

**I. THE WAIMANO RIDGE**

## A. INTRODUCTION

Offering dramatic views of Pearl Harbor and the ocean beyond, the long slopes of Waimano rise gently from the Pearl City coastal plain to join the main Koolau ridgeline. Immediately northwest of Ewa are Manana Ridge and the Pacific Palisades residential neighborhoods. Immediately southeast of Diamond Head are the residential developments at Waimalu Ridge. The H-1 freeway and Kamehameha Highway, two of the Oahu's major transportation arterials, describe Waimano's makai edge.

Residential neighborhoods built incrementally over the years characterize the ridge's broad lower slopes. Pearl City High School and Momilani Elementary School, which serve Waimano and adjacent neighborhoods, form the upper terminus of these residential areas. Immediately north of these schools on a long, narrowing stretch of open ridgetop stands the Waimano Training School and Hospital (WTSH). It is with this uppermost area, to which this report will refer as "The Waimano Ridge", that this study is concerned. The future of these often spectacularly situated lands and their continuing role in the life of urban Honolulu are the focus of this master planning effort, oriented toward defining the future needs of the WTSH within an overall context of health services for the developmentally disabled and mentally retarded. As part of its larger scope, the master plan is also directed toward incorporating other planned facilities and appropriate non-WTSH activities into its overall framework.

Master planning in accordance with Department of Health and the Waimano Master Plan Task Force intent is expected to transform the WTSH. It will be one of several uses on the ridge. In keeping with this, the existing WTSH will be referred to hereafter as the Waimano Training and Treatment Center (WTTC).

The general location at Waimano Ridge on the island of Oahu is shown in Figure 1, while its immediate location among its open space and residential neighbors are shown in Figure 2.

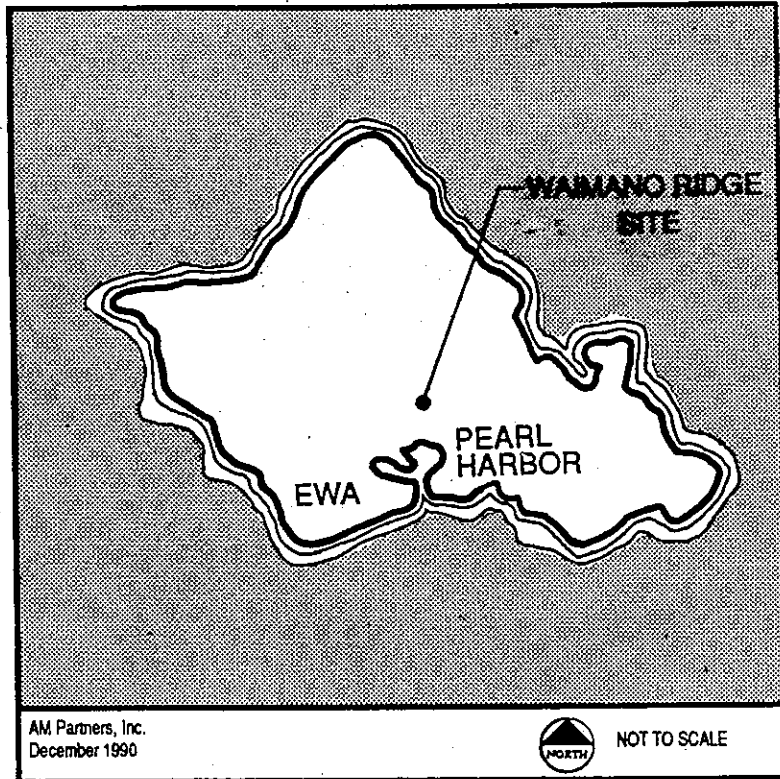


FIGURE 1: Location Map

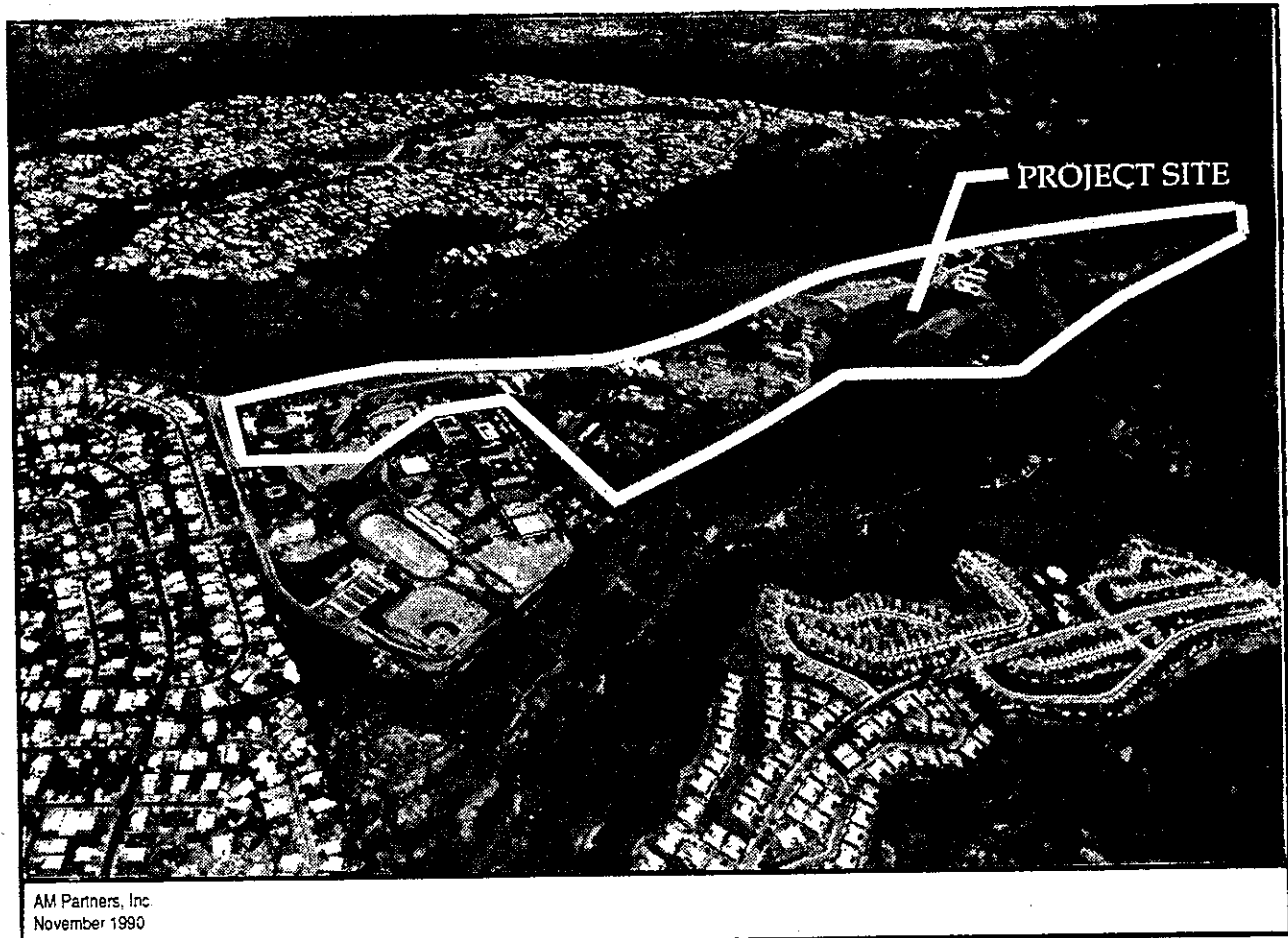


FIGURE 2: The Waimano Ridge Vicinity

The need for updating WTTC facilities and defining space needs for them has been cited by a previous study, "*Waimano Training School and Hospital: Analysis of Existing Conditions*," conducted in 1984 by Murayama, Kotake, Nunokawa, and Associates and DHM, Inc. Its conclusion states the following:

"...this study indicates that Waimano's organizational and functional efficiency is not at its optimal level, and that this inefficiency is partly due to the outdated site layout, inappropriate and obsolete building design, and inadequate and inappropriate staffing."

It further states that:

"...prior to initiating any major actions to upgrade the present facilities, Waimano must carefully project its future population size and characteristics."

It is in view of these statements, current Department of Health perspectives on health care policies for the developmentally disabled and mentally retarded, a new national trend toward deinstitutionalized treatment for these client groups, and the need to evaluate and incorporate, where appropriate, growing demands for use of the Waimano Ridge, that the current master planning effort is being undertaken. Its objective is a comprehensive master plan for the Waimano Ridge that meets WTTC space and facility needs and incorporates other appropriate facilities at suitable ridge locations.

## **1. Report Purpose**

### **Organization of the Waimano Ridge Master Plan Documents**

This report is the first of a three-part study to develop a master plan for the Waimano Ridge. The study and its component products are organized as follows:

Volume One: *Research and Evaluation Report:*  
An assessment of existing conditions at the Waimano Ridge.

Volume Two: *Program Development Report:*  
A comprehensive space program for the Waimano Training and Treatment Center (WTTC) based on patient and staff projections and an identification of potential WTTC relationships with other known facilities or activities at the Waimano Ridge.

Volume Three: *Master Development Plan Report:*  
A comprehensive, phased master plan for the Waimano Ridge.

This report is Volume One of this series. It focuses on summarizing the findings of a comprehensive investigation of the site and its constituent facilities to provide base information for master plan analysis and design.

### **Volume 1 Report Findings**

Information from available documents in combination with original field research and interviews with the Department of Health personnel was used to evaluate site physical conditions, environmental factors, and existing government regulations for later use in analyzing the suitability of the site for construction, determining constraints for master planning, and estimating the adaptability of existing buildings for continued or modified future uses.

When reviewing the findings of this study, it should be kept in mind that all analyses and findings were based exclusively on existing conditions and uses. Future functional, locational, and visual requirements which will be defined in Volumes Two and Three will create additional factors which may alter the findings contained in this volume.

## 2. Report Organization

This report is organized into four major sections, as follows:

### **The Waimano Site**

A summary of site characteristics that may have bearing on master planning.

### **The Buildings at Waimano**

A visual analysis of existing buildings at the site and summary of factors that may bear on their future reuse or rehabilitation.

### **Conclusion**

An evaluative summary of findings oriented toward providing an overview of the Waimano Ridge as a site for continued usage in the future.

### **Technical Appendices**

Technical investigative reports on various aspects of the Waimano site and its facilities, including utilities, roadways, electrical and mechanical systems, and archaeological and botanical values.

## 3. Methodology

Investigation of existing site and building conditions at Waimano was a multi-disciplinary effort involving planning, architectural, engineering, and environmental studies directed at creating an information base for subsequent site and facility analysis and future master planning.

Figure 3: *Investigative Research and Evaluation Process Diagram*, illustrates the process used. All investigations began with examinations of available documents to create a background for more detailed study. Existing site, building, and utility plans, reports, and regulatory or accreditatory documents were identified and studied for pertinent information to be used as investigatory points of departure. This information was supplemented by field studies conducted to verify or elaborate on documented information.

The "Research" phase displayed in Figure 3 displays general categories of information gathered. A brief description of each category follows:

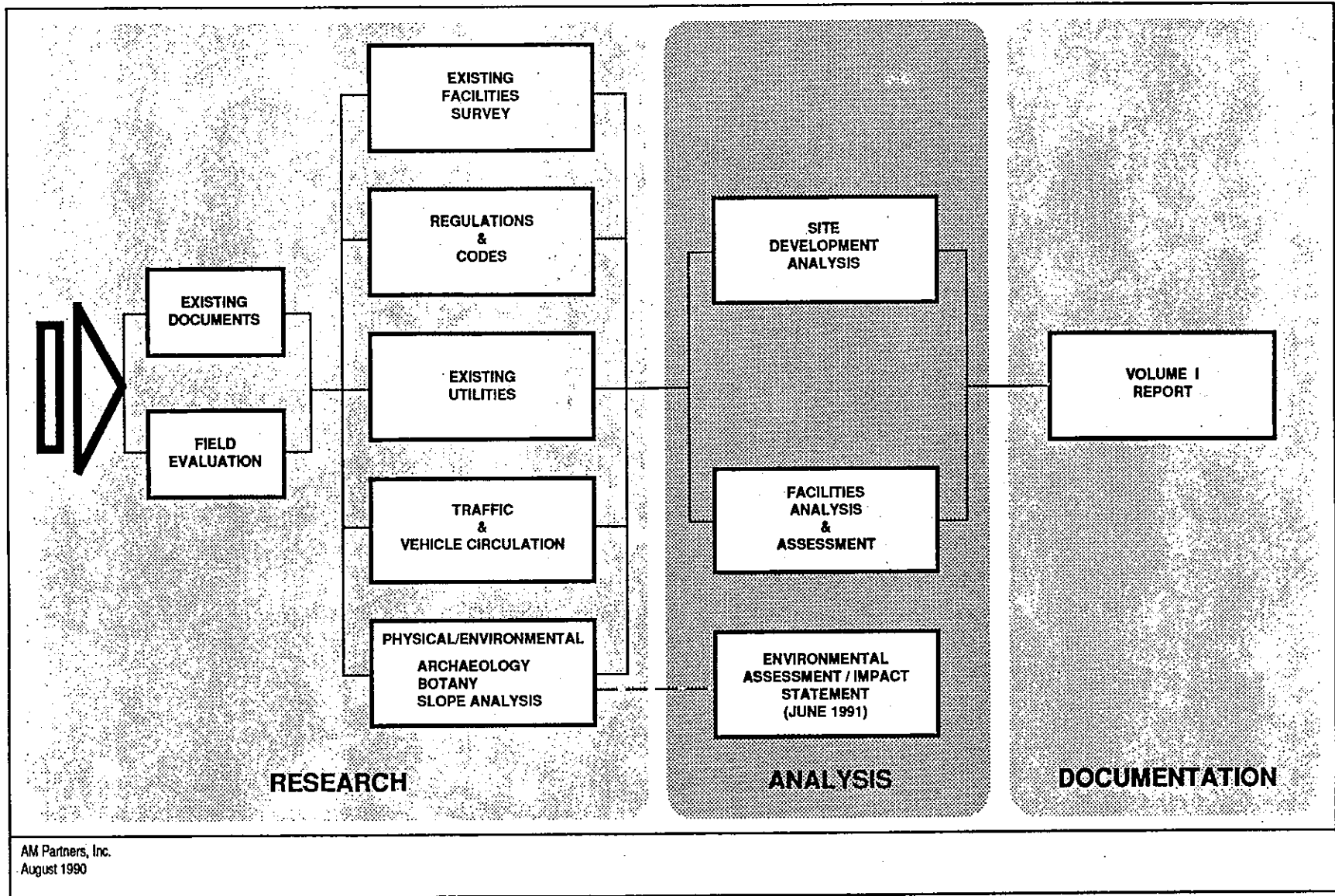


FIGURE 3: Investigative Research & Evaluation Process Diagram

### **Existing Facilities Survey**

Existing buildings and other facilities were visually inspected for general physical condition, structural soundness, and compliance with County, State, and Federal codes or standards.

### **Regulations & Codes**

Government land use regulations pertinent to the site were studied to determine statutory development potential. Applicable regulations included State Land Use District regulations, City and County Development Plan designations, and City and County Land Use Ordinance rules and development standards.

### **Existing Utilities**

System type and actual physical condition of on-site water supply, sewage, electrical, and mechanical systems were evaluated for their ability to meet current and future codes or utility demands at the Waimano Ridge.

### **Traffic & Circulation**

The condition of the on-site extension of Waimano Home Road was evaluated. The capabilities of on- and off-site road systems to meet projected usage demands were also evaluated.

### **Physical Environmental**

Specific physical site conditions were inventoried and evaluated for potential influences on facility placement or master plan organization. Factors studied included general soil types, site topography, historic/archaeological values, and on-site vegetation.

In addition to the preceding existing conditions, additional facilities planned for the ridge were studied for their potential influence on available master planning options. These facilities, which included the Department of Health Laboratory Facility, Pearl City Cultural Center, and the Pearl City Youth Association baseball fields, were incorporated into the

study as base data for master planning strategy development.

The "Analysis" phase focused evaluation of the foregoing factors on implications for site plan development and future usability of existing facilities. Site-related information was used to estimate the location, configuration, and size of "buildable" site areas. Building evaluations emphasized the estimated capability of a given structure to accommodate future usage requirements.

Findings of all investigations and site analyses were summarized and compiled during the "Documentation" phase into this report for subsequent master planning analysis and design. Information summaries were placed in the body of the report for easy access to categories of data, while more technical documentation was organized in the report appendix for more detailed study.

## **B. APPLICABLE GOVERNMENT LAND USE REGULATIONS**

As with all lands in Hawaii, the Waimano Ridge is subject to State and County land use regulations that prescribe the types of uses to which lands may be put and the relationship of buildings and other facilities to these lands. Three sets of customary regulations apply to the project site. They are:

- State Land Use Districts
- City and County of Honolulu Development Plans
- City and County of Honolulu Land Use Ordinance (Zoning regulations).

Figure 4: Public Land Use Districts, illustrates the various land uses or zoning districts designated for the site. Each district designation allows a given intensity and type of use. As the map shows, State and City and County Land use policies for the site roughly coincide. City and County regulations that permit some form of building generally correspond