

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.

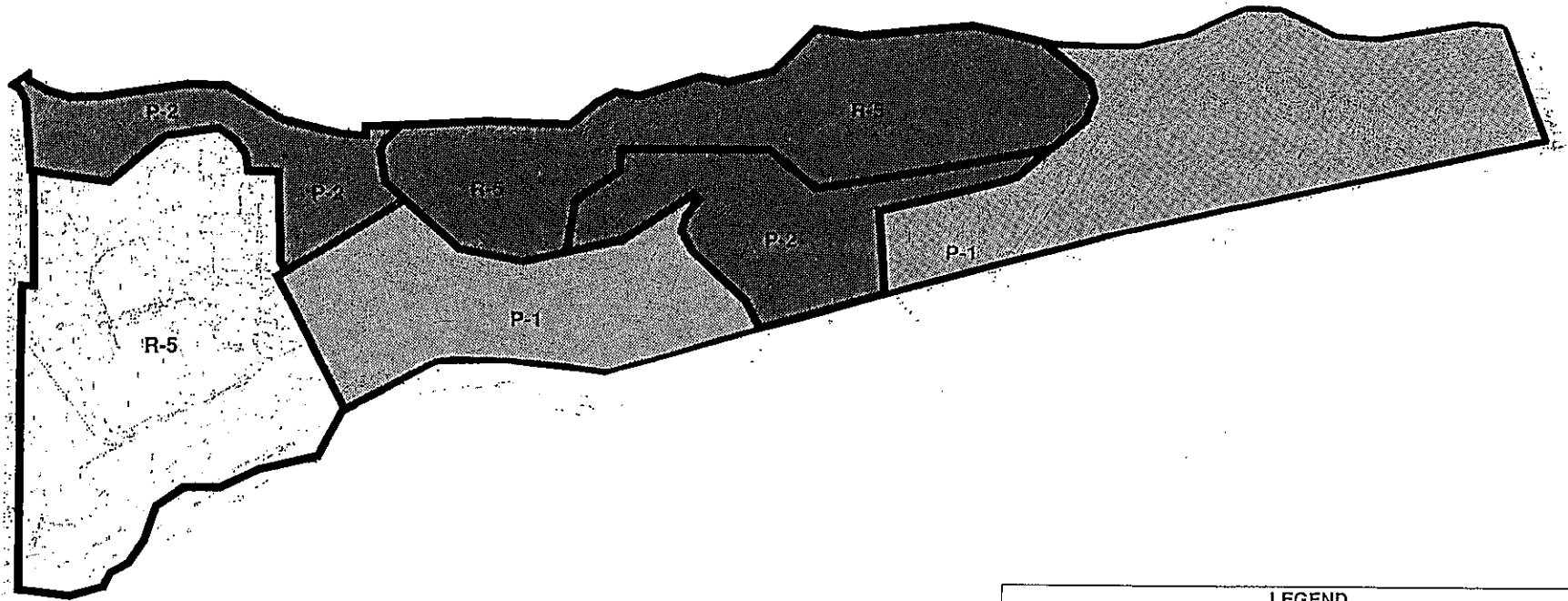
Findings of all investigations and site analyses were summarized and compiled during the "Documentation" phase into this report for subsequent master planning analysis and design. Information summaries were placed in the body of the report for easy access to categories of data, while more technical documentation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

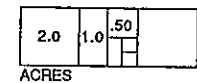


LEGEND					
STATE LAND USE AND CITY & COUNTY DEVELOPMENT PLAN (DP)			CITY & COUNTY ZONING DISTRICT		
TYPE	DESCRIPTION	ACREAGE	TYPE	DESCRIPTION	
	STATE URBAN & DP PUBLIC FACILITIES	132.0	A-1	APARTMENT	
			P-1	RESTRICTED - PRESERVATION	
	STATE CONSERVATION & DP PRESERVATION	102.0	P-2	GENERAL - PRESERVATION	
			R-5	RESIDENTIAL	

WAIMANO RIDGE MASTER PLAN

FIGURE 4: Public Land Use Districts

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July 1991

to the State Urban District. The City and County P-1 "Preservation" zone, which makes allowable usage subject to State Law, coincides with the State Conservation District. A description of the various districts and the policies they embody follows:

1. State Land Use Districts

The site lies at the northern edge of urbanization on the Waimano Ridge and encompasses portions of the steep, heavily vegetated slopes of Waimano and Waimalu Valleys. State Land Use Districting responds to these two conditions. The relatively "buildable" portion of the site and fringes of the "buildable areas" lie within the State Urban District, which permits urban forms of development, while areas characterized by steep slopes and heavy vegetation are in the State Conservation District, which does not. Permissible uses within each of these districts are as follows:

Urban District:

"Any and all uses permitted by the counties, either by ordinances or rules shall be allowed within this district, subject to any conditions imposed by the commission pursuant to section 205-4, HRS."

Conservation District:

"Uses of land within a conservation district shall be governed by the rules of the State Department of Land and Natural Resources, Title 13, Administrative Rules, and Chapter 183, HRS."

As Figure 4 shows, about 132 acres of the Waimano Ridge are in the Urban District. All current WTTC facilities are sited there. The site's Urban District lands are statutorily more readily developable than Conservation District Lands. Developing in the Conservation District category would involve processing time for a "Land Use Boundary Amendment" (to change Conservation Lands to a different district designation) or a "Conservation District Use Permit" (permission to build within the Conservation District).

2. City and County of Honolulu Development Plans

Development Plans set general County-level land use policies for Oahu. The development plan for each "Development Plan Area" consists of two maps, a "Land Use" map and a "Public Facilities" map. The Land Use map designates allowable types of land uses, such as "Public Facilities", "Apartment", etc. for specific areas of land. The Public Facilities map displays planned or programmed government facility improvements, such as "Public Building", "Park", "Road Widening" or utility lines.

Two categories of land use have been applied to the Waimano Ridge site. They are "Public Facilities" and "Preservation". "Public Facilities" includes government buildings for public purposes. "Preservation" is generally intended to preserve the natural or open space values of appropriate lands. Buildings are generally not encouraged in the latter category.

The "Public Facilities" designation for the Waimano Ridge generally corresponds to the State Urban District. Most of this area is occupied by WTTC buildings and other facilities. The "Preservation" designation generally corresponds to the State Conservation District.

3. City and County of Honolulu Land Use Ordinance

The Land Use Ordinance (LUO) prescribes specific land use policies and development standards for Oahu lands through the establishment of land use "zoning districts". In addition to determining the kind of structures that may be built and the kinds of uses that may take place on particular tracts of land, it also specifies minimum standards of development such as lot coverage, height, density, required parking, and distances of buildings from the edges of the property.

The Waimano Ridge falls into three land use zones: R-5 "Residential", P-2 "Preservation", and P-1 "Preservation". R-5 and P-2 correspond to State Urban District and Development Plan "Public Facilities"

designations. P-1 Preservation corresponds with the State Conservation District and the Development Plan "Preservation" designation. The first two categories will permit specific kinds of development. Any buildings in the P-1 Preservation District would be subject to applicable state laws. A general summary of principal zoning district requirements applicable to the site follows. More detailed LUO requirements can be found in Appendix G of this report.

The following descriptions are from applicable sections from the City & County of Honolulu LUO. The LUO should be consulted when actual planning and design proceed.

R-5 Residential:

The R-5 residential district is intended primarily for residential uses at densities of 3,750 - 5,000 square feet per residential unit. Site coverage is limited to 50% of the site and maximum height is generally set at 25 feet.

P-2 Preservation:

The P-2 preservation district is intended for the preservation of major open space and recreation lands, with provision for structures that would complement this intent. Where P-2 falls within the State Conservation District, State regulations govern usage. Where it falls into the urban district, LUO regulations are to be followed. Public uses and structures are allowed in this district. Minimum net site area per structure or complex is 5 acres. Building coverage is restricted to 5% of the site. Maximum building height is 25 feet.

4. Existing Land Uses

Figure 5 displays the Waimano Ridge site within the context of adjacent Pearl City land uses. Definitions of usages shown in the map legend are as follows:

• **Residential:**

Areas characterized primarily by single-family or multi-family homes.

- **Institutional:**

State or County buildings for government services or public usage, such as schools, fire and police stations, government offices; or health care facilities.

- **Recreational:**

Parks or recreation buildings for public use.

- **Urban Mixed Uses:**

Mixtures of usages around the Pearl City transportation corridor. Usage is predominantly a mixture of commercial and industrial establishments, with a limited amount of residential facilities.

The ridges above Pearl City are predominantly residential in character, consisting of single-family and townhouse neighborhoods served by public schools, parks, and community or recreation centers. With residential facilities for the live-in sector of clientele, the WTTC follows this pattern in part. The WTTC, as a health care and training facility, has a broader mission, however. As a public health care complex, it is functionally multifaceted. It provides a comprehensive set of services for a clientele group requiring the varying degrees of care. Its function is clearly community-related and, in combination with the adjacent Pearl City High School and Momilani Elementary School, it forms a cluster of public service uses at the top of Waimano Ridge. If future development of the project site continues this public service or community orientation, it may be appropriate for design of its facilities and grounds to assume a civic as well as a residential orientation. Landscaping and building design could begin to establish beneficial precedents for the character of urbanization in a ridgetop setting, and to relate this character harmoniously with the natural environment that surrounds it.

5. Summary

As a site for WTTC, Department of Health and appropriate community related uses, the Waimano Ridge can be seen as a harmonious northern exten-

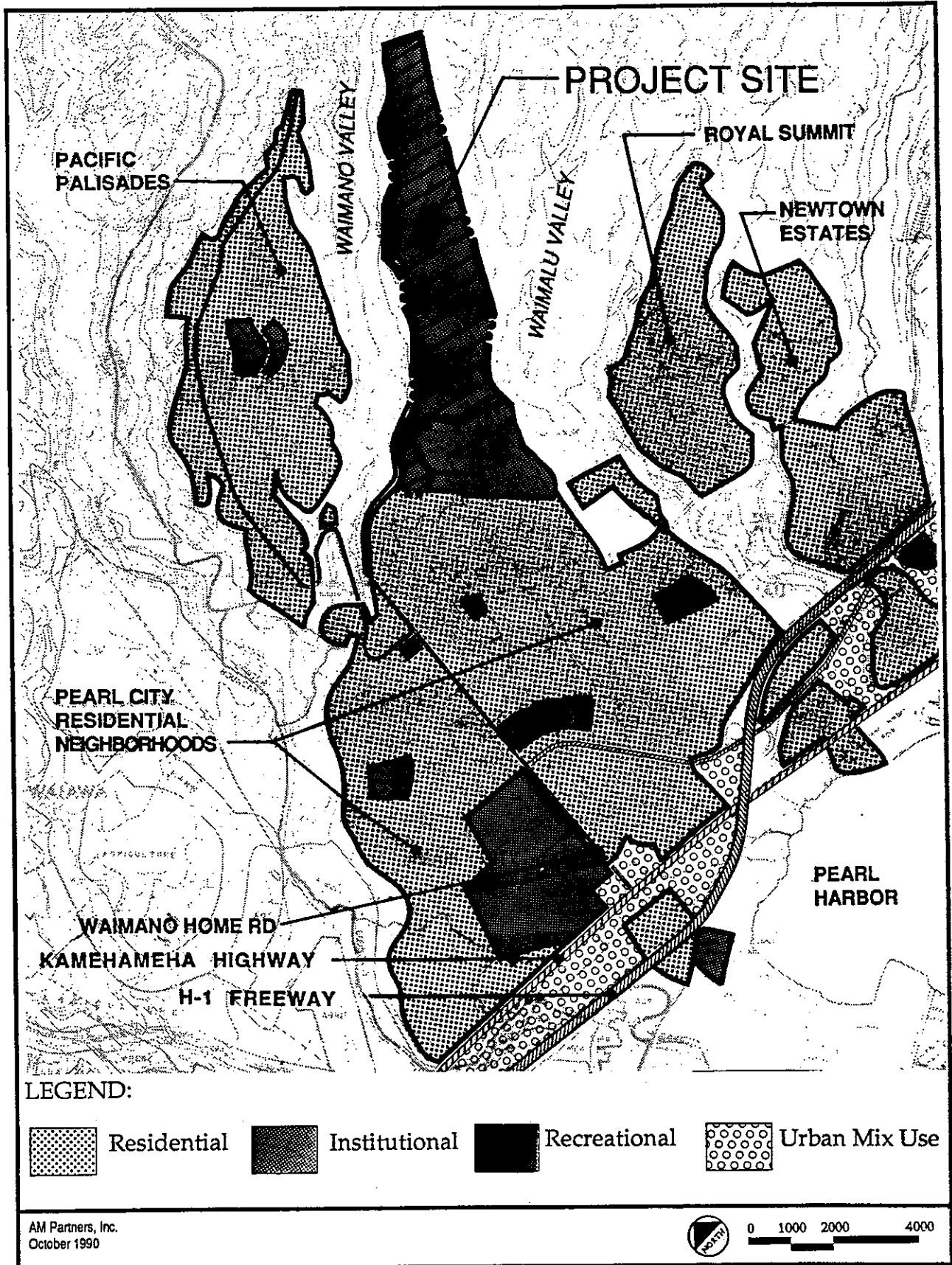


FIGURE 5: Existing Land Use Patterns

sion of the "institutional" public facility uses embodied by Pearl City High School and Momilani Elementary School.

State and County land use districts that permit construction of buildings and other facilities for these kinds of uses generally encompass 132 acres along the top of the Waimano Ridge. City and County Development Plan and Land Use Ordinance provisions ministerially permit construction of facilities for such uses under the category "Public Facilities".

This 132-acre area, then is statutorily the most accessible portion of the site for development of new buildings construction to meet WTTC and other community needs within the requirements set by applicable Land Use Ordinance development standards. Since no amendments to existing regulatory provisions would be needed, this portion of the site would provide the most expeditious avenue for facility development.

Development outside this area or at variance with City and County Land Use Ordinance development standard requirements could require one or more of the following applications:

- Conditional Use Permit (Land Use Ordinance)
- Zoning Code Variance (Land Use Ordinance)
- Development Plan Amendment (Development Plan)
- Conservation Use Permit (State Land Use Law)
- State Land Use District Boundary Amendment (State Land Use Law)

A detailed listing of applicable State and County building constraints are attached as Appendix G.

If facility development were to proceed at variance with currently existing land use regulations, a facility's development schedule would have to include time provisions for application for and processing of required amendments.

Variance with the City & County Development Plan would require an amendment subject to an annual review. Utilization of conservation lands would require special permits issued by the Board of Land and Natural Resources. Lastly, State Land Use District Boundary Amendments would require a petition to the State Land Use Commission.

C. EXISTING SITE CONDITIONS

1. Overview

The project site (TMK: 9-07-25:01) is a long, narrow tract of land stretching for approximately 242 acres along the Waimano Ridge, from its southern boundary with Pearl City High School to its northern extremity at about the 1600 foot elevation, where the topography narrows to the "knife-edge" configuration characteristic of most Hawaiian upper ridgelines. Waimano and Waimalu Valleys lie immediately northwest and southeast, forming the site's lateral boundaries.

A portion of the Waimano site consists of relatively flat ridgetop areas that, over the years, have provided building sites for the present WTTC buildings. The majority of its lands, however, are in open space. Most are undeveloped or comprise the sides of Waimano Ridge. Views of Pearl Harbor, Honolulu, Ewa, and Oahu's Central Plateau are often striking from Waimano Ridge vantage points, especially from the tops of slopes within the sites' central area and from the ridges' lateral edges overlooking the adjacent valleys. From these latter places in particular, views across to nearby ridges are characterized by a stunning sense of spaciousness. Figure 6: The Waimano Ridge Vicinity, displays the relationship of the site to principal neighboring areas and features. As can be readily seen, it is positioned immediately above the Pearl City residential neighborhoods and the major traffic arterials that connect Central Honolulu to the island's central and leeward areas. Primary roadways are the H-1 Freeway and