

BENJAMIN J. CAYETANO
GOVERNOR



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

*East Hawaii Veterans
Cemetery, Phase II*

EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

RECEIVED

'97 MAY -6 A9:12

April 25, 1997

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

Mr. Gary Gill, Director
Office of Environmental Quality Control
220 South King Street
Honolulu, HI 96813

Dear Mr. Gill:

Re: Notice of Determination: Negative Declaration
East Hawaii Veterans Cemetery No. 2, Phase II, Hilo, Hawaii
TMK: 3-2-3-20: parcels 2 and 8

The State Department of Defense (DOD) is the proposing and accepting agency for the above referenced project. The DOD reviewed and responded to comments related to the expansion of the East Hawaii Veterans Cemetery No. 2. The 30-day review period began October 8, 1996 and ended November 7, 1996. The Department determined that the implementation of this project will not have any significant environmental effects as defined by HAR 11-200-12. Therefore, the agency is issuing a negative declaration. Please publish this notice in the May 8, 1997 Environmental Notice. We have enclosed a completed OEQC Bulletin Publication Form and four copies of the final EA.

Identification of the Proposing Agency
The Hawaii State Department of Defense

Identification of the Accepting Agency
The Hawaii State Department of Defense

Brief Description of Proposed Action

There is insufficient burial acreage available on the east side of the island of Hawaii. East Hawaii Veterans Cemetery No. 1 is at capacity and insufficient burial acreage remains at East Hawaii Veterans Cemetery No. 2. The DOD wishes to acquire two properties to expand the burial capacity of their existing East Hawaii Veterans Cemetery No. 2. These properties total 7.11 acres and are adjacent to that cemetery. The project consists of land acquisition of the adjacent properties and facilities improvement on the existing property. These improvements include: addition to the committal chapel with new concrete sidewalk from the existing main access road to the expanded chapel; construction of a new road to access the acquired properties; and expansion of the maintenance facility with extension of its service road. Modification of the



55

Mr. Gary Gill
Page 2

maintenance facility adds a robing room, general storage and a housekeeping closet. Upon completion of the proposed development, the expanded cemetery will provide approximately 12,000 total grave sites.

Determination
Negative Declaration

Reasons Supporting Determination

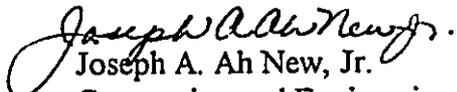
This determination is based on the significance criteria listed in HAR 11-200-12 of the Environmental Impact Statement Rules. Specifically, these significance criteria are addressed in Section 9 DETERMINATION of the EA.

Contact Persons for Further Information

Proposing Agency: Mr. Joseph A. Ah New, Jr.
State of Hawaii
Department of Defense
Office of the Adjutant General
3949 Diamond Head Road
Honolulu, Hawaii 96816-4495
(808) 733-4250

Consultant: Mr. Bruce D. Wade
M&E Pacific, Inc.
1001 Bishop Street
Suite 500, Pauahi Tower
Honolulu, HI 96813
(808) 521-3051

Sincerely,


Joseph A. Ah New, Jr.
Contracting and Engineering Officer

Enc. (2)

1997-05-08-HI-PEA-East Hawaii
Veterans Cemetery, Phase II

MAY 8 1997

FILE COPY

FINAL

**FINAL
ENVIRONMENTAL ASSESSMENT
East Hawaii Veterans Cemetery - No.2**

TMK: 3-2-3-20: parcels 2 and 8

Prepared for:

**State of Hawaii
Department of Defense**

Prepared by:

**M&E Pacific, Inc.
Engineers and Architects
1001 Bishop Street
Pauahi Tower, Suite 500
Honolulu, Hawaii 96813-3497**

May, 1997

TABLE OF CONTENTS

1.0 APPLICANT 1
2.0 APPROVING AGENCY 1
3.0 CONSULTATION LIST 1
4.0 PROJECT OBJECTIVE AND NEED (GENERAL DESCRIPTION)..... 3
 4.1 Technical 3
 4.2 Economic..... 4
 4.3 Social..... 4
 4.4 Environmental..... 4
5.0 SUMMARY OF AFFECTED ENVIRONMENT..... 5
 5.1 Location and Access 5
 5.2 Topography and Climate..... 5
 5.3 Infrastructure 5
 5.4 Land Use Zoning 5
 5.5 Soils..... 6
 5.6 Water Quality 6
 5.7 Natural Hazards..... 6
 5.8 Archaeological and Historic Sites..... 6
 5.9 Flora..... 7
 5.10 Fauna..... 7
 5.11 Traffic..... 7
6.0 PROBABLE IMPACTS AND MITIGATION MEASURES 8
 6.1 Short-term Construction Related Impacts..... 8
 6.2 Drainage 8
 6.3 Aesthetic/Visual Resources 8
7.0 ALTERNATIVES TO THE PROPOSED ACTION..... 9
 7.1 No Action..... 9
 7.2 Alternative Site..... 9
8.0 LIST OF PERMITS 10
9.0 DETERMINATION 11

APPENDICES

- APPENDIX A: Historic Preservation Concerns for Veterans Cemetery Expansion
Ponahawai, South Hilo, Hawaii Island
TMK: 2-3-20: 2 and 8
- APPENDIX B: East Hawaii Veterans Cemetery Extension
Botanical Reconnaissance
- APPENDIX C: Reply to Request for Endangered Species
- APPENDIX D: Draft EA Public Comments and Responses

LIST OF FIGURES

- Figure 1 Project Location - Hilo, Hawaii
Figure 2 Tax Map Key: 3-2-3-20
Figure 3 East Hawaii Veterans Cemetery #2
Figure 4 Proposed Expansion and Layout of East Hawaii Veterans Cemetery #2
Figure 5 Berms and Landscaping

1.0 APPLICANT

The applicant for the proposed addition to the existing East Hawaii Veterans Cemetery - No.2 is the State of Hawaii, Department of Defense. This Environmental Assessment (EA) was prepared in accordance with Section 343, Hawaii Revised Statutes (HRS) and Chapter 200 of Title 11, Hawaii Administrative Rules (HAR). This Environmental Assessment is required due to the planned acquisition of State land and use of State funds.

2.0 APPROVING AGENCY

The approving agency for a determination of significance for this Environmental Assessment is the State of Hawaii, Department of Defense.

3.0 CONSULTATION LIST

The following parties were contacted during the preparation of the draft Environmental Assessment:

United States Government

Department of the Interior
Fish and Wildlife Service

State of Hawaii:

Department of Defense
Department of Land and Natural Resources:
Conservation and Environmental Affairs
Historic Preservation Division
Forestry and Wildlife Division
Land Use Division
Office of Environmental Quality Control
Office of Hawaiian Affairs

County of Hawaii:

County Council
Department of Parks and Recreation
Department of Planning
Department of Water Supply

Others:

Ken Nagata - botanist

Documents reviewed during the preparation of this draft Environmental Assessment:

Armstrong, R.W., editor, 1983, *Atlas of Hawaii*, second edition, Department of Geography, University of Hawaii. University of Hawaii Press, Honolulu.

Federal Emergency Management Agency (FEMA), 1988, *National Flood Insurance Rate Map*.

Foote, D.E., Hill, E.L., Nakamura, S., Stephens, F., 1972, *Soil Survey of Island of Hawaii, State of Hawaii*: U.S. Department of Agriculture, Soil Conservation Service.

Harper, Brooks, 1996, Correspondence Related to a Request for List of Endangered Species, United States Department of the Interior - Fish and Wildlife Service.

Hawaii Department of Health (HDOH), 1984, Underground Injection Control Program, *Map H-67, Hilo Hawaii*, Scale 1:24,000

Hawaii Department of Land and Natural Resources (DLNR), State Historic Preservation Division, 1996, *Historic Preservation Concerns for Veterans Cemetery Expansion*, prepared for M&E Pacific.

M&E Pacific, Inc., 1994, *Neighbor Islands Veterans Cemetery - Master Plan Report*. Prepared for the State Department of Defense Office of Veterans Services.

Nagata, K.M., 1996, *East Hawaii Veterans Cemetery Extension Botanical Reconnaissance*, prepared for M&E Pacific.

4.0 PROJECT DESCRIPTION

4.1 Technical

The East Hawaii Veterans Cemetery - No. 2 (Cemetery 2) project results from the master plan developed by the State Department of Defense, Office of Veterans Services to establish, expand, and improve veteran cemeteries throughout the State.

Cemetery 2 was established in 1980 and provides interment services to veterans and family members on the island of Hawaii. Based on the 1990 census, 13,655 veterans on the island of Hawaii are eligible for interment at the two East Hawaii Veterans Cemeteries in addition to spouses, dependent children and former residents. East Hawaii Veterans Cemetery - No.1 is at burial capacity and insufficient burial acreage remains at the present East Hawaii Veterans Cemetery - No.2. Additional land is required to expand the existing cemetery capacity to accommodate burials to the year 2014. In addition, the existing facilities at Cemetery 2 require upgrades to meet the Department of Veterans Affairs (VA), Occupational Safety and Health Administration (OSHA), and Americans with Disabilities Act (ADA) standards.

The project consists of land acquisition and property development. Property development includes addition of burial sites, enlargement of support facilities, expansion of ceremonial/memorial facilities, extension of a service road and construction of an access road. Upon completion of the proposed development, the expanded cemetery will provide approximately 12,000 total grave sites and should provide sufficient interment capacity for twenty years. This Environmental Assessment addresses property acquisitions and development of two parcels of land adjoining the existing Cemetery 2.

Due to the shortage of available funds, the proposed upgrades and land acquisition were planned for implementation in two phases. Phase I included upgrade of the existing facilities and site development within the existing boundaries. Construction of Phase I was completed in 1996. Phase II of the project involves acquisition and development of adjacent land and facilities improvements on the existing property. These improvements include: addition to the committal chapel with new concrete sidewalk from the existing main access road to the expanded chapel; construction of a new road to access the acquired properties; and expansion of the maintenance facility and its extension of its service road. Maintenance facility modification adds a robing room, general storage and a housekeeping closet.

Two adjacent parcels of land totalling 7.11 acres of land will be acquired to augment Cemetery 2. New burial acreage will cover approximately 80% of the total acreage acquired. The additional burial acreage will add 7650 grave plots to Cemetery 2. Grave plots will measure 4 feet by 8 feet. At each grave plot double interment is possible. Burial density is approximately 1075 plots per acre. The VA standard is 600 graves per acre based on 5 feet by 10 feet plots. A verbal concurrence from the VA has been given as a waiver from the standard.

Parcel development consists of grading, paving and landscaping. Grading is discussed in Section 6.2. A new paved road will provide access to the new properties. A 24 feet road will extend 90 feet into the new parcels and will branch into two 24 feet wide arms. One arm will extend 255 feet to the southwest while the other arm will extend 190 feet to the northeast. Cul-de-sacs located at the end of each arm will serve as a turnaround to exit the new parcels. No burial plot will be further than 275 feet from the on site roadway. Landscaping will relocate palm trees, remove and dispose of other trees and sod the entire parcel. Fifteen royal palms bordering the property line between the existing cemetery and the subject land will be relocated along the existing access road. Trees will be spaced approximately 45 feet apart at a distance of 6 feet from the south side of the access road. Other palms will be replanted among the landscaped berms (see Section 6.3 Aesthetic/Visual Resources). Plans and specifications will incorporate indigenous land plant species whenever and wherever feasible as required by state law.

4.2 Economic

A February 1994 report, issued by the State Department of Defense, estimated acquisition and development costs to be \$778,558. Funding responsibility would be split evenly between the state and matching federal funds. This amount included design, construction management services, construction and a 5% contingency. The figure did not include permit fees, utility connection charges, cost of water development (if required by the Department of Water Supply) or cost growth due to inflation.

This project will benefit veterans on the island of Hawaii by precluding the necessity for interment at a private facility or on Oahu. Presently, veterans are eligible for interment at (2) two existing cemeteries in Hilo as well as the Hawaii State Veterans Cemetery at Kaneohe, Oahu. However, the Hilo cemeteries are near capacity and interment at the Kaneohe facility will result in additional time, expense and difficulty of access for the veterans and their families.

4.3 Social

Military veterans cemeteries symbolize more than a final resting place for those who were in the service of country and state. They are places of visitation and remembrance. Places where commitment for the spirit of national allegiance is renewed through homage to those who served in our Armed Services protecting our republic. Expansion of East Hawaii Veterans Cemetery - No.2 provides veterans on the eastern side of the island of Hawaii and their dependents with a facility comparable in stature and quality as those found elsewhere in the islands.

4.4 Environmental

Presently, the properties to be acquired are owned by the State of Hawaii. The properties will be transferred to the County of Hawaii who will own and operate the expanded facility. Conversion of this state land to a cemetery will preserve green space in an urban area. Underground injection of rainfall runoff will be accomplished through the construction of two new catch basins/drywells.

5.0 SUMMARY OF AFFECTED ENVIRONMENT

5.1 Location and Access

Cemetery 2 is located in the town of Hilo on the island of Hawaii (See Figure 1). Cemetery 2 will be expanded through the acquisition of two additional parcels located immediately north of and adjacent to the existing cemetery. These parcels consist of a 6.0 acre parcel identified as TMK 3rd Div: 2-3-20:2 and a 1.11 acre parcel identified as TMK 3rd Div: 2-3-20:8 (See Figure 2). These two parcels are owned by the state of Hawaii.

Cemetery 2 is accessible from the existing county road, Laimana Street. Layout of the existing property is shown in Figure 3. The entrance to the existing cemetery is a 36 foot wide road. Access to the expansion parcels will come from an extension of the unpaved maintenance road (See Figure 4).

5.2 Topography and Climate

Site elevations range from 144 to 196 feet mean sea level (MSL). Existing grades on the parcels are gently sloping with grades ranging from 3 to 5 percent. The site generally slopes from the west down towards the east.

The prevailing winds in Hilo are northeasterly trades by day and a southwest breeze drifting downslope from Mauna Loa at night. Temperatures range from 66°F to 80°F, with an annual average of 73°F. Skies are clear 8% of the time and cloudy 58% of the time. Relative humidity averages 80%, leading to approximately 150 inches of rain per year.

5.3 Infrastructure

The East Veterans Cemetery - No.2 was established in 1980. Recent upgrades to the facility include modifications to site utilities, extension and addition of on-site roadways, construction of new buildings, and renovation of existing facilities to meet current Department of Veterans Affairs, Occupational Safety and Health and Americans with Disabilities Act standards. Telephone, water, electrical and sewer services are currently available at the present cemetery site.

In contrast, the parcels to be acquired are undeveloped. Historically, these parcels were utilized for agricultural purposes. No infrastructure exists on those sites. The proposed project includes extending the existing water system to provide hose bibbs for irrigation purposes.

5.4 Land Use Zoning

The project site is classified as an Urban District by the State Land Use Commission. This designation permits the most intense site development. The County of Hawaii zoning classification is residential, single family home on minimum 7,500 square foot lots (RS-7.5).

County code states that no cemetery shall be established or expanded without the approval of the county council as evidenced by a resolution. Application requests for the county council to pass a resolution to enlarge a cemetery must be accompanied by: 1) a certificate of approval from the State DOH, 2) a complete description of the land, 3) a map of the project site, 3) evidence of approval relative to the noncontamination of water services by the Department of Water Supply, 4) abstract or certificate of title to the property and 5) \$100. Before the council may take final action, the application and associated documents are referred to the county planning commission which will study the documents, conduct public hearings and make a recommendation to the county council.

5.5 Soils

Site soil has been characterized by the U.S. Department of Agriculture Soil Conservation Service (Foote et al., 1972). The soil is Hilo Silty Clay Loam of slope 0 to 10 percent. This well drained silty clay is described as continuously wet. Annual soil temperature is 72 °F to 74°F. The surface layer of the soil is a dark brown silty clay about 12 inches thick. Subsurface soil is approximately 48 inches thick and consists of dark brown, dark reddish brown and very dark grayish brown silty clay loam. While the surface layer is strongly acidic (with a pH ranging from 4.5 to 6.0), the subsurface soil is strongly to medium acidic.

Soil permeability is rapid while run off is slow and the hazard of erosion slight. Drainage for the soil is 2 to 6.3 inches per hour. The depth to the bedrock (pahoehoe lava) is greater than 5 feet.

5.6 Water Quality

The interment area is approximately 0.75 miles inland of Hilo Bay and occurs above (mauka of) the Underground Injection Control (UIC) line (DOH, 1981). Drinking water wells located 0.5 miles inland of the interment area indicate that the depth to groundwater is about 100 feet or more. Regular testing of these water sources indicate good quality drinking water. Nearby surface waters include the Wailuku River, located about 2,000 feet to the north, and the Alenaio Stream, about 2,000 feet to the south.

5.7 Natural Hazards

The properties are above coastal areas prone to inundation from storms, tsunamis, etc. The parcels are absent of any surface water and flood hazards and are officially identified on the FEMA flood plain hazard maps as Zone X. The area is determined to be outside of the 500 year flood plain.

The entire island of Hawaii is designated as seismic Zone 3 by the 1994 edition of the Uniform Building Code.

5.8 Archaeological and Historic Sites

Most of the project site is covered in feral sugar cane and grass. In light of the past use of the properties for sugar cane cultivation, the State Historic Preservation Division feels that

it is very unlikely that any significant historic sites remain in the parcel. A copy of their report is found in Appendix A.

Based on historic maps, the Hilo Boarding school ditch may have crossed the subject properties. This ditch supplied water to the boarding school and surrounding areas. The Historic Preservation Division determined the ditch to be a historic site. However, the exact location of the ditch is unclear. Maps and a site inspection by a staff archaeologist yielded no definitive information. The Division feels that sugar cane cultivation probably destroyed evidence of the ditch.

As the Historic Preservation Division will monitor initial groundbreaking activities at the site, the proposed veterans cemetery expansion will have "no adverse effect" on the significant historic sites.

Should the contractor uncover any subsurface cultural remains such as artifacts, burials, deposits of shells or charcoal during excavation work, he will be directed to stop work in the area and contact the State's Historic Preservation Division immediately.

5.9 Flora

The parcels were surveyed on July 21, 1996. The survey found no endangered species or important botanical resources on the project site. The project will have no impact on the integrity of the native flora. A copy of the botanical survey is found in Appendix B, and an excerpt is provided below.

Vegetation on the property consists of para grass intermixed with other alien, non-native herbs and shrubs and emergent alien tree species. Para grass is dominant throughout most of the site. Sensitive plant, wedelia, hilo grass, ho'i'o and desmodium intortum are common in the para grass layer in certain areas and sugar cane, banana, napier grass, paraserianthes, moho, gunpowder tree, African tulip, mango, breadfruit and avocado are the predominant emergent species. Only one native species, ho'i'o, is found on the site. It is a common endemic and a very minor element in the vegetation.

5.10 Fauna

The U.S. Fish and Wildlife Service has no record of wetlands, sensitive habitats or endangered, threatened, proposed or candidate species at the project site. No significant adverse effects to fish or wildlife are expected. A copy of the Fish and Wildlife Service's determination is found in Appendix C.

5.11 Traffic

Cemetery 2 is located in a residential area with little traffic. Funeral processions to the cemetery will cross through this residential area. Continuous impact due to additional traffic is not expected. Increased traffic on holidays such as Memorial and Veterans Day is anticipated.

6.0 PROBABLE IMPACTS AND MITIGATION MEASURES

6.1 Short-term Construction Related Impacts

Noise, dirt, storage of construction related material and traffic due to equipment are expected to be the main construction related impacts of the project. However, construction nuisances are temporary and abatement measures will be undertaken during construction. Construction activities will be restricted to regular work hours, limiting noise impacts to those times. Dirt migration will be controlled through the regular application of water.

6.2 Grading and Drainage

Approximately 100% of the subject parcels will be graded (Figure 5). Surface grading of burial areas will provide slopes ranging from 4 to 10%. This is within the VA site development criteria of 2 to 15%. A NPDES permit will be required as more than 5 acres will be graded. Included in this permit will be an erosion control plan.

The contractor is required to submit a plan for best management practices to be implemented during the construction phase of the project. These include: sediment traps or ponds to prevent sediment-laden runoff from the construction site, gravel construction entrances at each ingress and egress, silt fences around any drain and perimeter runoff control. The contractor will be directed to keep the project and surrounding area free from dust nuisance. Graded earth will be sodded with Bermuda grass and stabilized as soon as final grades are established. Planting will not be delayed until all grading is completed. If grading work is delayed or interrupted, the area will be planted.

Although the total quantity of rain falling on these sites will not increase, construction of a hardened roadway on the proposed acquisition parcels will increase run off from these sites slightly. Construction of two (2) new catch basins/drywells will mitigate any increase in rainfall runoff generated by development. Run off from the burial areas will be conveyed by sheet flow to existing and new drainage structures

6.3 Aesthetics/Visual Resources

A landscaped buffer zone will be constructed between the two acquired parcels and houses located on Ala Moku Street just north of the properties (Figure 5). Approximately six (6) grass berms will be erected along the length of the northern property line separating Cemetery 2 from the residential section. Each berm will measure 3 feet high by 20 feet wide by 100 feet long. The berm mound sides will be sloped at an angle of approximately 1:3. Palm trees, relocated from elsewhere on the properties, will be intermixed among the berms to increase privacy.

7.0 ALTERNATIVES TO THE PROPOSED ACTION

7.1 No Action

Although, veterans are eligible for interment at two (2) existing Veterans Cemeteries at Hilo, insufficient burial acreage remains to accommodate eligible veterans and their families. In time, these two cemeteries will reach burial capacity. If no action is taken, when these existing cemeteries reach full capacity, eligible veterans must be interred at a private cemetery or at remotely located veterans cemeteries. Interment at private or remotely located cemeteries results in additional time, expense and inconvenience for East Hawaii veterans and their families.

7.2 Alternative Site

The project sites were selected as part of the Veterans Cemeteries Master Planning by the state Department of Defense. Project goals were to expand and incorporate adjacent lands into existing cemeteries. The two parcels are ideal because they are already owned by the State of Hawaii and are located adjacent to the existing veterans cemetery No. 2.

Selection of an alternative site will have negative economic consequences. There are no funds budgeted for land purchases. Selection of another site involves a land swap with or donation from a private landowner. In addition, the receipt of federal funds for this project requires that cemetery expansion be contiguous. Rejection of the proposed sites, in favor of another remotely located site, would require the state Department of Defense to refund federal moneys already spent on upgrading the existing East Hawaii Veterans Cemetery - No.2.

8.0 LIST OF PERMITS

The following permits and clearances will be required as part of this project:

State of Hawaii:

Construction Dewatering Permit (DOH Clean Water Branch), not anticipated
Certificate of Approval (Department of Health)
NPDES Permit (Department of Health)

County of Hawaii:

Application for a Council Resolution
Evidence of Approval (Department of Water Supply)
Grading Permit (Department of Public Works, Engineering Division)
Building Permit (Department of Public Works, Building Division)
Construction Dewatering Permit to Discharge into County of Hawaii Storm Drainage
System (if necessary, not anticipated)

9.0 DETERMINATION

In accordance with Chapter 343, Hawaii Revised Statutes, this Environmental Assessment has characterized the technical and environmental issues of the expansion of the East Hawaii Veterans Cemetery - No.2 and identified potential impacts and their significance. It is anticipated that the proposed project will not significantly impact the environment. Therefore, a Negative Declaration is anticipated, and an Environmental Impact Statement is not required for this project. This determination is based on the significance criteria listed in §11-200-12 of the Environmental Impact Statement Rules. Specifically, these significance criteria are addressed below:

1. The proposed project will not result in an adverse commitment, loss, or destruction of any natural or cultural resources. The proposed site has been utilized for agricultural purposes. Any prior site of historic interest would have been destroyed.
2. The range of beneficial uses of the environment will not be curtailed.
3. The project will not conflict with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, HRS.
4. The proposed project will not substantially adversely affect the economic or social welfare of the community or state.
5. The project will not substantially adversely affect public health as there will be no industry of any type on-site.
6. The project will not involve substantial adverse secondary impacts, such as population changes or demands on public infrastructure facilities.
7. The project will not involve a substantial degradation of environmental quality. In fact, green space will be preserved.
8. The project does not involve a commitment for larger actions and will not result in significant cumulative effects upon the environment. The expansion is adequate to meet projected burial demands for the next 20 years.
9. The project will not substantially affect a rare, threatened or endangered species, or its habitat.
10. The project will not detrimentally affect air or water quality or ambient noise levels.
11. The project will not affect an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geological hazardous land, estuary, fresh water, or coastal waters.

12. The project does not affect identified scenic vistas or view planes.
13. The project does not require substantial energy consumption.
 1. The proposed project will not result in an adverse commitment, loss or destruction of any natural or cultural resources as shown in the archaeological survey in the EA.
 2. The range of beneficial uses of the environment will not be curtailed.
 3. The project will not conflict 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 orders or executive orders.
 4. The proposed project will not adversely affect the economic or social welfare of the community or the state.
 5. The project will not adversely affect public health.
 6. The project will not involve substantial adverse secondary impacts, such as population changes or effects on public facilities. The proposed project responds to future veteran interment requirements.
 7. The project will not involve a substantial degradation of environmental quality.
 8. The project will not involve a commitment for larger actions and will not result in significant cumulative effects upon the environment.
 9. The project will not substantially affect any rare, threatened or endangered species as shown in the botanical survey of the EA.
 10. The project will not detrimentally affect air or water quality or ambient noise levels. Sound attenuation is included in the project design. Short-term impacts will occur during the construction phase.
 11. The project will not affect an environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal waters.
 12. The project will not affect scenic vistas and viewplanes.
 13. The project will not require substantial energy consumption.

**APPENDIX A: Historic Preservation Concerns for Veterans Cemetery Expansion
Ponahawai, South Hilo, Hawaii Island
TMK: 2-3-20: 2 and 8**

BENJAMIN J. CAVETANO
GOVERNOR OF HAWAII



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

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

DEPUTY
GILBERT COLOMA-AGARAN

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

August 13, 1996

Mr. Bruce Wade
M & E Pacific, Inc.
1001 Bishop Street, Suite 500 Pauahi Tower
Honolulu, Hawaii 96813

LOG NO: 17823 ✓
DOC NO: 9608MS03

Dear Mr. Wade:

**SUBJECT: Historic Preservation Concerns for Veterans Cemetery Expansion
Ponahawai, South Hilo, Hawaii Island
TMK: 2-3-20: 2 and 8**

Thank you for accompanying Historic Preservation Division staff archaeologist Marc Smith on the site inspection July 10, 1996.

In the northeast corner of the parcel, several large breadfruit and avocado trees are located along an intermittent drainage ditch. The rest of the parcel is covered by feral sugar cane and grass. Because of this past use for sugar cane cultivation, we feel that it is very unlikely that any significant historic sites would remain in the parcel.

However, based on historic maps, it appears likely that the Hilo Boarding School (est. 1856), ditch may have crossed the subject parcel. This ditch which supplied water to the boarding school and surrounding agricultural areas has been determined to be a significant historic site by the Historic Preservation Division. The exact location of the ditch in the subject parcel is unclear. The remnant of a drainage ditch in the northeast corner of the parcel and culvert under Laimana Street into the location of the boarding school, suggests that this may be the location of the historic ditch. We feel that the sugar cane cultivation probably destroyed evidence of the ditch elsewhere in the parcel, but we would request the opportunity to monitor the initial ground disturbing activities.

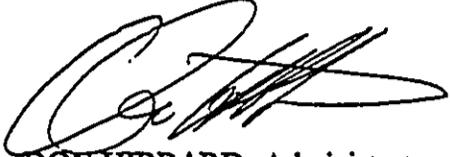
We believe if the applicant agrees to the above condition of monitoring initial ground altering activities by a Historic Preservation Division staff archaeologist, then the proposed action of expanding the veterans cemetery will have "no adverse effect" on significant historic sites.

RECEIVED AUG 14 1996

Mr. Wade
Page 2

If you should have any further questions, and to schedule the project monitoring please contact Patrick McCoy at 587-0006 (Honolulu), or Marc Smith at 933-4346 (Hilo).

Aloha,



**DON HIBBARD, Administrator
State Historic Preservation Division**

MS:amk

**APPENDIX B: East Hawaii Veterans Cemetery Extension
Botanical Reconnaissance**

July 11, 1996

Kenneth M. Nagata
46-270 Kahuhipa St. #A421
Kaneohe, Hawaii 96744

Subject: Notice to Proceed with Botanical Survey

This letter will serve as a Notice to Proceed with a botanical survey of approximately 7+ acres in Hilo, Hawaii. As we discussed, only a cursory survey and report are requested. A species list will not be required. It is anticipated that the cost of this survey will range from \$750 to \$1000 plus expenses. The completed report should be submitted to M&E Pacific within the next few weeks.

The property is identified on the tax map keys as TMK 3-2-3-20: parcels 2 and 8. It is immediately adjacent to the East Hawaii Veterans Cemetery #2 located at the end of Laimana Street. Included are three maps to assist you in locating the property.

Should you have any questions or require any additional information, please call me at 529-7233.

Thank you.

Sincerely,



Bruce D. Wade

enclosure

EAST HAWAII VETERANS CEMETARY
EXTENSION
BOTANICAL RECONNAISSANCE

PREPARED BY: KENNETH M. NAGATA
FOR: M & E PACIFIC
DATE: 25 JULY 1996

INTRODUCTION

THE SUBJECT PROPERTY IS ADJACENT TO THE EXISTING EAST HAWAII VETERANS CEMETARY #2 LOCATED AT THE END OF LAIMANA STREET, HILO, HAWAII. APPROXIMATELY SEVEN ACRES IN SIZE, IT IS BORDERED BY THE AMAKIHI STREET ALIGNMENT (MAUKA BOUNDARY), SUBDIVISIONS, LAIMANA STREET (MAKAI BOUNDARY) AND THE EXISTING VETERANS CEMETARY.

THE VEGETATION IN THE REGION HAS BEEN CLASSIFIED AS ONE OF SHRUBS AND CLOSED FOREST (RIPPERTON AND HOSAKA 1942). THIS VEGETATION TYPE IS DOMINATED BY GUAVA (*PSIDIUM GUAJAVA*) WITH 'OHIA (*METROSIDEROS POLYMORPHA*) IN THE HIGHER ELEVATIONS. HALA (*PANDANUS ODORATISSIMUS*) AND KUKUI (*ALEURITES MOLUCCANA*) ARE LOCALLY ABUNDANT UPPER CANOPY SPECIES WHILE FALSE STAGHORN FERN (*DICRANOPTERIS LINEARIS*), BOSTON FERN (*NEPHROLEPIS EXALTATA*), HILO GRASS (*PASPALUM CONJUGATUM*) AND YELLOW FOXTAIL (*SETARIA GRACILIS*) ARE FOUND IN THE HERB LAYER.

METHOD

A WALK-THROUGH SURVEY WITH 80% COVERAGE WAS CONDUCTED ON 21 JULY 1996 TO DETERMINE THE FLORISTIC COMPOSITION OF THE PROJECT SITE. TRANSECTS WERE ESTABLISHED THROUGHOUT THE PROPERTY AND ALL PLANT SPECIES ALONG THESE TRANSECTS WERE RECORDED. SAMPLES OF PLANTS WHICH COULD NOT BE IDENTIFIED IN THE FIELD WERE BROUGHT BACK TO THE LAB FOR VERIFICATION. COMMON AND SCIENTIFIC NAMES USED ARE THOSE FOUND IN WAGNER ET AL (1990) AND NEAL (1965).

RESULTS

THE VEGETATION IN THE SITE WAS FOUND TO CONSIST OF A THICK HERB LAYER OF PARA GRASS (*BRACHIARIA MUTICA*) WITH EMERGENT MOHO (*HELIOCARPUS POPAYANENSIS*), AFRICAN TULIP (*SPATHODEA CAMPANULATA*), GUNPOWDER TREE (*TREMA ORIENTALIS*), BINGABING (*MACARANGA MAPPA*) AND *PARASERIANTHES FALCATA* 10 - 30 FEET TALL. IN THE MIDDLE PORTION OF THE PROPERTY PARA GRASS IS MONODOMINANT AND OFTEN SEVEN FEET THICK WITH ONLY A FEW EMERGENT TREES BUT IN THE MAUKA AND MAKAI PORTIONS OTHER SPECIES SUCH AS WEDELIA (*WEDELIA TRILOBATA*), SENSITIVE PLANT (*MIMOSA PUDICA* VAR *UNJUGA*), *DESMODIUM INTORTUM* AND HILO GRASS ARE COMMON WITHIN THE HERB LAYER. IN THE MAUKA AREA HOTO (*ATHYRUM ARNOTTII*), BANANA (*MUSA X PARADISIACA*), NAPIER GRASS (*PENNISETUM PURPUREUM*), SUGAR CANE (*SACCHARUM OFFICINARUM*) AND YELLOW GINGER (*HEDYCHIUM FLAVESCENS*) ARE FOUND. SUGAR CANE AND NAPIER GRASS ARE ALSO FOUND IN THE MAKAI PORTION OF THE PROPERTY. A LARGE GROVE OF MANGO (*MANGIFERA INDICA*), BREADFRUIT (*ARTOCARPUS ALTILIS*), JAVA PLUM (*EUGENIA CUMINII*), AVOCADO (*PERSEA AMERICANA*) AND ALEXANDER PALM (*ARCHONTOPHOENIX ALEXANDRAE*) IS LOCATED ALONG LAIMANA STREET. THE UNDERSTORY HERE IS MOSTLY A MIXTURE OF VARIOUS FERAL LANDSCAPE SPECIES SUCH AS *HELICONIA* SPP., *DRACAENA* SPP., *SYNGONIUM AURITUM* AND *XANTHOSOMA SAGITTIFOLIUM*.

ONLY ONE NATIVE SPECIES AND NO NATIVE PLANT COMMUNITIES WERE FOUND. HO'PO IS AN ENDEMIC FERN COMMON IN WET AREAS ON MOST OF THE MAIN ISLANDS IN HAWAII. IT IS UNCOMMON IN THE MAKAI PORTION AND COMMON IN SOME PARTS OF THE MAUKA AREA OF THE PROPERTY AND CONSTITUTES BUT A NEGLIGIBLE ELEMENT OF THE VEGETATION IN THE SITE.

SUMMARY

THE VEGETATION IN THE SUBJECT PROPERTY IS ONE OF PARA GRASS INTERMIXED WITH OTHER ALIEN (NON-NATIVE) HERBS AND SHRUBS AND EMERGENT ALIEN TREE SPECIES. PARA GRASS FORMS A THICK LAYER AND IS DOMINANT THROUGHOUT MOST OF THE SITE. SENSITIVE PLANT, WEDELIA, HILO GRASS, HO'PO AND *DESMODIUM INTORTUM* ARE COMMON IN THE PARA GRASS LAYER IN CERTAIN AREAS AND SUGAR CANE, BANANA, NAPIER GRASS, *PARASERIANTHES*, MOHO, GUNPOWDER TREE, AFRICAN TULIP, MANGO, BREADFRUIT AND AVOCADO ARE THE PREDOMINANT EMERGENT SPECIES. ONLY ONE NATIVE SPECIES, HO'PO, WAS FOUND IN THE SITE. IT IS A COMMON ENDEMIC AND A VERY MINOR ELEMENT IN THE VEGETATION.

THERE ARE NO IMPORTANT BOTANICAL RESOURCES IN THE PROJECT SITE. THE PROPOSED PROJECT WILL HAVE NO IMPACT ON THE INTEGRITY OF THE NATIVE FLORA.

LITERATURE CITED

- NEAL, M. C. 1965. IN GARDENS OF HAWAII. BERNICE P. BISHOP MUSEUM SPECIAL PUBL. 50. BISHOP MUSEUM PRESS. HONOLULU 924 PP.
- RIPPERTON, J. C. & E. Y. HOSAKA. 1942. VEGETATION ZONES OF HAWAII. HAWAII AGRIC. EXP. STA. BULL. 89. HONOLULU. 60 PP
- WAGNER, W. L., D. R. HERBST & S. H. SOHMER. 1990. MANUAL OF THE FLOWERING PLANTS OF HAWAII. UNIV. OF HAWAII PRESS AND BISHOP MUSEUM PRESS. HONOLULU. 2 VOLS. 1853 PP

APPENDIX C: Reply to Request for Endangered Species

July 10, 1996

U.S. Department of the Interior
Fish and Wildlife Division
300 Ala Moana Blvd.
Room 3108 Box 50088
Honolulu, Hawaii 96850

Attention: Brooks Harper

Subject: Request for List of Endangered Species

The state Department of Defense is seeking to acquire land in Hilo, Hawaii to expand an existing veterans cemetery. As the land is state owned, an environmental assessment is required. I am in the process of writing the assessment and am seeking a list of endangered species (if any) or other considerations. The property is identified on the tax maps as TMK 3-2-3-20 parcels 2 and 8.

Enclosed is a copy of the tax map showing the property location at the end of Laimana St. off Waianuenue St. in Hilo.

Your prompt attention to this matter will be greatly appreciated. If you have any questions please contact me at 529-7233. Thank you for your time.

Sincerely,



Bruce D. Wade

enclosure

RECEIVED AUG 12 1996



United States Department of the Interior

FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS ECOREGION
300 ALA MOANA BOULEVARD, ROOM 3108
BOX 50088
HONOLULU, HAWAII 96850
PHONE: (808) 541-3441 FAX: (808) 541-3470

In Reply Refer To: KF

JUL 30 1996

Bruce D. Wade
M&E Pacific Inc.
Suite 500 Pauahi Tower
1001 Bishop Street
Honolulu, HI 96813

Re: Request for List of Endangered Species

Dear Mr. Wade:

The U.S. Fish and Wildlife Service (Service) has received your request for comments on the proposed expansion of the Veteran's Cemetery located in Hilo, Hawaii onto State owned land. The project sponsor is the State of Hawaii Department of Defense.

The Service has reviewed the project details provided with your request and pertinent information in our files, including maps prepared by the Hawaii Heritage Program of the Nature Conservancy of Hawaii. The Service has no records of wetlands, sensitive habitats, or endangered, threatened, proposed, or candidate species at the project site. No significant adverse effects to fish and wildlife resources are expected from the proposed action. The Service, therefore, does not require further notification or consultation on the project.

The Service appreciates the opportunity to provide comments on the proposed project. If you have questions regarding these comments, please contact our Program Leader for Interagency Cooperation, Margo Stahl or Fish and Wildlife Biologist Kevin Foster at 808/541-3441.

Sincerely,

Brooks Harper
Field Supervisor
Ecological Services

APPENDIX D: Draft EA Public Comments and Responses

BENJAMIN J. CAYETANO
GOVERNOR



EDWARD V. RICHARDSON
MAJOR GENERAL
ADJUTANT GENERAL

MICHAEL E. RAWLINS
COLONEL
DEPUTY ADJUTANT GENERAL

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

April 25, 1997

Mr. Gary Gill, Director
Office of Environmental Quality Control
220 South King Street
Honolulu, HI 96813

Dear Mr. Gill:

Re: Response to OEQC Comments regarding Draft Environmental Assessment (EA) for
East Hawaii Veterans Cemetery No. 2, Phase II, Hilo

This is in response to your letter dated October 3, 1996 to Lieutenant Colonel Richard Young of the Department of Defense. Per your review of the draft EA you raised concerns regarding the following three items: 1) segmentation of projects is not permitted and whether there are any future phases, 2) what measures will be taken to prevent ground and water contamination from embalming fluids and 3) notify neighbors and document contacts.

Our responses are:

- 1) No future phases are planned for this project. This project was segmented into two phases due to budgeting. Phase 1 involved maintenance and minor repairs to existing structures and did not require any assessment. Phase 2 involves the acquisition of additional land and thus requires an EA.
- 2) The proposed cemetery site is about one-half mile hydrologically downgradient from the nearest drinking water source. There are no drinking water sources downgradient from this site. As the static water table elevation is far below the ground level, there is a large unsaturated filter zone to protect groundwater from contamination. Therefore, no contamination of groundwater is expected.
- 3) Adjacent neighbors on abutting streets have been notified. Addresses contacted are listed on the following page. In addition, phone messages were left for the president of the community association, *Halai Kumiai*.

Sincerely,


Joseph A. Ah New, Jr.
Contracting and Engineering Officer

c: Bruce D. Wade - M&E Pacific



PUBLIC CONTACT LIST

Form letters advising nearby neighbors of the Department of Defense's intent to expand the East Hawaii Veterans Cemetery No. 2 and where to find the related draft environmental assessment were sent to the following addresses:

| | |
|-------------|-------------|
| 4 Ala Muku | 59 Ala Muku |
| 5 Ala Muku | 62 Ala Muku |
| 11 Ala Muku | 67 Ala Muku |
| 12 Ala Muku | 70 Ala Muku |
| 17 Ala Muku | 76 Ala Muku |
| 25 Ala Muku | 77 Ala Muku |
| 26 Ala Muku | 83 Ala Muku |
| 31 Ala Muku | 84 Ala Muku |
| 32 Ala Muku | 89 Ala Muku |
| 40 Ala Muku | 90 Ala Muku |
| 41 Ala Muku | 143 Halai |
| 47 Ala Muku | 155 Halai |
| 48 Ala Muku | 159 Halai |
| 54 Ala Muku | 165 Halai |
| 55 Ala Muku | |

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

October 3, 1996

Lt. Col. Richard Young
State Department of Defense
3949 Diamond Head Road
Honolulu, Hawaii 96816

Dear Lt. Col. Young:

Subject: Draft Environmental Assessments (EA) for East Hawaii Veterans
Cemetery No. 2, Phase II, Hilo

Please include the following in the final EA:

1. For project disclosures under HRS 343 *segmentation* of is not permitted. Projects must be described in their entirety. This EA describes Phase II and Phase I is mentioned in the document. Are any future phases planned for this project? If so a single disclosure document for all phases must be submitted.
2. Formalin, used to preserve bodies, has the potential to contaminate surrounding soils. What measures will be taken to prevent *ground and water contamination* by formalin or other similar chemical compounds? *522-527*
3. Notify the nearest neighbors and any interested community groups and document your *contacts*.

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

Sincerely,


GARY GILL
Director

c: ✓ Bruce Wade, M&E Pacific

FIGURES

FIGURES

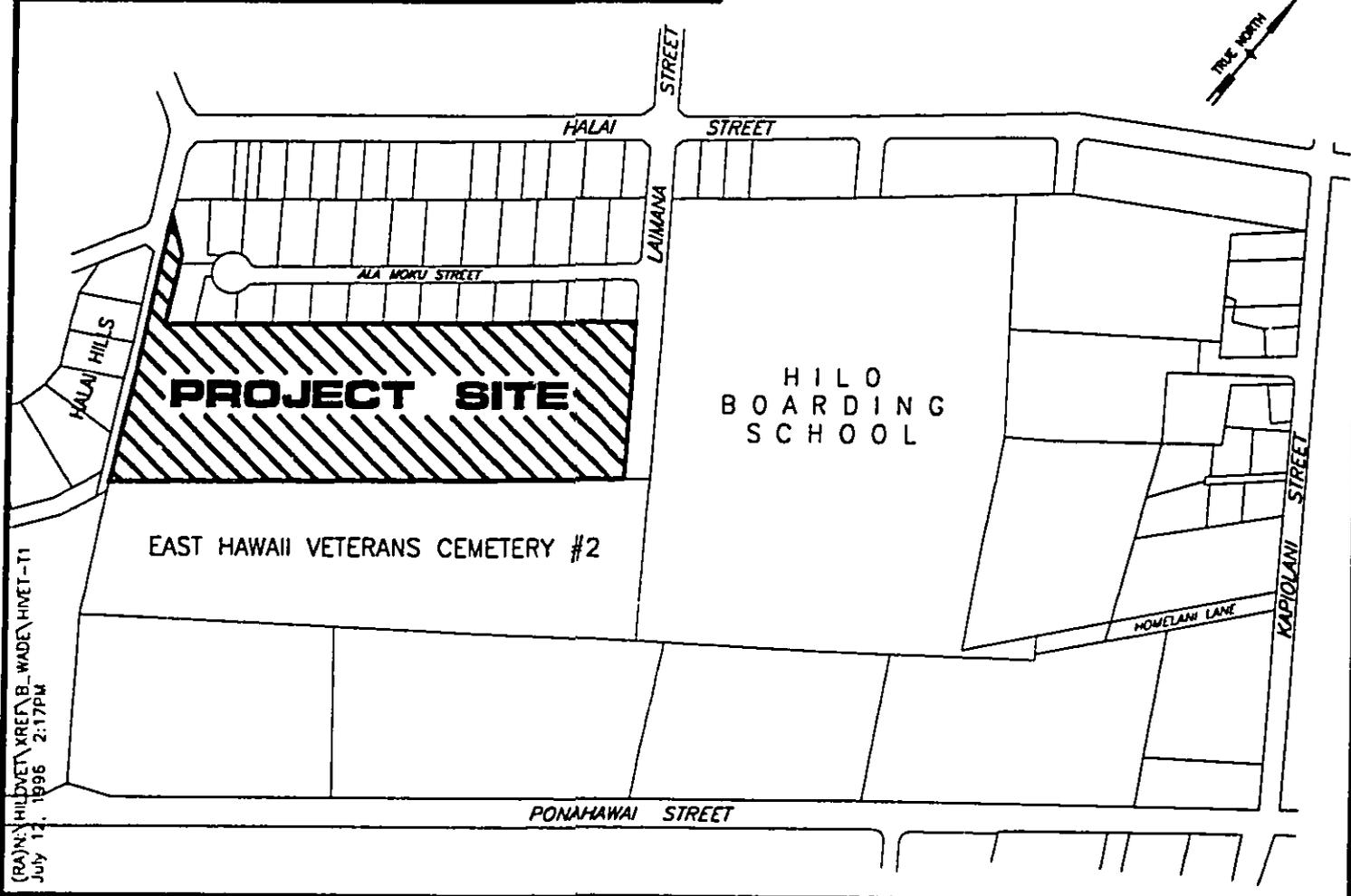
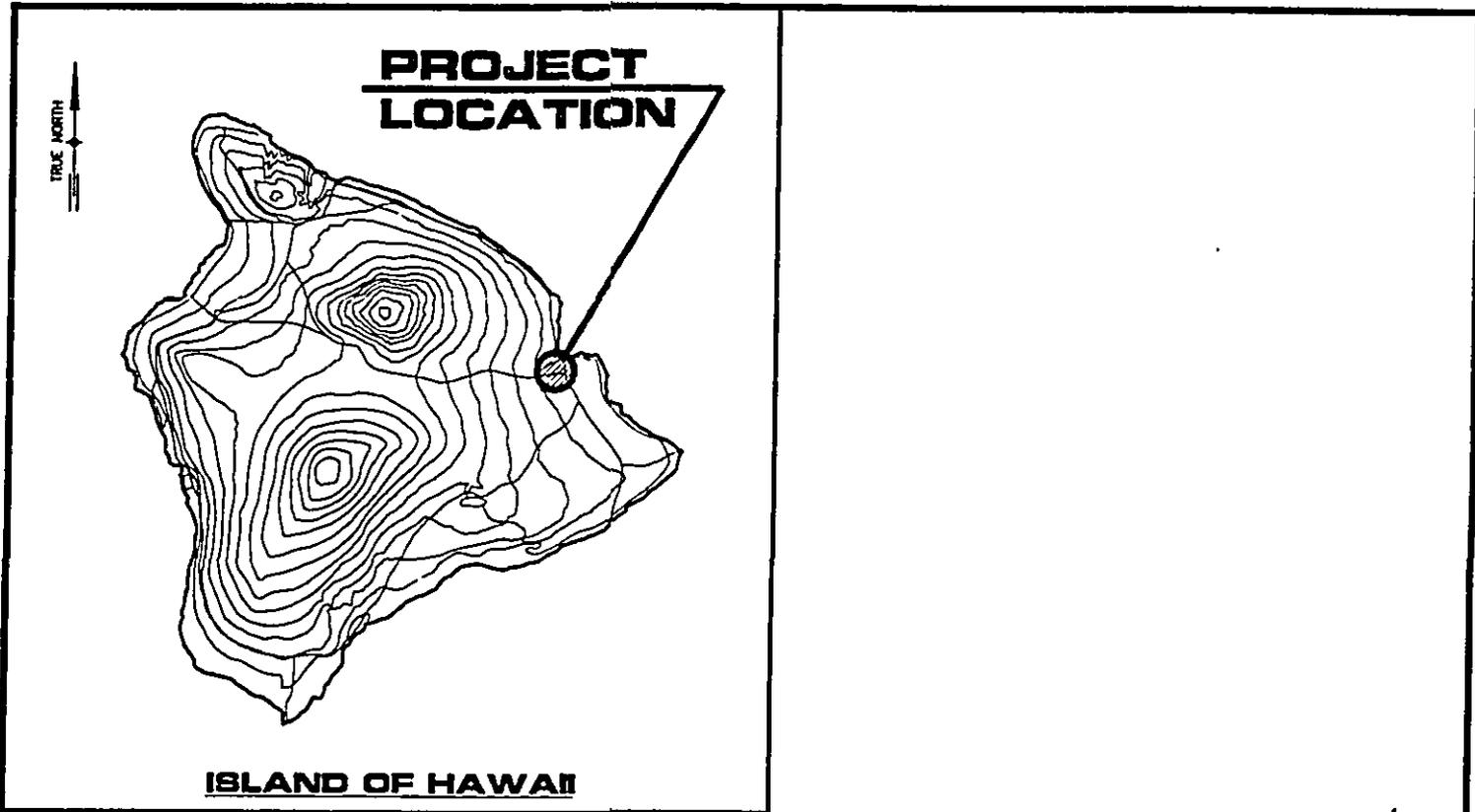


FIG. 1 PROJECT LOCATION - HILO, HAWAII
TMK: 3-2-3-20: 2&8

(RAJN:\HILOVET\EA\FIG2.DWG
July 15, 1995 1:35PM

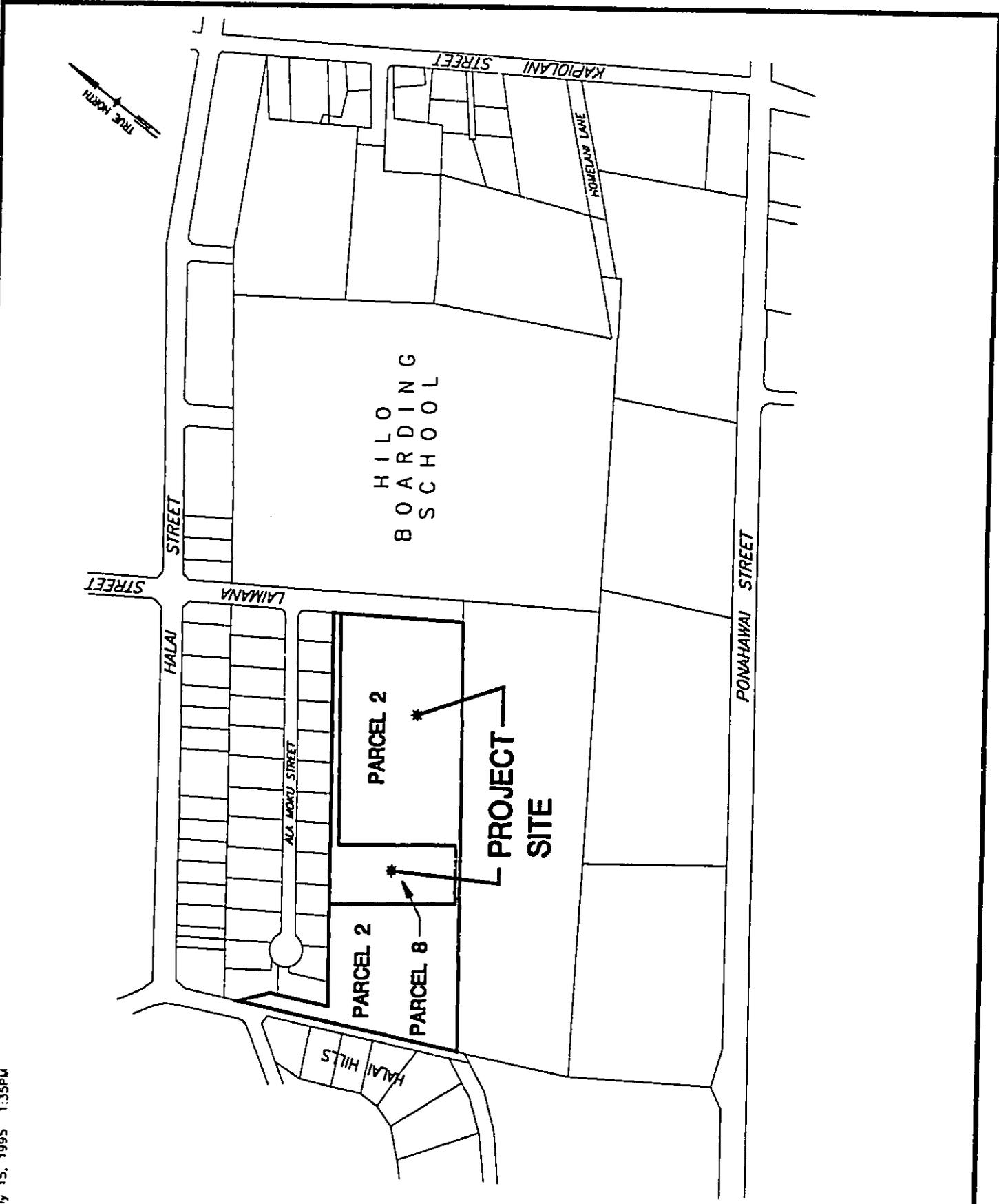
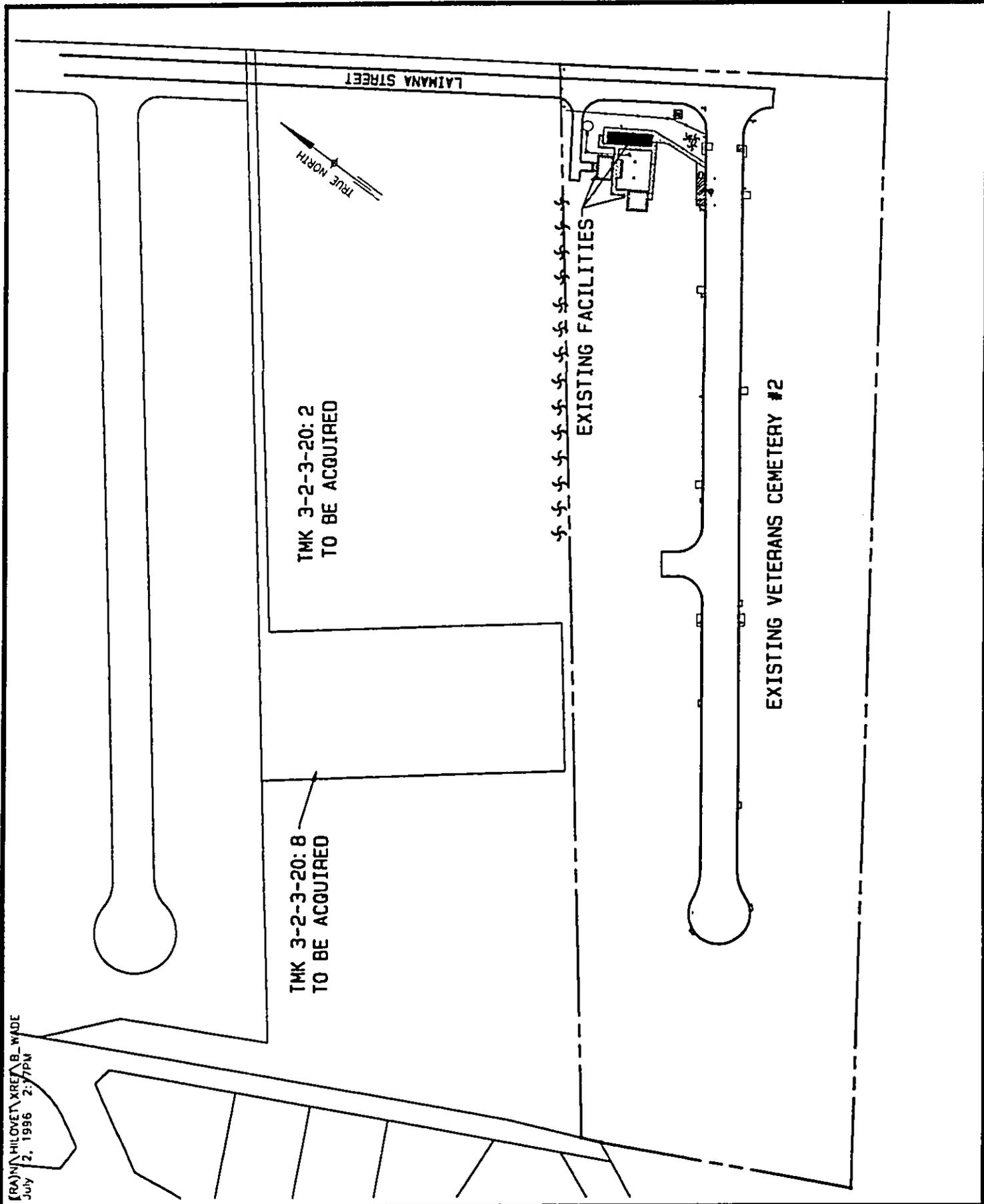


FIG. 2 TAX MAP KEY: 3-2-3-20



[RAJ] \ HILOVE \ XRE \ AB \ WADE
 July 2, 1996 2:37PM



FIG. 3 EAST HAWAII VETERANS CEMETERY #2

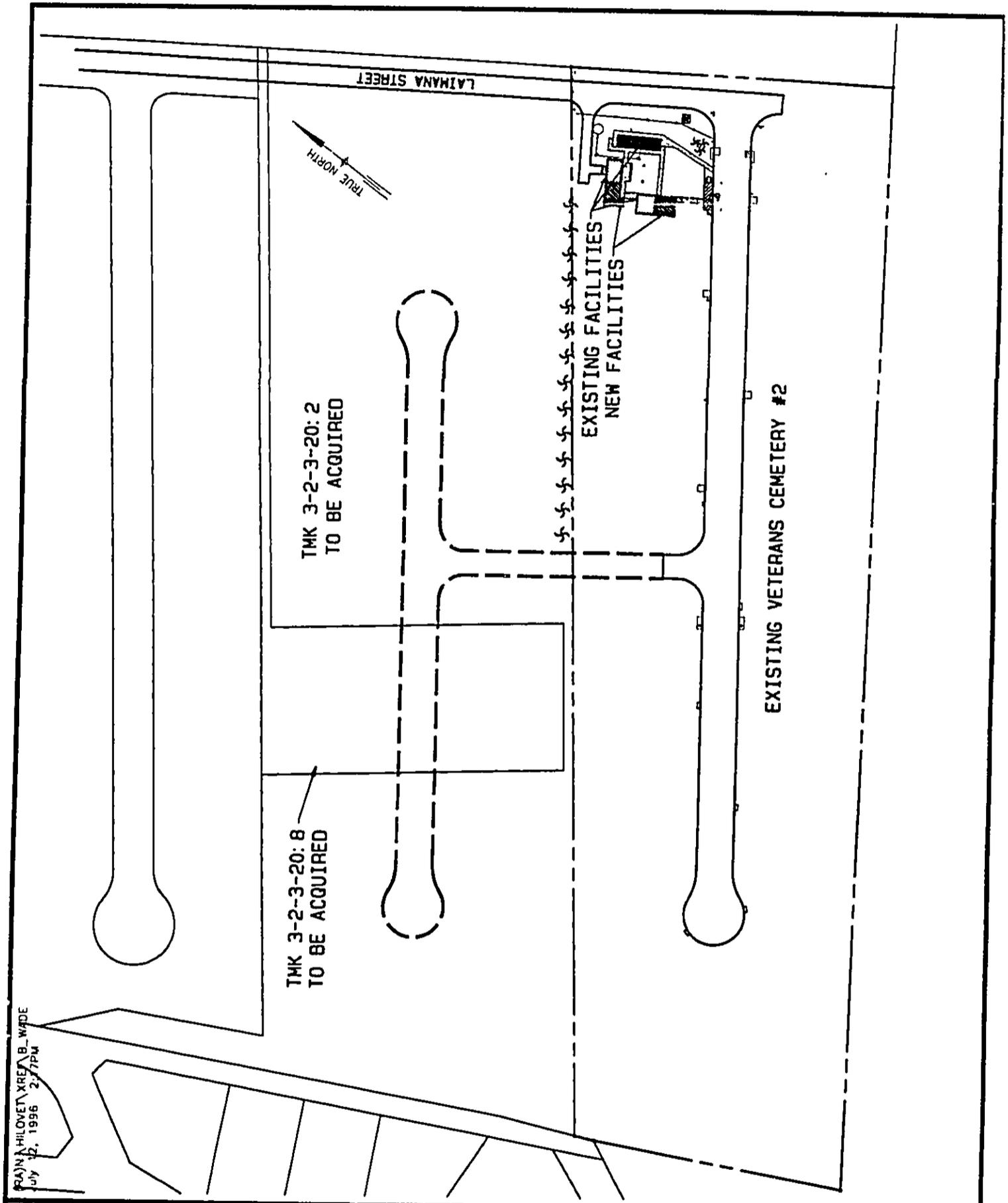
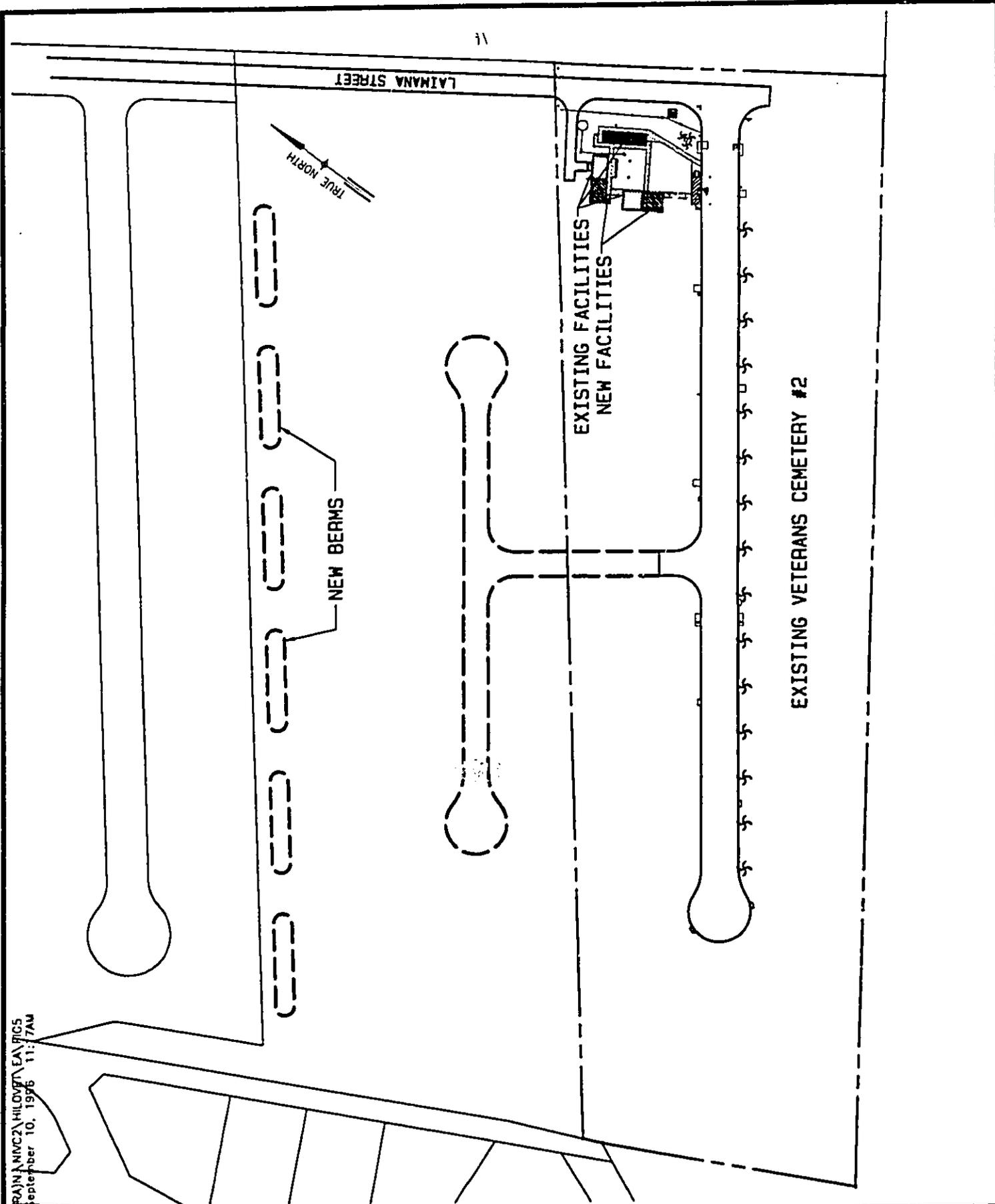


FIG. 4 PROPOSED EXPANSION AND LAYOUT OF EAST HAWAII VETERANS CEMETERY #2



RAJAN\MMC2\HILLO\PLAN\FIG5
September 10, 1996 11:37AM



FIG. 5 BERMS AND LANDSCAPING