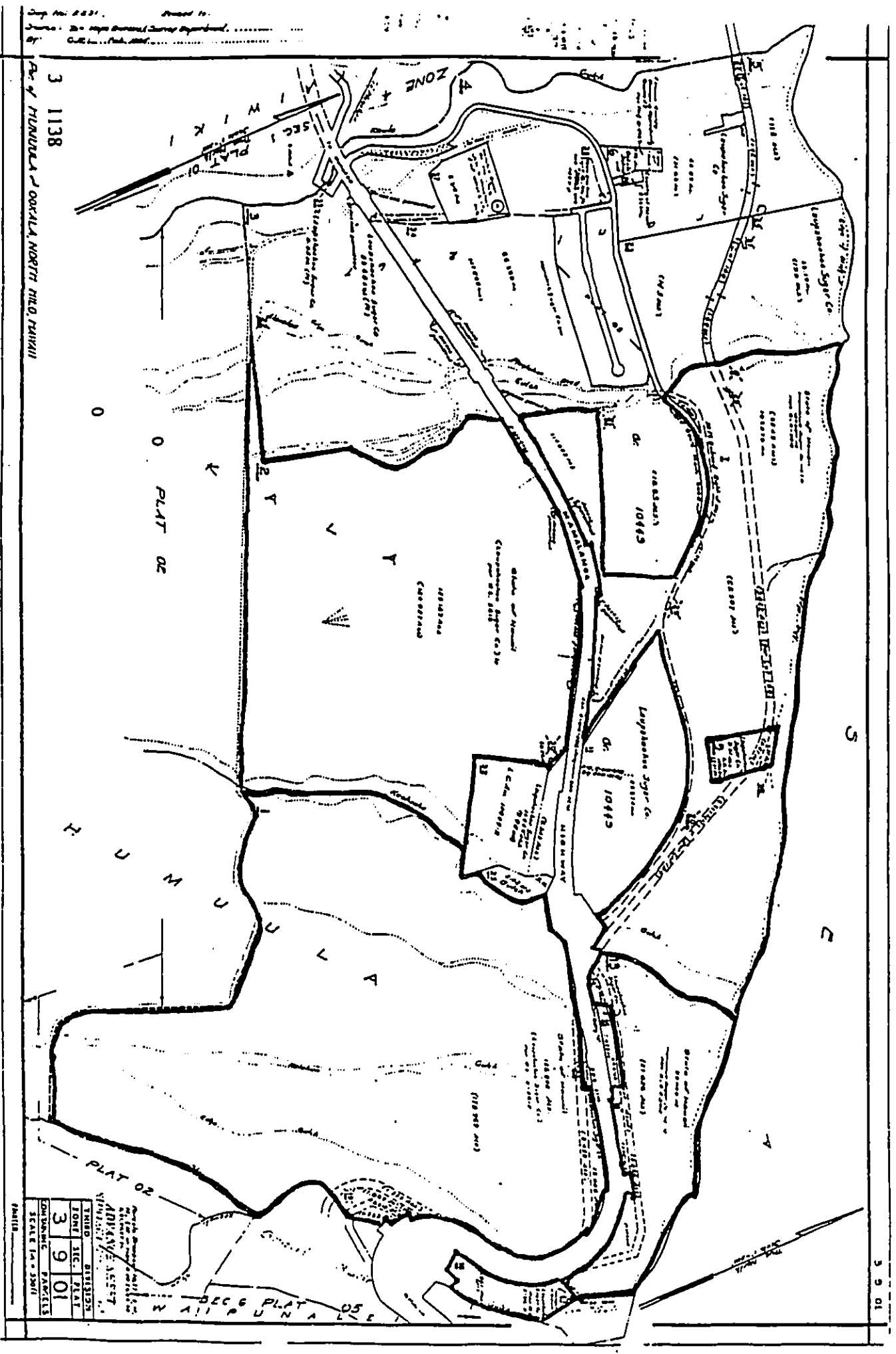
A dairy and pasture operation will not require substantial energy.

9.9 Comments from various agencies and responses from Island Dairy.

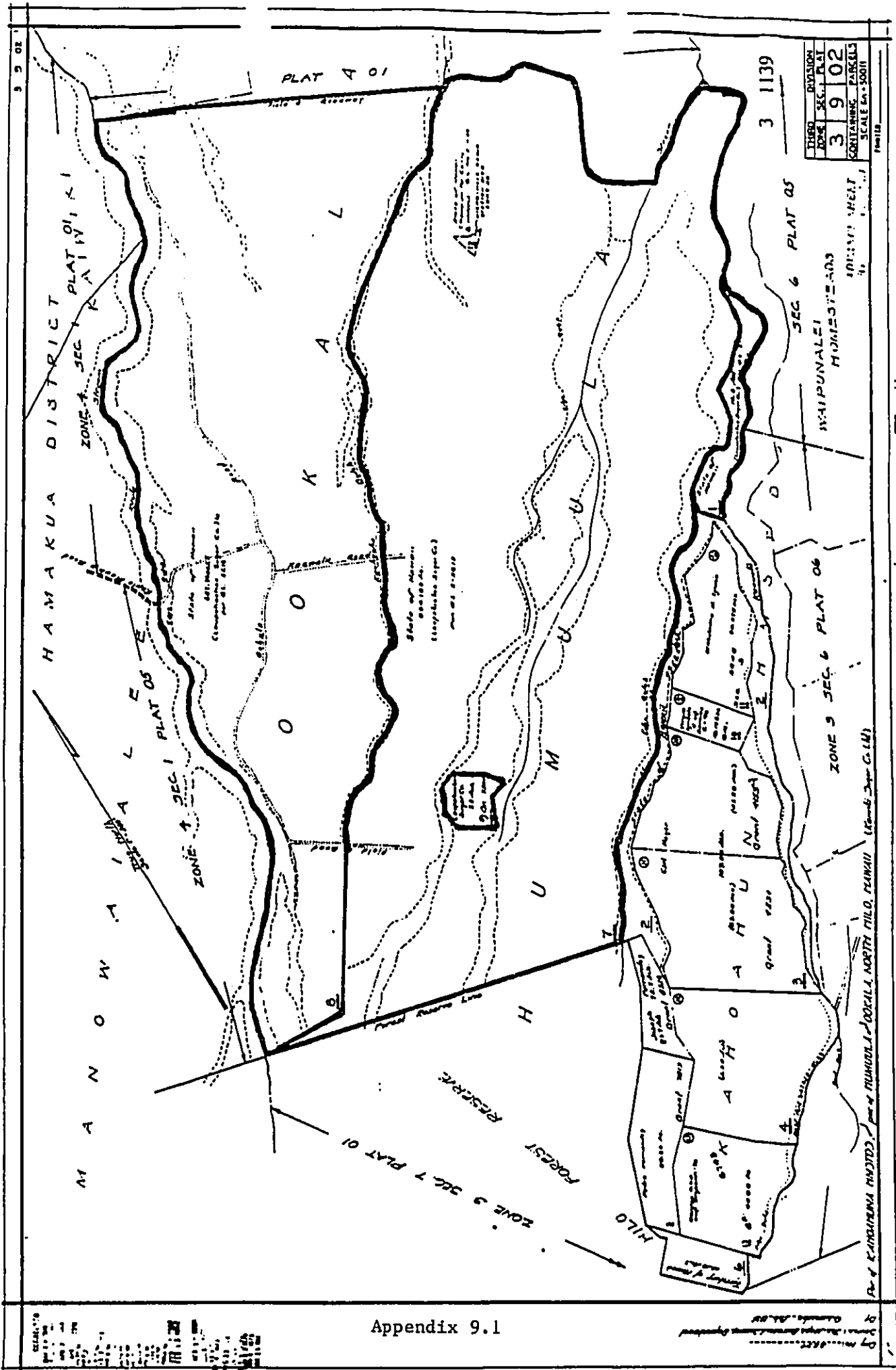
State Agencies: Department of Agriculture
Department of Hawaiian Home Lands
Department of Health, Environmental Health
Department of Health, Waste Water Branch
Department of Land and Natural Resources, Historic
Perservation
Department of Land and Natural Resources, Land Division
Office of Hawaiian Affairs

County Agencies: Planning Department
Police Department
Public Works
Water Supply

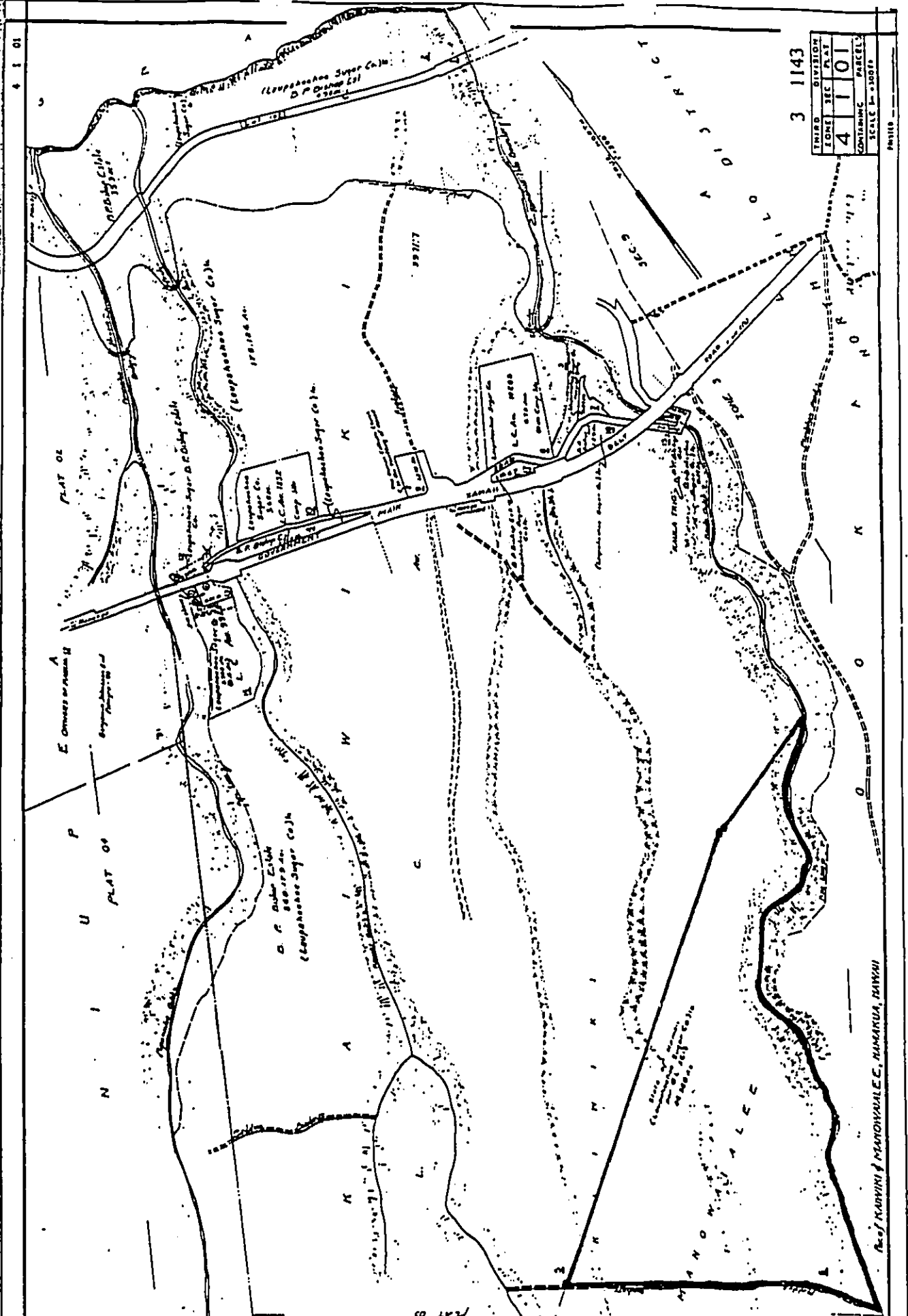
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Appendix 9.1








THIRD	DIVISION
4	1101
SECTION	PIECE
3	1143
SCALE 1" = 100 FT	

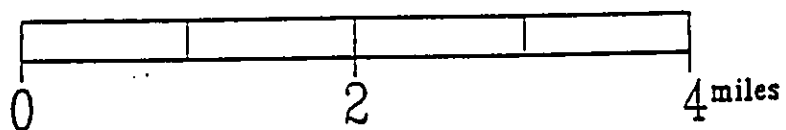
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 Date: [illegible]

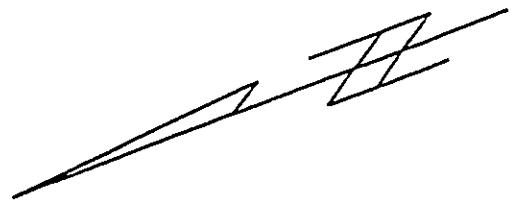
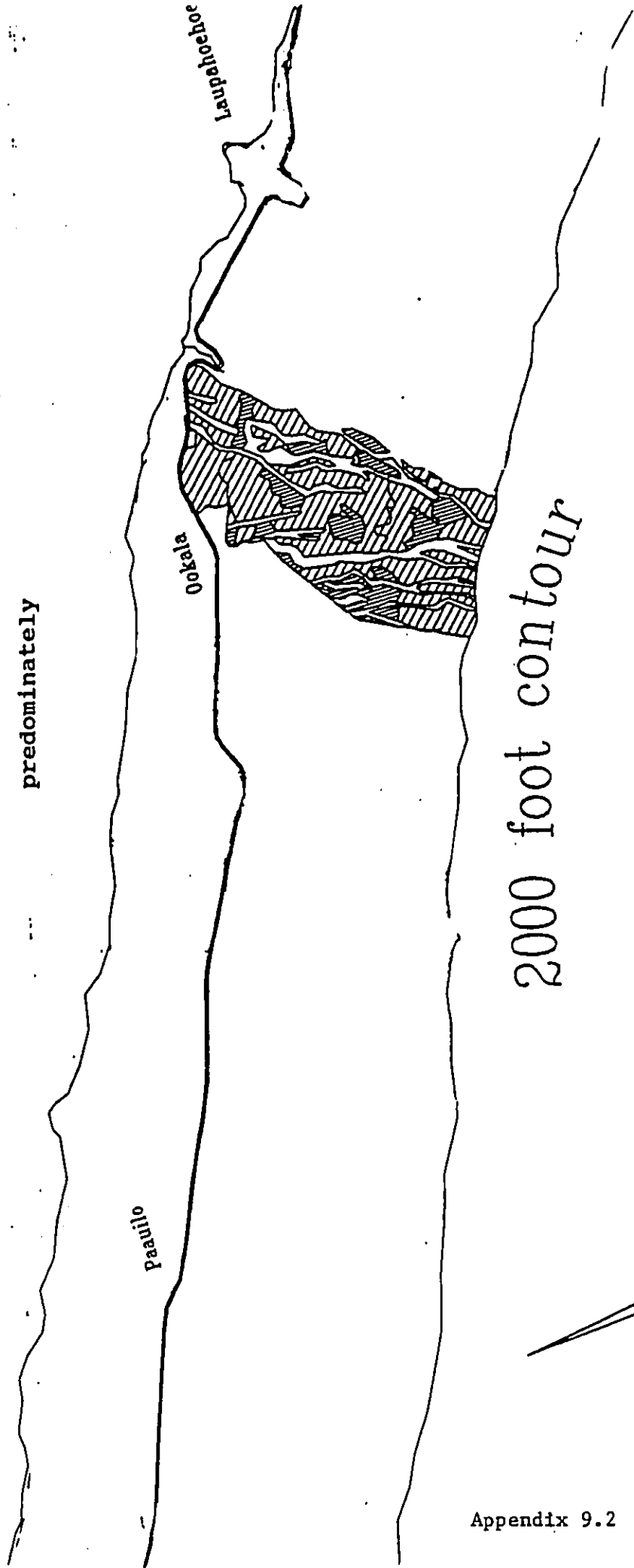
As of NANKUA, HAWAII, NANKUA, HAWAII

-  soil code ending: C 1235 acres
-  soil code ending: D 5905 acres
-  soil code ending: E 1429 acres
-  State land
-  Major Highway

Produced by the Office of State Planning
 in conjunction with the Bureau of Land
 Management on the Statewide GIS.
 Data Sources - State Land: USGS Girs data,
 1976; Soil: Soil Conservation Service;
 Roads: USGS Digital Line Graph, 1983.
 Map for display purposes only.



Honokaa &
Ookala
soils
predominately



Lease Number: _____

State of Hawaii
 Department of Land and Natural Resources
 Division of Land Management

Date: _____
 August 27, 1993

CROP SUITABILITY ANALYSIS

Land ID					
Lease Number	Tax Map Key	Map Unit	Exposure	Wind Speed	Area (Acre)
		HsD	E	< 25 MPH	

Land Factors	
Elevation:	1000 · 3000
Slope:	10 · 20
k Value:	0.050
Depth to Bedrock:	· 60
Depth to Pan:	·
Coarse Fragments:	· 0
Drainage:	well
Temperature:	66 · 69
Rainfall:	100 · 150
pH:	5.6 · 7
Series:	HONOKAA

Crop	Suitability	Score	Flaw
Avocado	PSWI	0 /16	SL
Banana	S	14 /18	
Coffee	PS	0 /18	SL RF
Forage Crops	S	12 /16	
Guava	PS	0 /18	SL TE
Macadamia	PS	0 /18	SL
Papaya	PS	0 /18	SL
Pasture	S	14 /16	
Pineapple	PS	0 /20	SL TE RF
Root Crops	PS	0 /16	SL TE
Sugar Cane	SWI	11 /16	
Truck Crops	PS	0 /16	SL

Lease Number:

State of Hawaii
Department of Land and Natural Resources
Division of Land Management

Date:
August 27, 1993

CROP SUITABILITY ANALYSIS

Land ID					
Lease Number	Tax Map Key	Map Unit	Exposure	Wind Speed	Area (Acre)
		HSE	E	<25 MPH	

Land Factors	
Elevation:	1000 - 3000
Slope:	20 - 35
k Value:	0.050
Depth to Bedrock:	60
Depth to Pan:	
Coarse Fragments:	0
Drainage:	well
Temperature:	66 - 69
Rainfall:	100 - 150
pH:	5.6 - 7
Series:	HONOKAA

Crop	Suitability	Score	Flaw
Avocado	PSWI	0 /16	SL
Banana	S	14 /18	
Coffee	PS	0 /18	SL RF
Forage Crops	PS	0 /16	SL
Guava	PS	0 /18	SL TE
Macadamia	PS	0 /18	SL
Papaya	PS	0 /18	SL
Pasture	S	13 /16	
Pineapple	PS	0 /20	SL TE RF
Root Crops	PS	0 /16	SL TE
Sugar Cane	SWI	10 /16	
Truck Crops	PS	0 /16	SL

State of Hawaii
 Department of Land and Natural Resources
 Division of Land Management

Lease Number:

Date:
 August 26, 1993

CROP SUITABILITY ANALYSIS

Land ID					
Lease Number	Tax Map Key	Map Unit	Exposure	Wind Speed	Area (Acre)
		OoD	E	<25 MPH	

Land Factors	
Elevation:	0 · 1000
Slope:	12 · 20
k Value:	0.100
Depth to Bedrock:	· 60
Depth to Pan:	·
Coarse Fragments:	· 0
Drainage:	well
Temperature:	72 · 74
Rainfall:	90 · 120
pH:	5.1 · 7
Series:	OOKALA

Crop	Suitability	Score	Flaw
Avocado	U	0 /16	SL
Banana	S	13 /18	
Coffee	U	0 /18	SL
Forage Crops	SWI	11 /16	
Guava	U	0 /18	SL
Macadamia	U	0 /18	SL
Papaya	U	0 /18	SL
Pasture	S	/16	
Pineapple	U	0 /20	SL
Root Crops	PSWI	0 /16	SL
Sugar Cane	U	0 /16	SL
Truck Crops	PSWI	0 /16	SL

Lease Number:

State of Hawaii
 Department of Land and Natural Resources
 Division of Land Management

Date:
 August 26, 1993

CROP SUITABILITY ANALYSIS

Land ID					
Lease Number	Tax Map Key	Map Unit	Exposure	Wind Speed	Area (Acre)
		KaD	E	<25 MPH	

Land Factors	
Elevation:	800 - 1500
Slope:	10 - 20
k Value:	0.050
Depth to Bedrock:	60
Depth to Pan:	
Coarse Fragments:	0
Drainage:	well
Temperature:	70 - 70
Rainfall:	150 - 200
pH:	4.5 - 6
Series:	KAIWIKI

Crop	Suitability	Score	Flaw
Avocado	U	0 /16	SL
Banana	S	15 /18	
Coffee	U	0 /18	SL
Forage Crops	SWI	12 /16	
Guava	U	0 /18	SL
Macadamia	U	0 /18	SL
Papaya	U	0 /18	SL
Pasture	S	/16	
Pineapple	U	0 /20	SL
Root Crops	PSWI	0 /16	SL
Sugar Cane	U	0 /16	SL
Truck Crops	PSWI	0 /16	SL

Lease Number: _____

State of Hawaii
Department of Land and Natural Resources
Division of Land Management

Date: _____
August 27, 1993

CROP SUITABILITY ANALYSIS

Land ID					
Lease Number	Tax Map Key	Map Unit	Exposure	Wind Speed	Area (Acre)
		H5C	E	<25 MPH	

Land Factors	
Elevation:	1000 - 3000
Slope:	0 - 10
k Value:	0.050
Depth to Bedrock:	· 60
Depth to Pan:	·
Coarse Fragments:	· 0
Drainage:	well
Temperature:	66 - 69
Rainfall:	100 - 150
pH:	5.6 - 7
Series:	HONOKAA

Crop	Suitability	Score	Flaw
Avocado	SWI	15 /16	
Banana	S	15 /18	
Coffee	PS	0 /18	RF
Forage Crops	S	13 /16	
Guava	PS	0 /18	TE
Macadamia	S	16 /18	
Papaya	S	16 /18	
Pasture	S	15 /16	
Pineapple	PS	0 /20	TE RF
Root Crops	PS	0 /16	TE
Sugar Cane	SWI	12 /16	
Truck Crops	S	15 /16	

PS = PARTIAL SUITABLE
RF = RAINFALL (excessive)
TE = TEMPERATURE

State of Hawaii

Department of Land and Natural Resources
Division of Land Management

Lease Number:

Date:
August 26, 1993

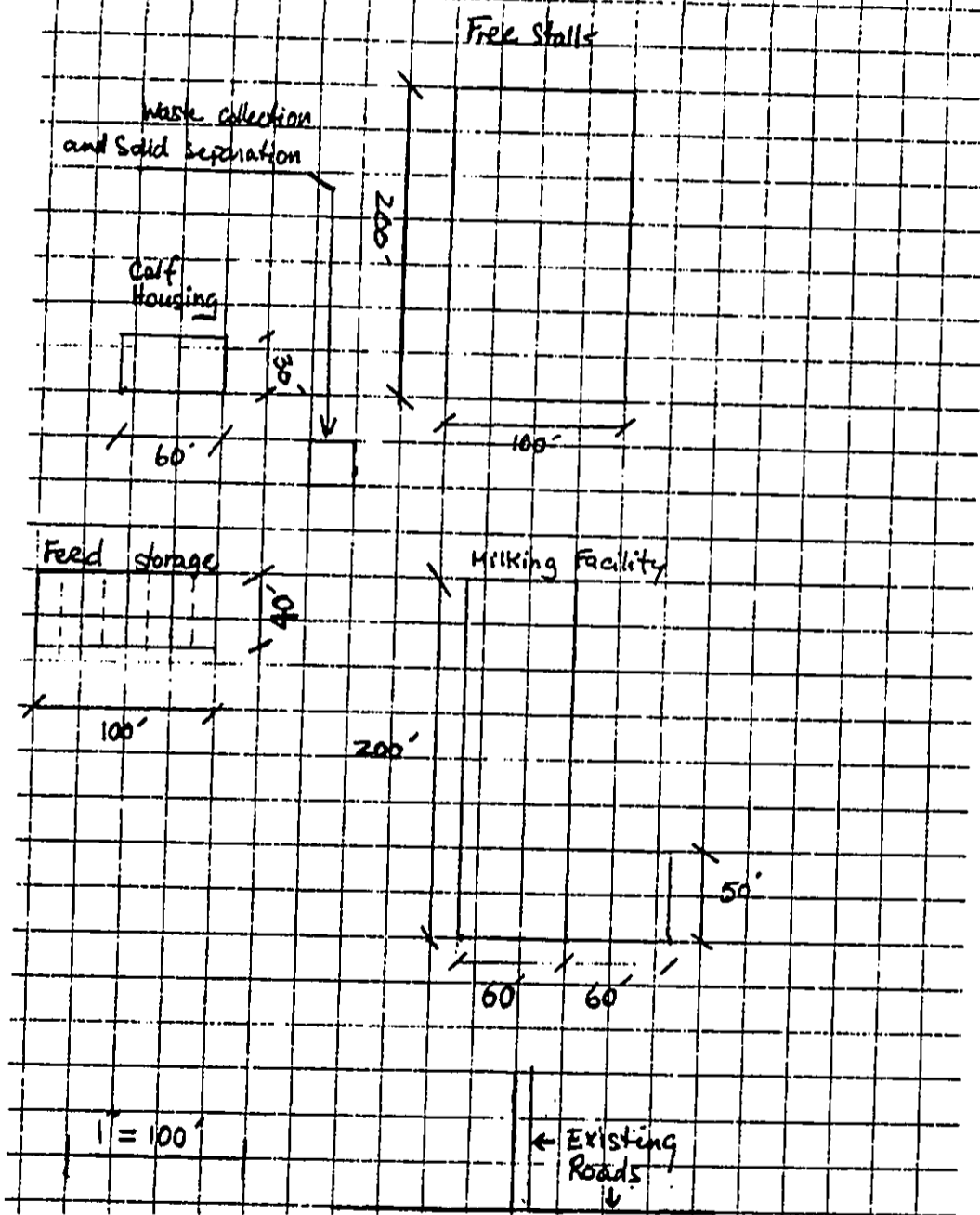
CROP SUITABILITY ANALYSIS

Land ID					
Lease Number	Tax Map Key	Map Unit	Exposure	Wind Speed	Area (Acre)
		RB	E	<25 MPH	

Land Factors	
Elevation:	0-3,000
Slope:	35-70
k Value:	
Depth to Bedrock:	.
Depth to Pan:	.
Coarse Fragments:	.
Drainage:	
Temperature:	.
Rainfall:	.
pH:	.
Series:	Rough broken

Crop	Suitability	Score	Flaw
Avocado	U	0/16	SL, K
Banana	U	0/18	SL, K
Coffee	U	0/18	SL, K
Forage Crops	U	0/16	SL, K
Guava	U	0/18	SL, K
Macadamia	U	0/18	SL, K
Papaya	U	0/18	SL, K
Pasture	S	1/16	
Pineapple	U	0/20	SL, K
Root Crops	S	0/16	SL, K
Sugar Cane	U	0/16	SL, K
Truck Crops	U	0/16	SL, K

Proposed Structures (Preliminary)



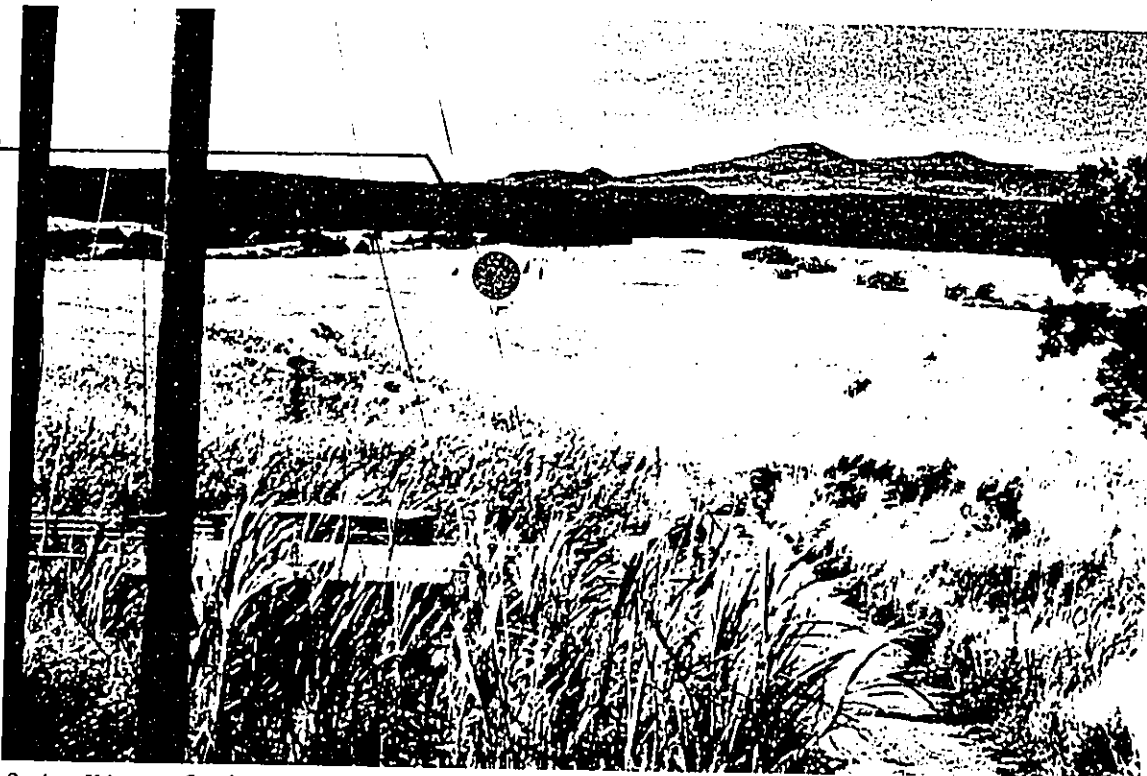
Appendix 9.4 - Layout of proposed structures

GTE
Site

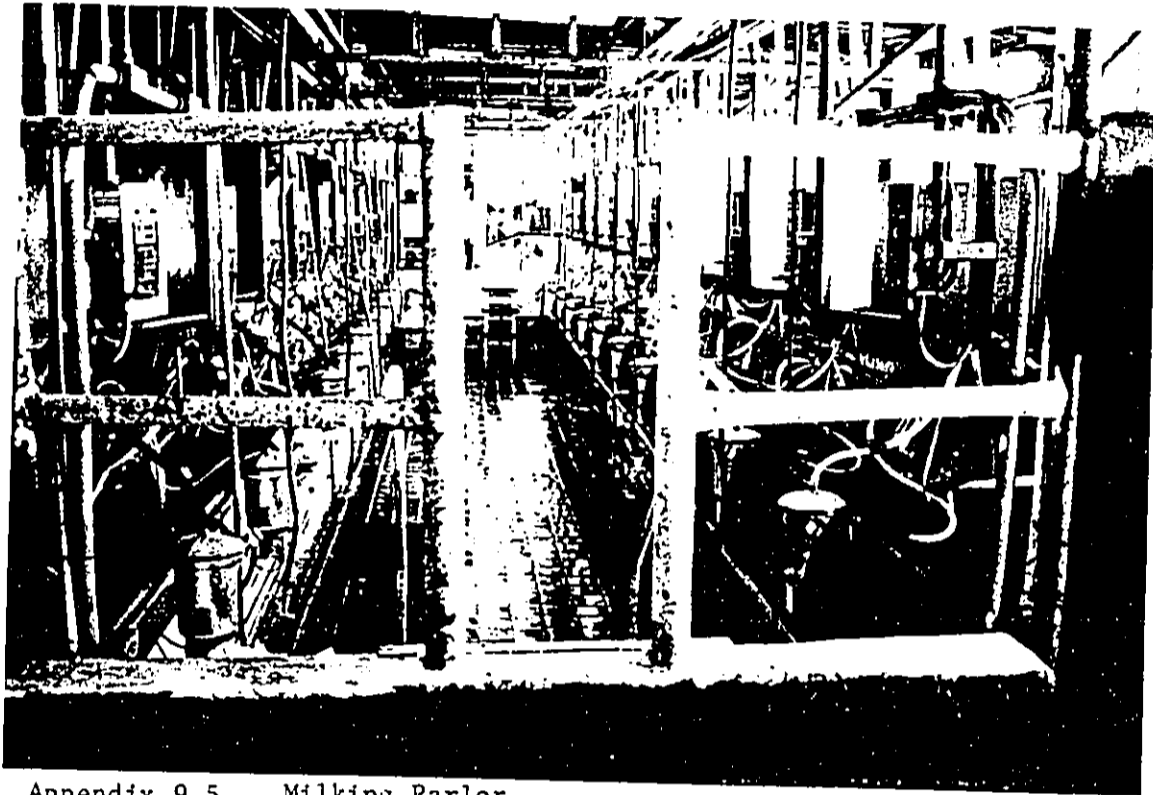


9.4- View of the property from the Highway

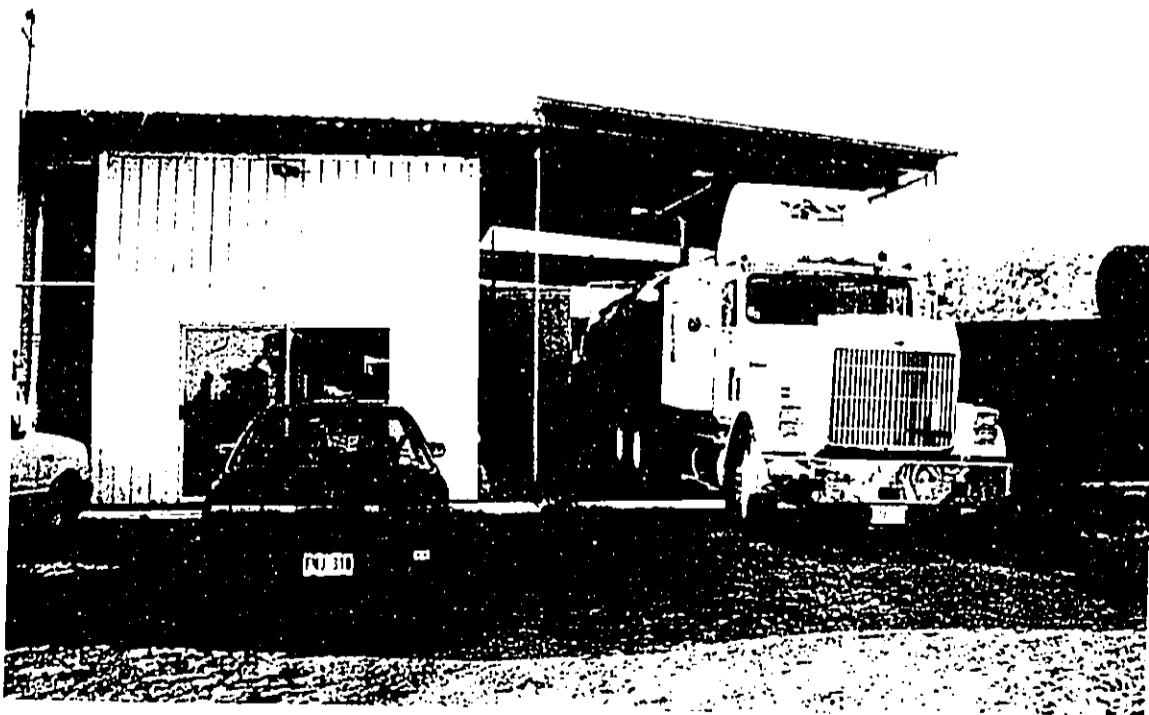
Proposed Site



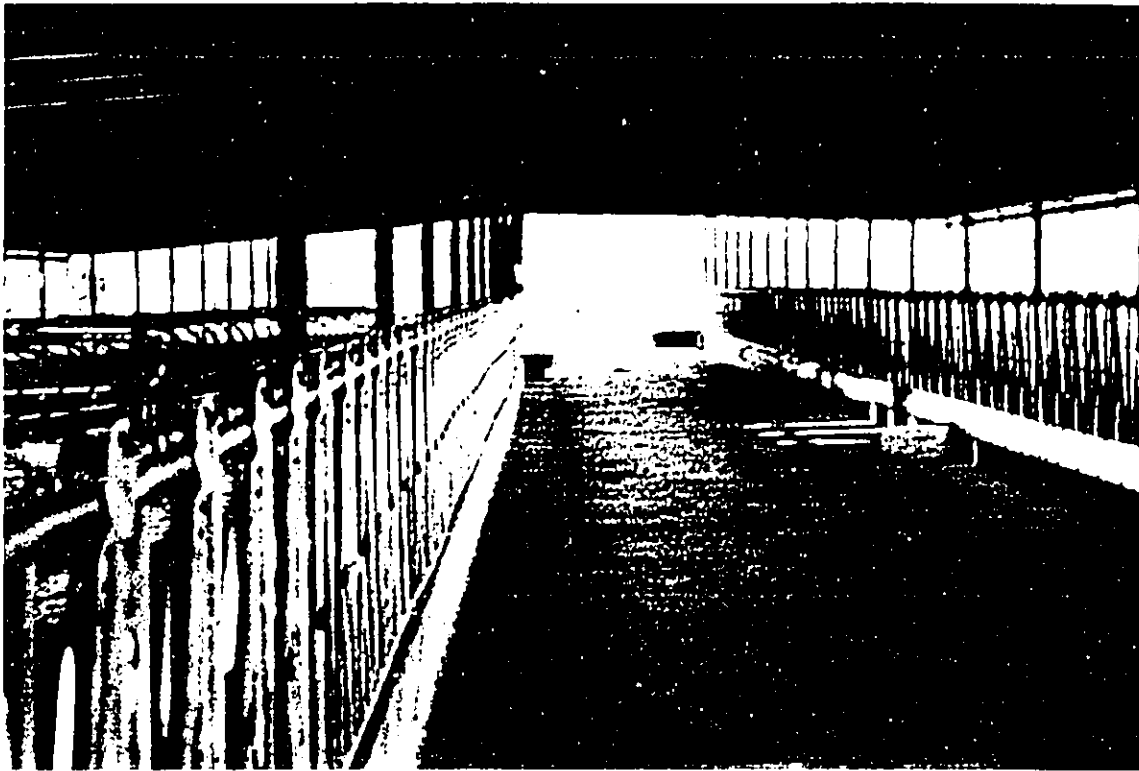
9.4- View of the site from teh GTE Site



Appendix 9.5 Milking Parlor



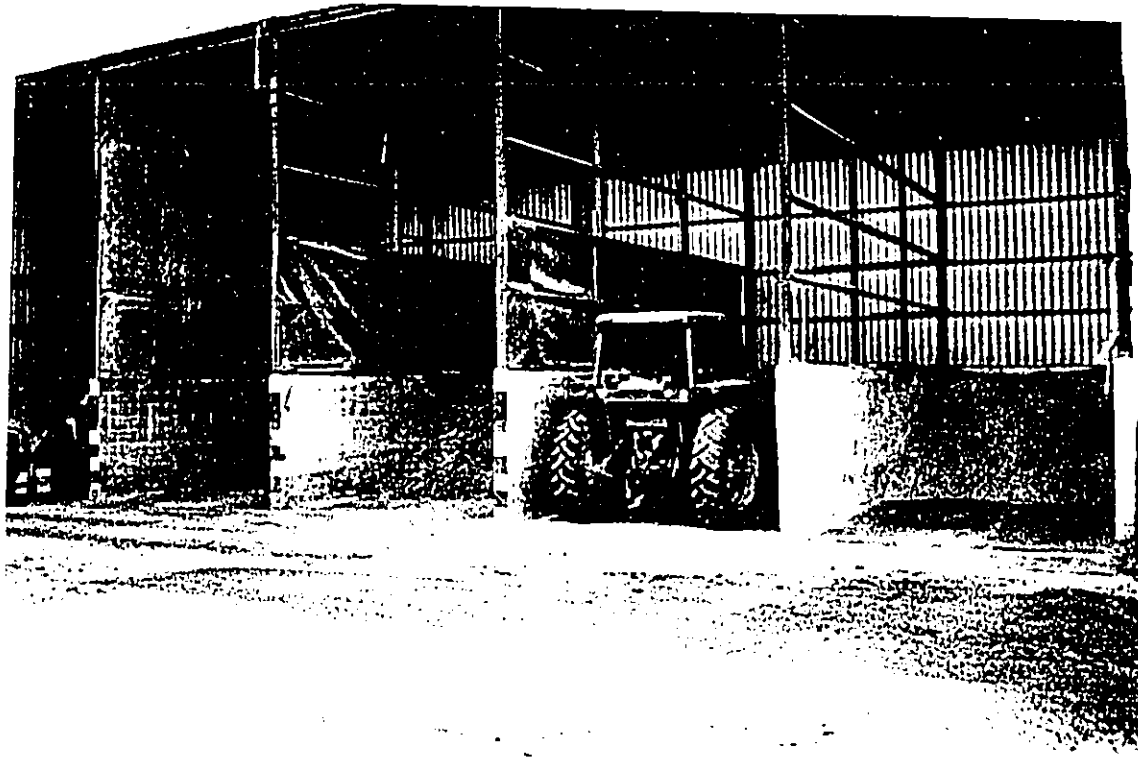
Appendix 9.5 Loading Bay and Processing Room



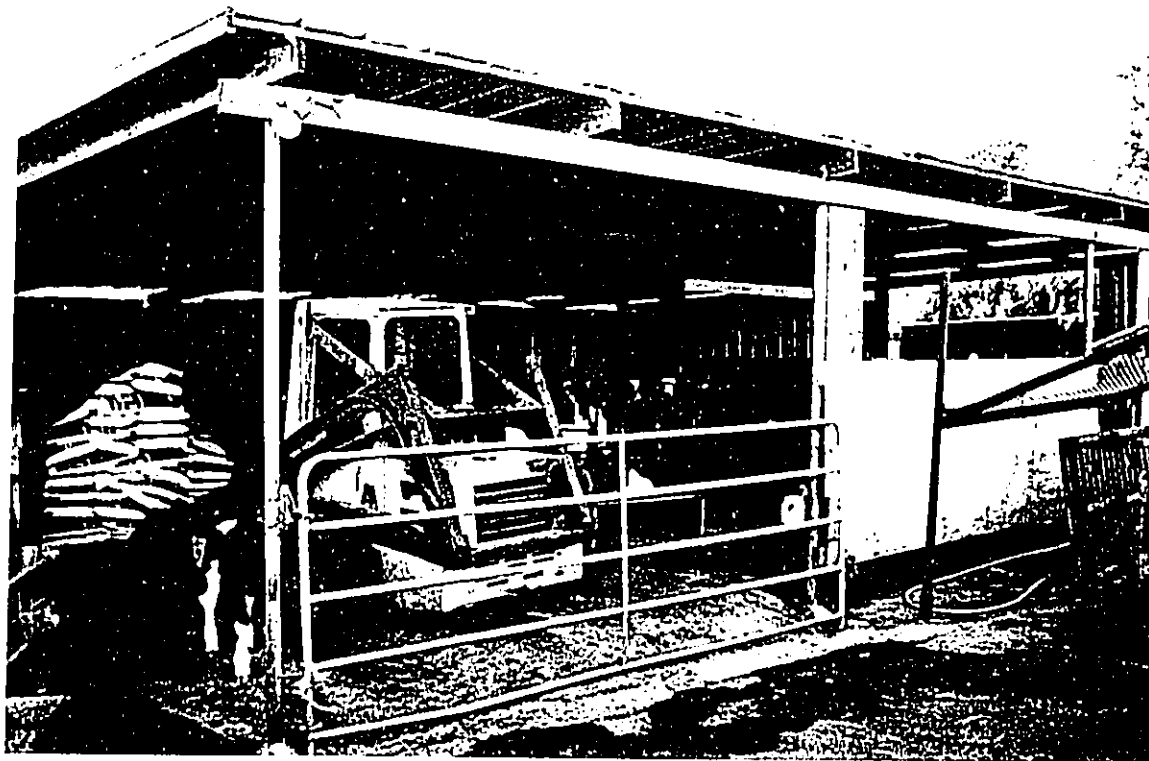
Appendix 9.5 Freestall structure and Feed Alley



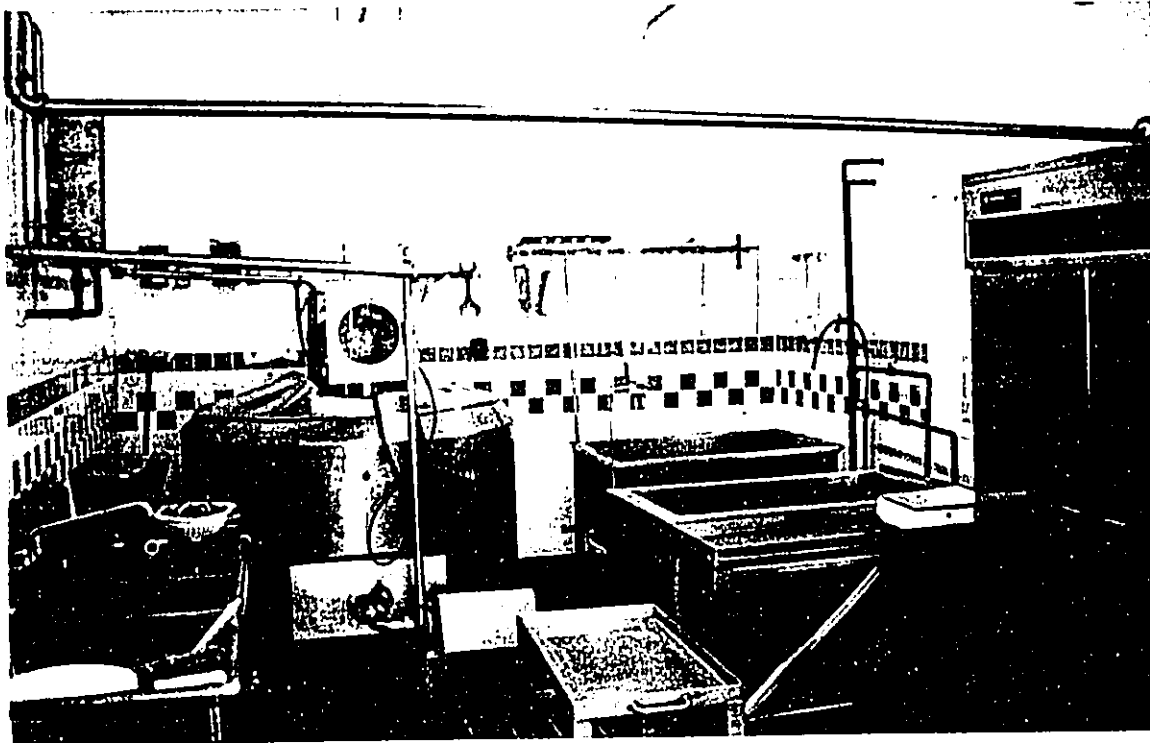
Appendix 9.5 Freestall Structure



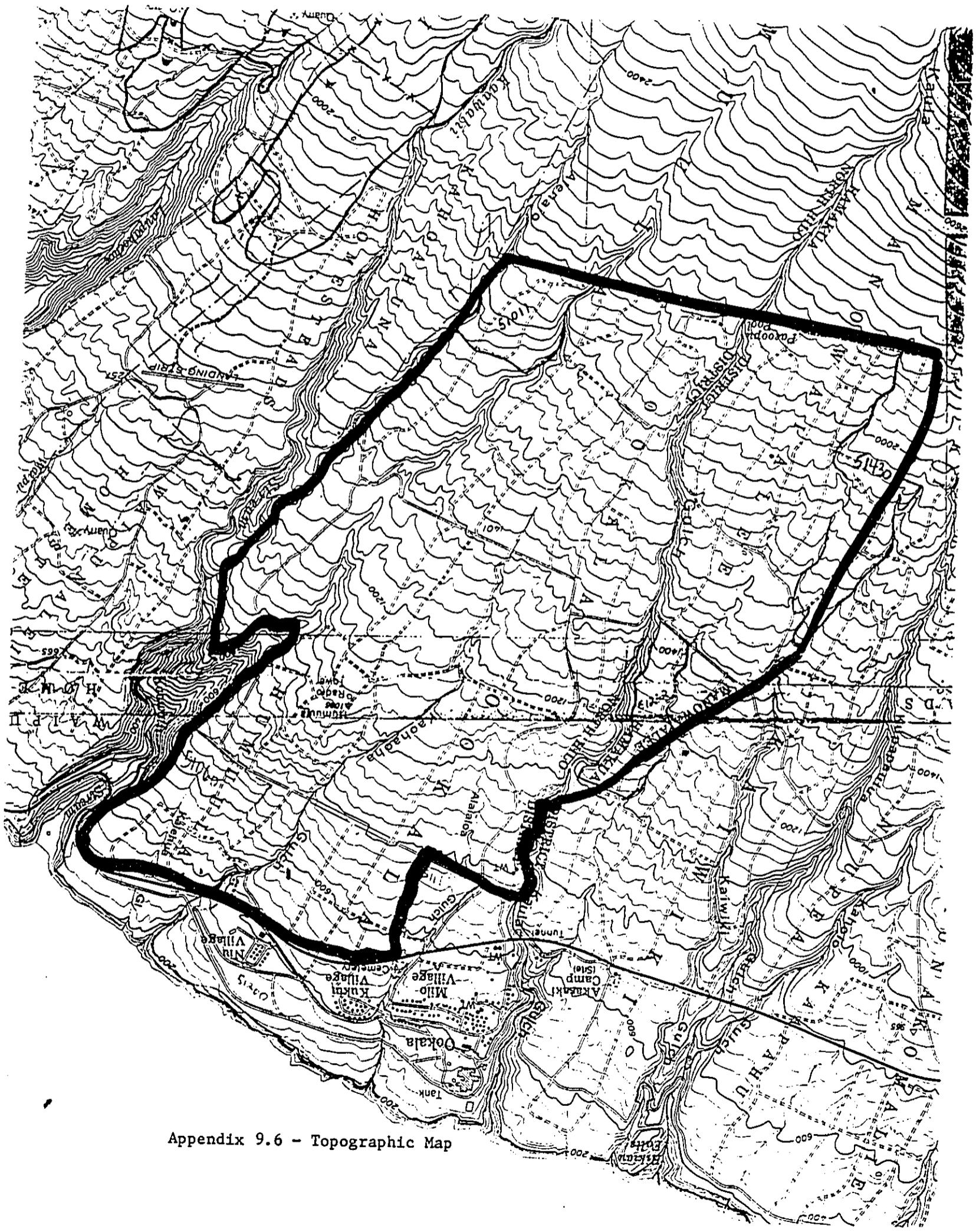
Appendix 9.5- Feed Storage Facility



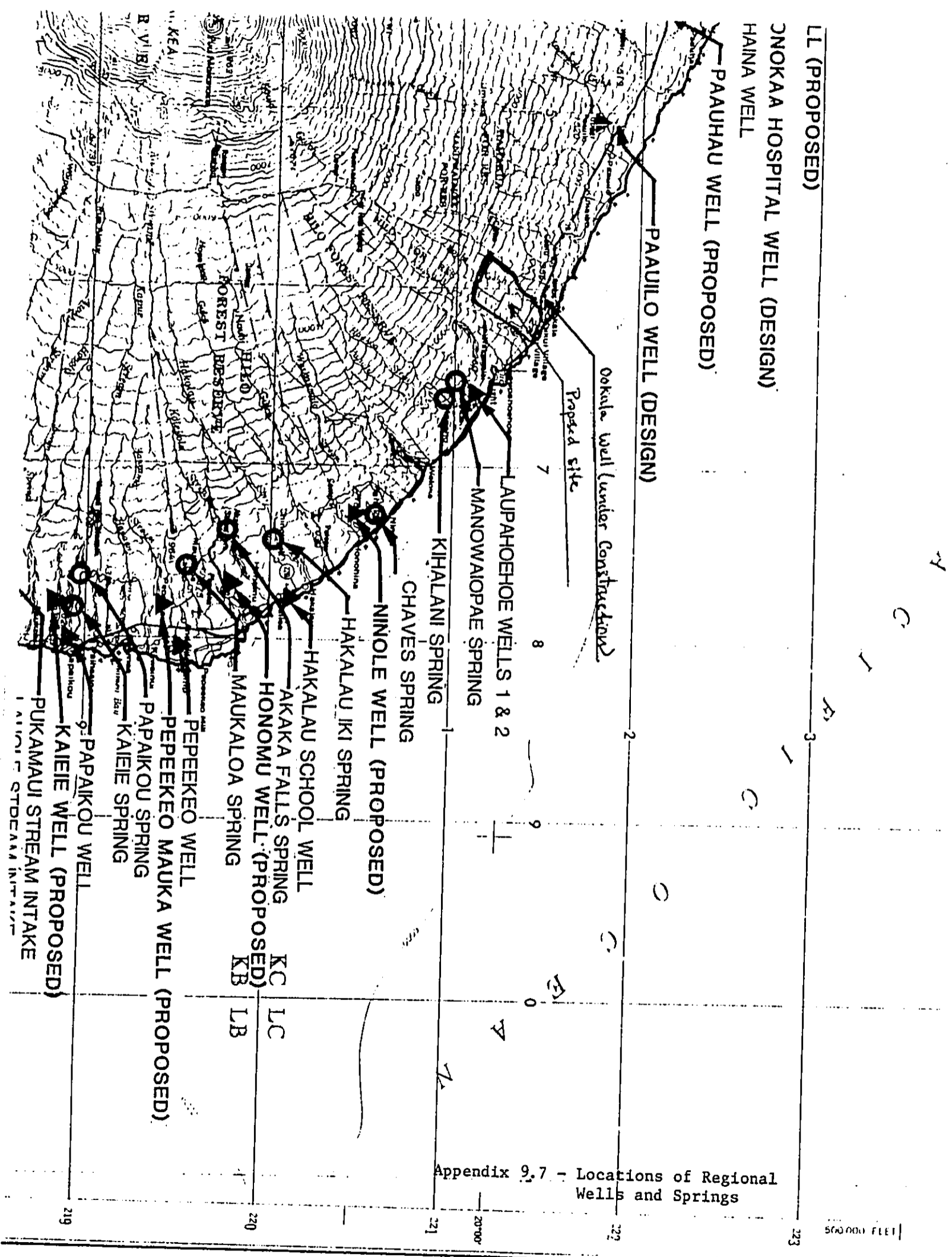
Appendix 9.5 Calf Housing



Processing Room



Appendix 9.6 - Topographic Map



LL (PROPOSED)

ONOKA HOSPITAL WELL (DESIGN)

HAINA WELL

PAUHOU WELL (PROPOSED)

PAULO WELL (DESIGN)

Okala Well (under construction)

Proposed site

LAUPAHOEHOE WELLS 1 & 2

MANOWAIOPAE SPRING

KIHALANI SPRING

CHAVES SPRING

NINOLE WELL (PROPOSED)

HAKALAU IKI SPRING

HAKALAU SCHOOL WELL

AKAKA FALLS SPRING

HONOMU WELL (PROPOSED)

MAUKALO A SPRING

PEPEKEO WELL

PEPEKEO MAUKA WELL (PROPOSED)

PAPAIKOU SPRING

KAIEIE SPRING

PAPAIKOU WELL

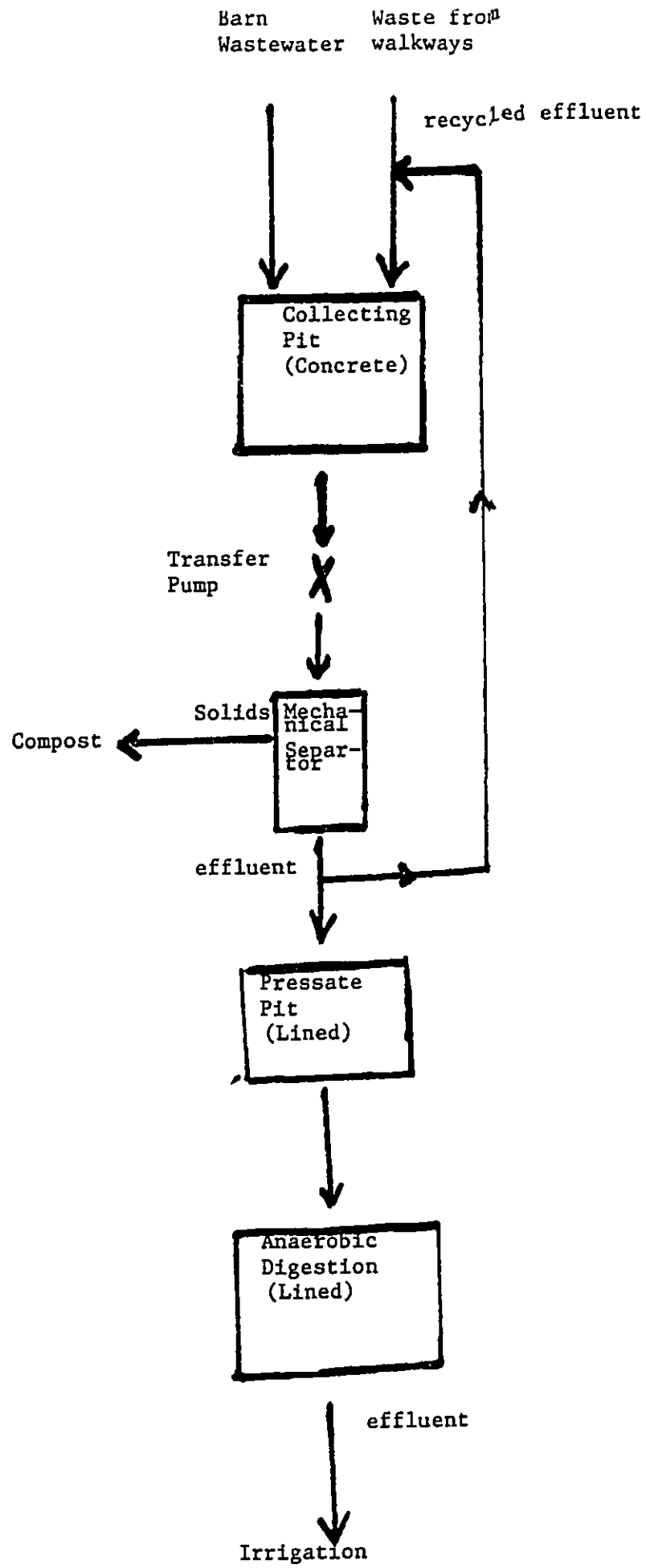
KAIEIE WELL (PROPOSED)

PUKAMAUI STREAM INTAKE

Appendix 9.7 - Locations of Regional Wells and Springs

500,000 FEET

219 220 221 222 223



Appendix 9.8 - Waste Management Flow Chart

9.9 Comments from various agencies and responses from Island Dairy.

State Agencies: Department of Agriculture
Department of Hawaiian Home Lands
Department of Health, Environmental Health
Department of Health, Waste Water Branch
Department of Land and Natural Resources, Historic
Perservation
Department of Land and Natural Resources, Land Division
Office of Hawaiian Affairs

County Agencies: Planning Department
Police Department
Public Works
Water Supply

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LAWSON
HILTON

March 12, 1998

Suspense date: 3/27/98

MEMORANDUM

TO: Department of Agriculture
Attention: Paul Matsuo

FROM: Charlene E. Unoki
Hawaii District Office *Charlene*

SUBJECT: Long term lease for dairying purposes at Ookala,
Hawaii, tmk: (3) 3-9-1-1, 2; 3-9-2-7, 8; 4-1-1-6;
4-1-5-1.

Please review the attached:

- | | |
|--|---|
| <input type="checkbox"/> DRAFT EIS | <input type="checkbox"/> LUC REVIEW |
| <input type="checkbox"/> EIS PREPARATION NOTICE | <input type="checkbox"/> Correspondence |
| <input checked="" type="checkbox"/> ENVIRONMENTAL ASSESSMENT | <input type="checkbox"/> Other |

and submit your comments within the time requested above. If you have any questions, please call my office at 974-6203.

If "no response" is received by the suspense date, we will assume there are no comments.

- We have no comments or objections.
- Comments attached or written below.

Signed: *Paul T. Matsuo*

Date: 3/23/98

Attachment(s)

IRRB 1193

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

JAMES J. NAKATANI
Chairperson, Board of Agriculture

LETITIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
P.O. Box 22159
Honolulu, Hawaii 96823-2159

Fax: (808) 973-9613

March 12, 1998

Mr. Bahman Sadeghi
Vice President
ISLAND DAIRY, INC.
P. O. Box 2626
Kamuela, HI 96743

Dear Mr. Sadeghi:

RE: Relocation of Dairy Operation
TMK Nos.: 3-9-1-1, 2 & 3-9-2-7, 8

The Agricultural Resource Management Division of the
Department of Agriculture has no objections to your dairy
operation relocation plans.

Sincerely,

A handwritten signature in cursive script that reads "Paul T. Matsuo".

PAUL T. MATSUO, P.E.
Administrator-Chief Engineer
Agricultural Resource Management
Division





April 10, 1998

Mr. Paul Matsuo, P.E., Administration-Chief Engineer
Agriculture Resource Management Division
State of Hawaii, Department of Agriculture
1428 South King Street,
Honolulu, HI 96814-2512.

Dear Mr. Matsuo,

Thank you for your review and response to our draft environmental assessment. I will forward a final copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response.

Sincerely,

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.
P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

FIDELITY
LAND DIVISION
HAWAII

MAIL ROOM

SCHEFFER 15 11:30

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RECEIVED
LAND DIVISION
HAWAII

March 12, 1998

Suspense date: 3/27/98

MEMORANDUM

TO: Department of Hawaiian Home Lands
Hawaii District Office

FROM: Charlene E. Unoki *Charlene*
Hawaii District Office

SUBJECT: Long term lease for dairying purposes at Ookala,
Hawaii, tmk: (3) 3-9-1-1, 2; 3-9-2-7, 8; 4-1-1-6;
4-1-5-1.

Please review the attached:

- | | |
|--|---|
| <input type="checkbox"/> DRAFT EIS | <input type="checkbox"/> LUC REVIEW |
| <input type="checkbox"/> EIS PREPARATION NOTICE | <input type="checkbox"/> Correspondence |
| <input checked="" type="checkbox"/> ENVIRONMENTAL ASSESSMENT | <input type="checkbox"/> Other |

and submit your comments within the time requested above. If you have any questions, please call my office at 974-6203.

If "no response" is received by the suspense date, we will assume there are no comments.

- We have no comments or objections.
- Comments attached or written below.

Signed: *Linda C. Hinn*
 Linda C. Hinn
 ACTING BRANCH MANAGER

Date: 3/20/98

Attachment(s)



April 10, 1998

Ms. Linda Chinn, Branch Manager
Department of Hawaiian Home Lands
P.O.Box 1879,
Honolulu, HI 96805.

Dear Ms. Chinn,

Thank you for your review and response to our draft environmental assessment.

I will forward you a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response and support.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bahman Sadeghi', is written over the typed name.

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

BENJAMIN J. CAYETANO
GOVERNOR



LAWRENCE MIIKE
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 918
HILO, HAWAII 96721-0918

March 16, 1998

Mr. Bahman Sadeghi
Vice President
Island Dairy, Inc.
P.O. Box 2626
Kamuela, HI 96743


Dear Mr. Sadeghi:

Thank you for the opportunity to give input on your proposed plan to relocate your dairy operations from Ahualoa to Ookala.

Your dairy facility will need to comply with Title 11, Hawaii Administrative Rules, Chapter 15 Milk, Chapter 20 Potable Water Systems, Chapter 26 Vector Control, and Chapter 62 Wastewater. A waste management plan to address the animal waste will need to be submitted to our Wastewater Branch to be reviewed and approved.

All of these rules are available at our office in Hilo. If you have any questions regarding these comments, please feel free to contact our office to speak to Newton Inouye or myself at 933-0917.

Sincerely yours,


AARON UENO
District Environmental Health
Program Chief, Hawaii District



April 10, 1998

Mr. Aaron Ueno, Program Chief
District Environmental Health
STATE OF HAWAII, Department of Health
P.O.Box 916,
Hilo, Hawaii 96720-0916

Dear Mr. Ueno,

Thank you for your response to our draft environmental assessment. Your comments will be inserted in our final EA. The requirements outlined in your letter will certainly be complied with in the execution of our plan.

I will forward a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response and support.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bahman Sadeghi".

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



LAWRENCE BRUCE
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH

P.O. BOX 3378
HONOLULU, HAWAII 96801

MAR 27 1 52 PM '98

In reply, please refer to:
END /WB

RECEIVED
LAND AND NATURAL RESOURCES
HONOLULU, HAWAII

March 19, 1998

983012

TO: Charlene E. Unoki, District Land Agent
Department of Land and Natural Resources

FROM: Dennis Tulang, P.E., *Dennis Tulang*
Chief, Wastewater Branch

SUBJECT: Island Dairy, Inc.
Environmental Assessment
Long Term Lease for Dairying Purposes
at Ookaia, Hawaii
TMK: (3) 3-9-1:1, 2; 3-9-2:7, 8; 4-1-1:6; 4-1-5:1

We acknowledge receipt of your memorandum dated March 12, 1998 regarding the subject matter. We reviewed the document and offer the following comments and recommendations:

- 1) We have had only one (1) contact regarding animal waste management with Island Dairy, Inc. In 1994, Island Dairy requested assistance from the USDA Natural Resource Conservation Service (NRCS) in developing an animal waste management plan for their existing dairy in Ahualoa. The Department of Health (DOH) reviewed and commented to the preliminary waste management plan prepared by NRCS in 1994. Unfortunately, no response from the Dairy has ever been received by the Department.

It is our belief that Island Dairy Inc., has not implemented an approved animal waste management plan for their existing dairy.

It is recommended that before any lease agreement is executed, provisions be included binding the lessee to implementing an animal waste management plan approved of by the Department of Health. Such provisions should also stipulate a reasonable time schedule for the implementation of the waste management plan.

Ms. Charlene E. Unoki
March 19, 1998
Page 2

- 2) "Chapter 5.0: Summary of Major Impacts" should include a discussion on short and long term impacts on groundwater resources and the aquifer beneath the proposed site. It should provide aquifer identification and classification for the affected areas.
- 3) Details of a complete waste management system needs to be provided to the Department. The information provided (a collection pit 12'x16'x10' in size) does not include any wastewater treatment plan and is insufficient to make any type of evaluation.
- 4) "Chapter 7.0: Proposed Mitigation Measures" should provide a discussion on measures to minimize the impact of nutrients found in the manure wastewater effluent. A nutrient mass balance and the suitability of the irrigated areas must also be included in the report.

If there are any questions or need clarification, please contact Tomas See at (808) 586-4294.

TS:erm



April 10, 1998

Mr. Tomas See, Enginner
Wastewater Branch
STATE OF HAWAII, Department of Health
P.O.Box 3378,
Honolulu, Hawaii 96801.

Dear Mr. See,

Thank you for your review and response to our draft environmental assessment, as well as the subsequent information that you faxed me. I have incorporated this information as well as follow your instructions in your letter identified as items 2,3 and 4.

Attached please find our revised draft environmental assessment for your review. I will insert your comments in our final EA. The requirements of your department will certainly be complied with and being a permit process fundamental to approving our facility for operation you can be assured we will make every effort to meet your requirement and implementing them.

I have contacted the offices of NRCS in Hilo for assistance in presenting a plan to your office. I hope to work with you closely to reaching the goal of building a modern dairy facility with todays waste management standards.

I would also like to take this opportunity to remention that at our exisitng facility we lost our lease in early 1995 and operated month to month until a new short term lease was negotiated in mid 1997.

I will forward a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response and support.

Sincerely,

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

BENJAMIN 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

DEPUTIES

GILBERT COLOMA AGARAN

AQUACULTURE DEVELOPMENT
PROGRAM

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RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION

DIVISION
LAND DIVISION
STATE PARKS
WATER AND LAND DEVELOPMENT

April 13, 1998

Mr. Bahman Sadeghi
Island Dairy
P.O. Box 2626
Kamuela, Hawaii 96743

LOG NO: 21281 ✓
DOC NO: 9804PM03

Dear Mr. Sadeghi:

**SUBJECT: Relocation of Dairy to Ookala
Ookala, North Hilo, Hawaii Island
TMK: 3-9-1: 1 and 2; 3-9-2: 7 and 8**

Thank you for your letter of March 5, 1998 and the opportunity to review and comment on the planned relocation of your dairy operation.

You mention in your letter that the dairy will be relocated on 1841 acres of former sugar cane land in Ookala. Because of the long-term use of the land for agricultural purposes it is highly unlikely that any significant historic sites would remain due to the disturbance of the ground surface. We thus believe that the use of the subject parcels for your dairy operation will have "no effect" on significant historic sites.

In the unlikely event that you find some evidence of historic use of this land, such as artifacts, we would appreciate being notified so that our staff might have an opportunity to investigate the findings. If you should have any questions please contact Patrick McCoy (587-0006).

Aloha,

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

DON HIBBARD, Administrator
State Historic Preservation Division

PM:amk



April 21, 1998

Mr. Don Hibbard, Administrator
State Historic Preservation Division
STATE OF HAWAII, DLNR
33 South King Street, 6th Floor
Honolulu, Hawaii 96813.

Re: Relocation Plans to Ookala

Dear Mr. Hibbard,

Thank you for your review and comment on our plan to relocate to Ookala, North Hilo.

I would like to inform you that since our letter on March 5, 1998, the final number of acres that we are considering has been increased to 2,382.10 acres. The two additional parcels are also former sugar cane land. The tax map keys to these parcels are 4-1-1:6 and 4-1-5:1.

Finally, we will certainly contact your office in case we encounter any evidence of historic use of this land.

I thank you again for your input and support.

Sincerely,

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

DOCUMENT CAPTURED AS RECEIVED

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii

P.O. Box 621,
96809

April 8, 1998

MEMORANDUM

To: Charlene Unoki, Hawaii District Land Agent

Thru: Dean Y. Uchida, Administrator *Dean Y. Uchida*

From: Al Jodar, Land Agent

Subject: Long term lease for dairying purposes at Ookala, Hawaii, tmk (3) 3-9-1:1, 2; 3-9-2:7, 8; 4-1-1:6; 4-1-5:1

APR 9 8 34 AM '98

Additional comments:

The Draft Environmental Assessment should have provided additional information to explain how many of the 800 to 1,200 dairy cows would be managed on the 2,382 acres of State lands. (Island Dairy has an existing dairy operation on 1,050 acres plus 80 acres recently purchased.)

TMKS of State parcels Acres (gross)

TMKS of State parcels	Acres (gross)
3-9-2:7	934.18
3-9-2:8	602.20
3-9-1:1	186.91
3-9-1:2	125.19
4-1-1:6	86.38
4-1-5:1	447.24
Total State acres	2,382.10
Island Dairy's private lands	1,130.00
State + Island Dairy	3,510.10

The carrying capacity for the State lands is 5-10 AU/acre based on the Land Study Bureau rating system. The total carrying capacity on the 2,382 acres would be 476 to 952 head minus the RB areas which is not calculated.

Post-It® Fax Note	7671	Date	4/9/98	# of pages	1
To	Charlene	From	Al		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #		Fax #			



April 14, 1998

Mr. Al Jodar, Land Agent
STATE OF HAWAII
Department of Land and Natural Resources
P.O.Box 621,
Honolulu, HI 96809.

Dear Mr. Jodar,

Thank you for your review and response to our draft environmental assessment. The information that you provided will be very helpful in implementing our plan.

The total number of cattle indicated in our draft EA is from birth to mature cows. Therefore in terms of animal units we will be below the 800-1200 head indicated. However this will be offset by the fact that dairy cattle have higher needs than beef cattle. The other opposing factor is the supplementation of feed in a dairy operation.

The initial soil and tissue analysis as well as relative feed value tests indicate that there must be extensive soil improvement to reach the potential and optimal production for these lands.

Finally in order to allow time for these improvements and make the transition as smooth as possible we will have to maintain cattle at both new and existing site (whole or in part).

I will forward you a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response and support.

Sincerely,

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPIOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813-5249
PHONE (808) 594-1888
FAX (808) 594-1865

MAR 30 1 00 PM '98

LAND DIVISION
HONOLULU, HI

March 25, 1998

Ms. Charlene E. Unoki
District Land Agent
DLNR, Land Division
75 Aupuni St., Room 204
Hilo, HI 96720

Doc. EIS 160

Subject: Draft Environmental Assessment (DEA) for Island Dairy, Inc, Ookala, North Hilo, Island of Hawaii

Dear Ms. Unoki:

Thank you for the opportunity to review the Draft Environmental Assessment (DEA) for Island Dairy, Inc, Ookala, North Hilo, Island of Hawaii. The applicant proposes to build a dairy farm and accessory pasture grounds on approximately 2,400 acres of ceded (Status B) lands previously used for sugarcane by Hamakua Sugar Company.

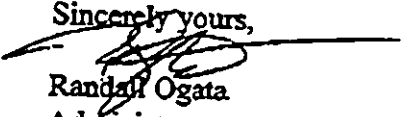
The Office of Hawaiian Affairs (OHA) has serious objections to the proposed development for the following reason. The DEA does not include any information on land ownership. OHA views this omission as a serious flaw in the application because it could be interpreted as either an attempt to bypass the issue of ceded lands or ignore an inescapable reality that developments on ceded lands require close consultation with Native Hawaiians. OHA urges the applicant to take a hard look to the issue of ceded lands and seek immediate consultation with Native Hawaiians. Once this issue is addressed, OHA would be glad to review the environmental impacts of developing a dairy farm in this part of the Hamakua coast.


Also OHA would like to highlight some inconsistencies in the DEA. On page 3, the area for the operation is approximately 2,400 acres. In a letter directed to Ms. Unoki, the applicant, Mr. Sadeghi, indicates an area of 1,800 acres. Furthermore, the table of contents in pages 1 and 2 does not match with topics included in the DEA.

Letter to Ms. Charlene Unoki
March 25, 1998
Page 2

Please contact Colin Kippen (594-1938), Officer of the Land and Natural Resources Division, or Luis A. Manrique (594-1758), should you have any questions on this matter.

Sincerely yours,


Randall Ogata
Administrator


for Colin Kippen
Officer, LNR

cc Board of Trustees
CAC, Island of Hawaii



April 10, 1998

Ms. Lynn Lee, Officer
STATE OF HAWAII, Office of Hawaiian Affairs
711 Kapiolani Blvd., Suite 500,
Honolulu, Hawaii 96813-5249.

Dear Ms. Lee,

Thank you for your review and response to our draft environmental assessment. Pursuant to our telephone conversation I will be making the amendments that you required as well as insert your letter in to our final EA.

I will forward you a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response and support.

Sincerely,

A handwritten signature in black ink, appearing to read "Bahman Sadeghi".

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

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RECEIVED
DEPARTMENT OF
LAND MANAGEMENT
HONOLULU

March 12, 1998

Suspense date: 3/27/98

MEMORANDUM

TO: County of Hawaii
Department of Planning

FROM: Charlene E. Unoki *Charlene*
Hawaii District Office

SUBJECT: Long term lease for dairying purposes at Ookala,
Hawaii, tmk: (3) 3-9-1-1, 2; 3-9-2-7, 8; 4-1-1-6;
4-1-5-1.

Please review the attached:

<input type="checkbox"/>	DRAFT EIS	<input type="checkbox"/>	LUC REVIEW
<input type="checkbox"/>	EIS PREPARATION NOTICE	<input type="checkbox"/>	Correspondence
<input checked="" type="checkbox"/>	ENVIRONMENTAL ASSESSMENT	<input type="checkbox"/>	Other

and submit your comments within the time requested above. If you have any questions, please call my office at 974-6203.

If "no response" is received by the suspense date, we will assume there are no comments.

- We have no comments or objections.
 Comments attached or written below.

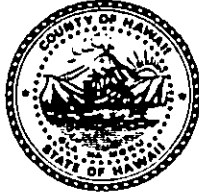
Signed: *R. Mahana*

Date: 3/31/98

Attachment(s)

072377

Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director

Russell Kokubun
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

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

April 13, 1998

Mr. Bahman Sadeghi, Vice President
Island Dairy, Inc.
P. O. Box 2626
Kamuela, HI 96743

Dear Mr. Sadeghi:

Request for Preliminary Comments/Concerns:
Preparation of Draft Environmental Assessment (EA)
Relocation of Dairy Operation to Ookala, N. Hilo
TMK: 3-9-01: 1 & 2 & 3-9-02: 7 & 8

This is in response to your letter dated 3/5/98, requesting information on the above captioned properties.

Land Use Designations. The department's reference maps confirm that the parcels are zoned or designated according to the following land use information. A brief discussion follows reviewing the consistency criteria of each designation with the proposed development.

- TMK: 3-9-01: 01 & 3-9-02: 07
Humuula, N. Hilo
- State Land Use (SLU): "Agricultural" ("A") & "Conservation" ("C"); a portion of parcels 01 and 07 are split-zoned "A" and "C".
 - County Zoning: A-20a (Agricultural-20 acs.)
 - Special Management Area (SMA): Both parcels are not within the SMA.
 - HI County General Plan (GP) Land Use Designation: Intensive & Extensive Agricultural, according to the LUPAG (Land Use Pattern Allocation Guide) Map
HI County GP (effective: November 14, 1989).

Mr. Bahman Sadeghi, Vice President
Island Dairy, Inc.
Page 2
April 13, 1998

TMK: 3-9-01: 02 & 3-9-02: 08 - SLU: "A"
Ookala, N. Hilo - County Zoning: Parcels 02 and 08 have the same county zoning and GP land use designation as given above; additionally, both parcels are not in the SMA.

SLU: "A". The dairy operation, processing, storage, maintenance facilities and areas, raising of livestock, and accessory uses are permitted uses under the State Land Use Agricultural district.

SLU: "C". As indicated above, portions of TMK: 3-9-01: 01 and TMK: 3-9-02: 07 are within the state "C" district. Consequently, the state Board of Land & Natural Resources (BLNR) maintains jurisdiction over state lands designated "Conservation". If the use of "C" lands will be a part of the proposed dairy operation, a CDUA (Conservation District Use Application) permit from BLNR may be required to develop or use lands within the "C" district. For more information and clarification on the requirements and procedures of a CDUA permit, please contact:

State of Hawaii - Department of Land & Natural Resources (DLNR)
Planning & Technical Services Branch
P.O. Box 621, Honolulu, HI 96809
PH: (808) 974-4000 (toll free)

County Zoning: Permitted Use. A dairy operation, including a milk processing plant, is a permitted use in Hawaii County's Agricultural zone district. The dairy operation qualifies as agricultural products processing (major use), according to Zoning Code Sec. 25-5-72(a)(2) and 25-1-5(b)(4).

Consistent with GP Designation. The proposed dairy operation is an allowable land use consistent with the GP designation for Intensive and Extensive Agriculture lands.

Request for Information:

Site Plan. In the draft EA, please include a detailed site plan(s) showing the dairy operation's leasehold area in the context of the four parcels. The site plan will also need to show all proposed and existing improvements and structures, road accesses, and other related improvements or uses of the dairy operation.

Mr. Bahman Sadeghi, Vice President
Island Dairy, Inc.
Page 3
April 13, 1998

Pen Feeding of Livestock, Herd Housing & Feed Storage Facility. Please provide information in the draft EA explaining if the dairy operation will involve the pen feeding of livestock. In addition, please clarify and explain the function and operation of the herd housing and feed storage facility described in your March 5, 1998 letter. The location of the herd housing and feed storage facility will need to be shown on the site plan.

Once the draft EA is received and reviewed, further comments may be provided. Please contact either Norman Hayashi or Earl Lucero of this office regarding any questions or information that may clarify this matter.

Sincerely,


VIRGINIA GOLDSTEIN
Planning Director

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cc: Ms. Charlene Unoki, District Land Agent
DLNR - Land Management Division



April 24, 1998

Ms. Virginia Goldstein, Planning Director
COUNTY OF HAWAII, Planning Department
25 Aupuni Street, Room 109,
Hilo, Hawaii 96720-8742.

Dear Ms. Goldstein,

Thank you for letter dated 4/13/98. Attached please find a copy of our preliminary draft environmental assessment.

I would like to inform you that since our initial letter to your office, we are requesting two additional parcels, tax map keys: 4-1-05:1 and 4-1-01:6 which are 447.24 and 86.38 acres respectively.

You will also find in appendix 9.4 of DEA a site map showing the proposed location of our facilities. The additional information that you have requested are outlined below and will also be addressed in our final DEA.

Attached you will also find a drawing of the improvements that will be constructed at the proposed site. This will be attached to and made a part of our DEA.

The information that you requested regarding pen feeding of livestock, herd housing and feed storage are as follow:

Pen Feeding: This will take place inside the "Free stall Housing". The Free stall housing is the structure where the cows are housed during adverse weather, and fed. In appendix 9.5 you will see an older version of this type of structure.

Herd Housing: This is the Free stall structure. This is used in our dairy as a remedy to adverse weather (mostly high rainfall) to maintain herd health and milk production as well as eliminate soil erosion during this high risk period. Again you will find a picture of this type of structure in appendix 9.5.

Feed Storage Facility: This structure is where the feed is unloaded from the shipping containers and stored. In appendix 9.5 you will also see a picture of a typical feed storage structure.

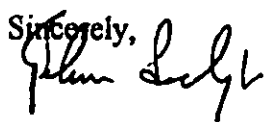
I will forward you a copy of our final EA at the termination of the 30 day public comment

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

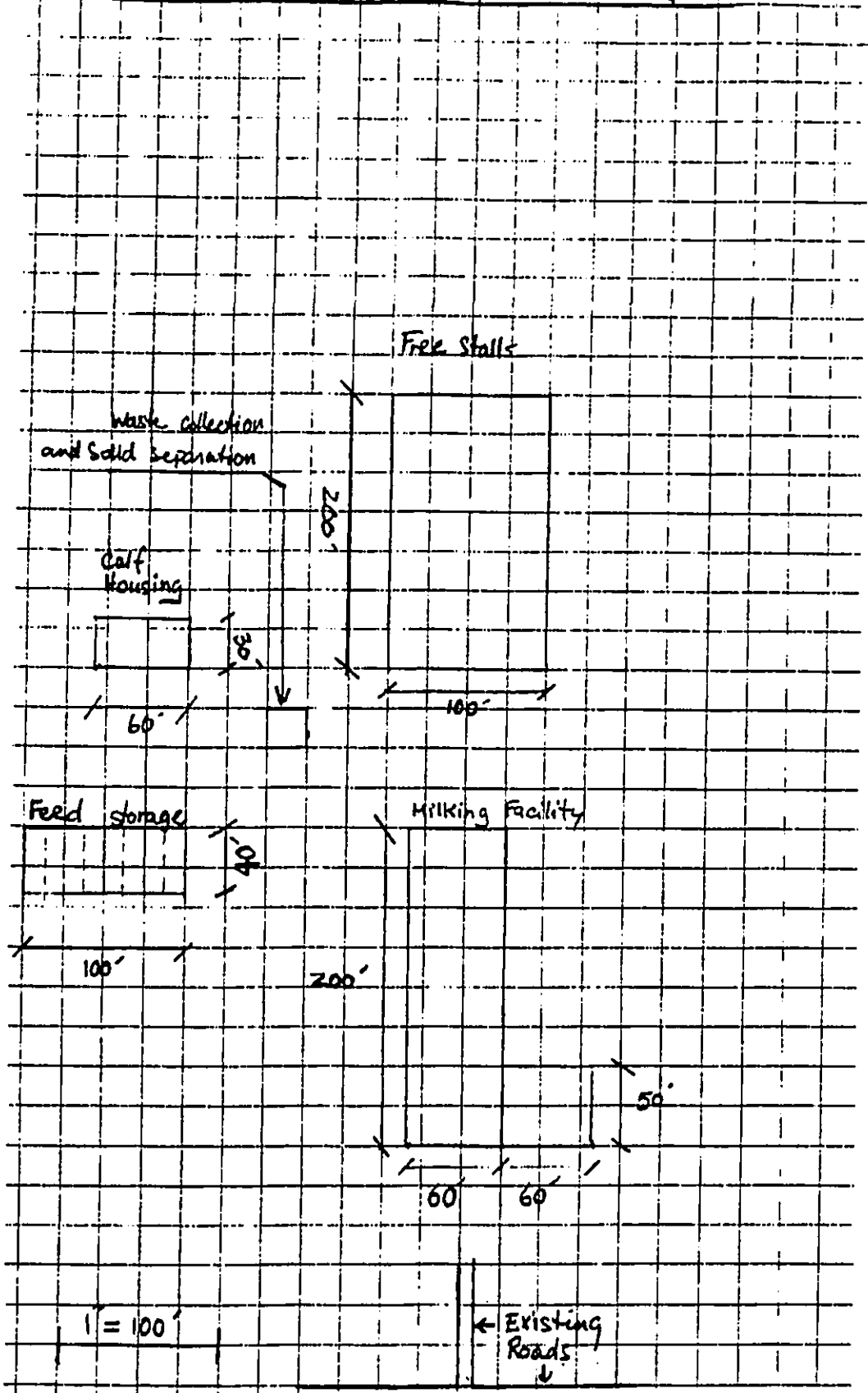
period. Thank you again for reviewing our proposal, and please let me know if I can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Bahman Sadeghi". The signature is written in a cursive style with a large initial "B".

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

Proposed Structures (Preliminary)



Appendix 9.4 - Layout of proposed structures

Stephen K. Yamashiro
Mayor



Wayne G. Carvalho
Police Chief

James S. Correa
Deputy Police Chief

County of Hawaii

POLICE DEPARTMENT

349 Kapolei Street • Hilo, Hawaii 96720-9998
PHONE 935-3371 • Fax (808) 962-2782

March 27, 1998

TO : CHARLENE E. UNOKI, DISTRICT LAND AGENT, DEPARTMENT
OF LAND AND NATURAL RESOURCES, LAND DIVISION

FROM : ~~WAYNE G.~~ WAYNE G. CARVALHO, POLICE CHIEF

SUBJECT : LONG TERM LEASE FOR DAIRYING PURPOSES AND OOKALA,
HAWAII, TMK: (3) 3-9-1-1, 2; 3-9-2-7, 8; 4-1-1-6;
4-1-5-1.

We have reviewed the environmental assessment for the long term lease by Island Dairy, Inc., to allow for the relocation of their dairy operation to Ookala, Hawaii.

Staff visited the proposed site and observed that the land parcels are prime agricultural land, making it ideal for a dairy operation. We estimate that substantial funding will be required for road construction and repairs, as well as for necessary infrastructure.

The paved roadway leading to the site, which was constructed and maintained by the plantation prior to its demise, is in need of repair and may need to be widened to allow for two-way traffic.

We do not foresee any traffic problems in the area if the existing roadway is repaired and maintained.

Thank you for the opportunity to comment.

JNS:lk



April 10, 1998

Mr. Wayne G. Carvalho, Police Chief,
COUNTY OF HAWAII, Police Department
349 Kapiolani Street,
Hilo, Hawaii 96720-2702

Dear Mr. Carvalho,

Thank you for your review and response to our draft environmental assessment. Your comments will be inserted in our final EA. The recommendation outlined in your letter will certainly be complied with in the execution of our plan.

I will forward a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response and support.

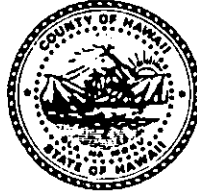
Sincerely,

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000

Stephen K. Yamashiro
Mayor



Donna Fay K. Kiyosaki
Chief Engineer

Jiro A. Sumada
Deputy Chief Engineer

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

March 16, 1998

ISLAND DAIRY INC
P O BOX 2626
KAMUELA HAWAII 96743

SUBJECT: PREPARATION FOR DRAFT ENVIRONMENTAL ASSESSMENT
Ookala, North Hilo, Hawaii
TMK: 3-9-01: 001, 002, & 3-9-02: 007, 008

We acknowledge receipt of your letter concerning the subject matter, and provide you with our comments as follows:

1. Any building construction shall conform to all requirements of code and statutes of the County of Hawaii.
2. All development generated runoff shall be disposed of on site and shall not be directed toward any adjacent properties.

The applicant shall be informed that if drywells are included in the subject improvements, an Underground Injection Control (UIC) permit must be applied for from the Department of Health, State of Hawaii.


3. All earthwork and grading shall be in conformance with Chapter 10, Erosion and Sediment Control, of the Hawaii County Code.
4. Any construction within known watercourses shall be in conformance with Chapter 27, Flood Control, of the Hawaii County Code.
5. Hawaii Belt Road, fronting the subject property, is under the jurisdiction of the Hawaii Department of Transportation (HDOT). Comments and requirements concerning this road should be directed to the HDOT.
6. A solid waste management plan shall conform to the rules and regulations of the County of Hawaii, Solid Waste Division.

PREPARATION FOR DRAFT EA
March 16, 1998
Page 2 of 2

7. Application should be submitted to the Planning Department for their review and comments.

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



 GALEN M. KUBA, Division Chief
Engineering Division

CKY/KG

c: Planning Department



April 10, 1998

Mr. Galen Kuba, Division Chief,
Engineering Division
COUNTY OF HAWAII, Department of Public Works
25 Aupuni Street, Room 202,
Hilo, Hawaii 96720-4252.

Dear Mr. Kuba,

Thank you for your review and response to our draft environmental assessment. Your comments will be inserted in our final EA. The requirements outlined in your letter will certainly be complied with in the execution of our plan. I will forward a copy of our final EA upon completion of the 30 day comment period with any revisions and attachments.

Once again, Mahalo for your response.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bahman Sadeghi".

Bahman Sadeghi, Vice President
ISLAND DAIRY, INC.

ISLAND DAIRY, INC.

P.O. Box 2626, Kamuela, HI 96743 Telephone: 808/775-0284 Facsimile: 808/775-8000



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

25 AUPUNI STREET • HILO, HAWAII 96720
TELEPHONE (808) 961-8660 • FAX (808) 961-8657

April 28, 1998

Mr. Bahman Sadeghi, Vice President
Island Dairy, Inc.
P.O. Box 2626
Kamuela, HI 96743

WATER AVAILABILITY REQUEST
TAX MAP KEY: 3-9-001:001 & 002: 3-9-002:007 & 008

This letter is in response to your inquiry of water availability in the amount of 7,000 gallons per day (gpd) for the subject parcels. Water can be made available through three (3) 1-inch meters with the following conditions.

1. Service lateral installation plans prepared by a licensed engineer, registered in the State of Hawaii, must be submitted for our review and approval. Installation shall be done by a properly licensed contractor. All installation costs shall be borne by the customer.
2. Due to the elevation of the property, adequate water pressure cannot be achieved per our standards. An elevation agreement must be executed with our Department and a supplemental tank and pump system must be installed for each meter to provide adequate water pressure. Schematic plans for the tank and pump system, prepared by a licensed engineer, registered in the State of Hawaii, must be submitted for our review and approval.
3. A "Policy and Conditions for Water Service" agreement must also be signed.
4. Prior to water service being provided, a facilities charge must be paid. Based on the anticipated water usage, the required facilities charge amount, which is subject to change, is \$52,314.00 (\$563.00 x 3 plus \$3,375.00 x 15).

If you have any questions, please contact our Water Resources and Planning Branch at 961-8660.

Milton D. Pavao, P.E.
Manager

KKO:gms

copy - Customer Service Sections (Hilo & Waimea)
Ms. Charlene Unoki, DLNR Hawaii District Office

... *Water brings progress...*