

"Waimano Training School and Hospital is an outdated health facility with buildings ranging in age from thirteen to fifty-four years old. Many of the plumbing fixtures are antiquated and needs to be replaced along with the piping. Firesprinkler lines also show signs of age.

The administration is very concerned about meeting code requirements for the health facility. This includes replacing the existing fixtures with those designed for the handicapped. In many cases, it may be necessary to rearrange the fixtures which is a very costly procedure. Other problems include the safe disposal of asbestos insulation on hot water piping and storage tanks and the lack of ventilation. In all buildings which patients frequent, the administration requests the installation of temperature regulators." As with the preceding measures, this last request is a code requirement.

E. POTENTIAL SITE DEVELOPMENT SUITABILITY

Because of its accessible ridgetop location, open space qualities, view opportunities, and developed infrastructure systems, the Waimano Ridge, with further improvement, can be made suitable for WTTC, Department of Health, and appropriate community uses. As the previous narratives have indicated, while certain site factors may impose strongly formative influences on organization of the site for future uses, most existing site conditions will not offer serious constraints to development. Rather, comprehensive organization of the site and its constituent facilities can provide opportunities for improving the efficiency of facility relationships and on-site utility networks.

Of the physical and regulatory conditions examined, three factors appear to be the most directly

influential on future master planning efforts and expeditious facility development. These are: 1) Topography, 2) Government Land Use Regulations and 3) Archaeological Values. Principal influences or concerns related these factors are as follows:

Topography:

Steeper slopes can often increase costs associated with site stabilization, building foundations, drainage control, and roadway access. To minimize site development costs, areas requiring the least topographic modification should be selected for facility development. In view of these considerations, the flattest portions of the Waimano Ridge would be the most topographically eligible building zones.

Government Land Use Regulations:

Securing exceptions to existing land use regulations can often lengthen a project's overall development schedule. Of the available modifications to existing regulations, changes to State Land Use boundaries or City and County Development Plan designations may require the longest processing times.

If expeditious facility development is adopted as a leading implementation priority, it may be important to consider directing master planned improvements to areas of the site where regulatory policies resemble or correspond with master plan intent.

Archaeological or Historic Values:

These values present minor or peripheral development concerns. No archaeological sites have been identified at the project site. A small cemetery adjacent to the existing water tanks at the top of the site and an old stone irrigation ditch at the Ewa edge of the ridge have been identified as historic sites meriting preservation. While neither item occupies a customarily "developable" area, the planning of future development on the ridge should be careful to minimize or avoid the locating of buildings, roadways, drainage, or water retention structures in ways that would disrupt the integrity of the irrigation ditch.

In assessing the Waimano Ridge's potential for redevelopment, it is useful to evaluate the factors described above. At its location at the Ewa edge of the ridge, it is not likely that development patterns and the historic irrigation ditch would conflict. Government regulations and topographic characteristics, however, describe a variety of different on-site policy and physical conditions which merit evaluation.

Figure 10: Building Constraint Analysis, illustrates a simultaneous display or "overlying" of regulations and topography, the two principal limitations to development. The map categorizes the site into four areas, labeled "A" through "D." Zones A through C indicates increasingly steeper slopes within the State Urban District and Zone D indicates the State Conservation District, no matter how level or steep the land may be. "A" indicates areas of least probable constraint for construction, or the area of highest "Construction Suitability". "D" indicates areas of severest probable constraint, or lowest "Construction Suitability."

As can be seen, the most readily developable area of the site consists of 77 acres of reasonably level to moderately sloped land along the ridgetop. This zone currently contains existing WTTC facilities and infrastructure systems that were probably located in response to the site's physical suitability. Since this area is already partially occupied by existing facilities, development of future WTTC and community-related facilities may have to consider existing facility relocation, possible demolition costs, or existing facility re-use where appropriate.

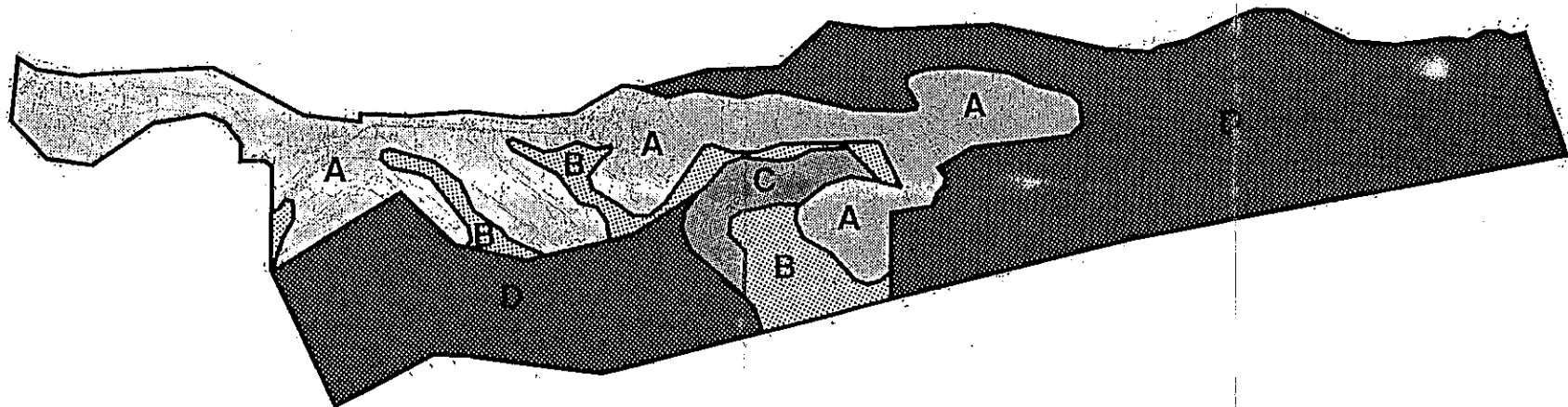
During the study of potential development suitability, a closer inspection of site contours revealed 3 large, relatively level areas. They are:

Site 1: The area immediately north of the Hale Complex at the southern end of the site,

Site 2: The area running roughly East-West at the middle of the zone designated "A", and

Site 3: The area around Hale Ola at the north end of the "A" zone.

All three of these areas merit closer inspection as possible construction sites during the master planning process which follows this study.



LEGEND					
CATEGORY	DESCRIPTION	ACREAGE	CATEGORY	DESCRIPTION	ACREAGE
A MINIMAL CONSTRAINT	STATE LAND USE: URBAN ZONING: R-5 OR P-2 SLOPE: 0% - 15%	77.0	C SEVERE CONSTRAINT	STATE LAND USE: URBAN ZONING: R-5 OR P-2 SLOPE: 30% - 40%	20.0
B MODERATE CONSTRAINT	STATE LAND USE: URBAN ZONING: R-5 OR P-2 SLOPE: 15% - 30%	17.5	D PROHIBITIVE	STATE LAND USE: URBAN ZONING: R-5 OR P-2 SLOPE: 40% +	127.5



WAIMANO RIDGE MASTER PLAN

FIGURE 10: Building Constraint Analysis