

**APPENDIX B:**  
**Botanical**  
**Reconnaissance**

## INTRODUCTION

A master plan for the development of the Waimano Training School and Hospital (WTSH) site to accommodate the Developmental Disabilities Division program is proposed. The demolition or renovation of existing buildings and/or construction of new buildings will be required. The WTSH site consists of 242 acres, of which roughly 110 acres are suitable for development; almost all of the ±110 acres already support landscaped areas and buildings. About 20 acres, now largely overgrown by guava scrub, are to be used for the State's Department of Health (DOH) Laboratory Facility site and are excluded from this study. The remainder of the 246 acres consists of steep slopes and gulches. No development is planned for these areas.

A field reconnaissance to assess the botanical resources found on the ±110-acre WTSH site was made on 24 July 1990. The primary objectives of the survey were to 1) provide a general description of the vegetation and 2) search for threatened and endangered plant species protected by Federal and State laws. In addition, the occurrence of any Exceptional Trees on the site was also checked. The scientific names used in the report are in accordance with Wagner *et al.* (1990) or, for the ornamental species, with St. John (1973).

## DESCRIPTION OF THE VEGETATION

The project site is located on the relatively level "plateau" portion of Waimano Ridge; elevation ranges from about 450 feet by the administration building to about 800 feet at the upper end of the property near the HECO powerline easement.

Landscape plantings include a variety of fruit trees such as mango (Mangifera indica), coconut (Cocos nucifera), star fruit (Averrhoa carambola), lychee (Litchi chinensis), avocado (Persea americana), and mountain apple (Syzygium malaccense). A number of different banyan species (Ficus spp.) are found throughout the grounds, especially on the upper half of the property. Many are fine, large, old speci-

mens. Other tree species found in the grounds include monkeypod (Samanea saman), Plumeria hybrids, Java plum (Syzygium cumini), royal palm (Roystonea elata), Norfolk Island pine (Araucaria heterophylla), jacaranda (Jacaranda mimosifolia), and various shower tree hybrids (Cassia spp). A small orchard of mixed fruit trees is also found on the site; plantings include star fruit, mountain apple, papaya (Carica papaya), calabash tree (Crescentia cujete), and jabon or pummelo (Citrus grandis).

Shrubs commonly used as foundation plantings or along roadsides and driveways include croton (Codiaeum variegatum), Hibiscus hybrids, various gingers (Hedychium spp., Alpinia spp.) ti (Cordyline fruticosa), and pua-kenikeneni (Fagraea berteriana).

The composition of the lawn species changes with increasing elevation and rainfall. On the drier, lower end of the site, typical lawn grasses are Bermuda grass or manienie (Cynodon dactylon) and swollen finger grass (Chloris barbata). Areas with heavy pedestrian traffic support West Indian dropseed grass (Sporobolus indicus). On the wetter, upper elevation portions of the site, common lawn grasses are a mixture of Hilo grass or mau'i-Hilo (Paspalum conjugatum), carpetgrass (Axonopus fissifolius), yellow foxtail (Setaria gracilis), Dallis grass (Paspalum dilatatum), and fimbriate paspalum (Paspalum fimbriatum). Spanish clover (Desmodium incanum) is also common in these wetter areas.

On the steep slopes that mark the perimeter of the buildable areas, the vegetation consists of scattered stands of Eucalyptus and ironwood (Casuarina equisetifolia) trees in a matrix of Christmas berry (Schinus terebinthifolius) and guava (Psidium guajava) scrub.

## References

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