



# University of Hawaii at Manoa

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December 5, 1985

RG:0063

Mr. Donald A. Clegg  
Department of General Planning  
City and County of Honolulu  
650 South King Street  
Honolulu, Hawaii 96813

Dear Mr. Clegg:

General Plan Amendment  
Hawaii Kai Secondary Resort  
East Honolulu, Oahu

We have reviewed the report summarizing the proposed general plan amendment, which if effected would designate Hawaii Kai as a secondary resort area.

Our review was prepared with the assistance of Peter Flaschbart and Luciano Minerbi, Urban and Regional Planning; Hans-Jurgen Krock, Look Laboratory; Matthew Spriggs, Anthropology; Chuck Y. Gee, Travel Industry Management; Ruth Gay, Botany; and Martha Diaz, Environmental Center.

The specific general plan issue is whether the proposed designation of Hawaii Kai as a secondary resort area will contribute to the general welfare and prosperity of Oahu. The primary concerns are traffic, water availability, infrastructure needs, tsunami hazard, open space/aesthetics, archaeology and botany. The secondary impacts which may result from the proposed project include: the cumulative economic and social impacts that will be experienced with the proposed multiple developments in the Ewa and Leeward districts as well as the Kuilima Resort expansion. Impacts to existing beach and recreational facilities such as Hanauma Bay are also of concern.

## General concerns

The project as proposed will require a General Plan review and amendment by the Department of General Planning, a U.S. Army Corps of Engineers Permit (Section 404), and a Shoreline Management Area (SMA) permit, pending review and approval by Department of Planning and Economic Development (DPED) for its consistency with Hawaii's Coastal Zone Management (CZM) program. We are concerned that the proposed uses may not adequately conform to the CZM goals and objectives, nor the Hawaii State Plan. Prior to a decision on this amendment, an environmental assessment should more fully address public access, impacts on this coastal ecosystem and the commitment of non-renewable resources, which would otherwise be available for such public uses as: open space, scenic vistas, recreation, scientific and cultural interpretive purposes.

### Infrastructure

Water: Pages 7-8 of the report indicate, "all infrastructure development, including water, reservoirs, pumps and transmission lines, sewage treatment systems, drainage, and transportation systems have been designed, and to a certain extent already implemented to accomodate the proposed development." We question the accuracy of this statement. There are no potable water sources in the Hawaii Kai area. Currently, 8,000+ residents receive potable water from the Board of Water Supply's Honolulu or Windward sources. Honolulu has been designated as a ground water control area because water usage from this source is rapidly approaching the sustainable yield of the aquifer. Based on current water shortages experienced island wide, the availability of yet more water for Hawaii Kai seems questionable.

Sewage treatment plant: It is our understanding that the proposed project will require an extension of the sewage outfall pipe at Sandy Beach otherwise the increased volumes of sewage discharge may significantly impact the beach water quality. Under present discharge volumes this problem is now usually avoided due to the strong currents which help to dilute and disperse wastes. The need for expansion of the existing sewage treatment plant and/or modification to the discharge outfall should be addressed prior to the decision to amend the General Plan.

Given a project of this magnitude -- a more extensive discussion of the increased demands on the capacity of existing facilities, amounts of wastes and water uses generated by tourism should be provided.

### Sediment and erosion

This development poses significant alteration to the Queen's Beach coastal area. The Hawaii Kai area is dry. Soils easily erode. Special care in grading and scheduling of land clearing operations will be required to avoid major sediment impacts to the nearshore reef area. The shallow reef shelf may not experience sufficient wave action to remove sediments deposited during construction activities. Concerns regarding proper "on-site" construction practices to mitigate increased rates of erosion should be implemented into the development plan to ensure minimal soil disturbance and impacts to the coastal waters.

### Traffic problems

Pages 7 and 8 of the proposal state that the necessary infrastructure development including transportation systems has been implemented to a certain degree. However, the traffic management study, by Wilbur Smith and Associates for Kaiser Development Company states that increases in travel are anticipated from:

- 1) additional residential and commercial development within Hawaii Kai,
- 2) other development identified in the east Honolulu area, and
- 3) increased tourist/recreational travel along Kalaniana'ole Highway.

The study recommends implementation of transportation programs which would accommodate the increased travel needs, as identified for the Kalanianaʻole highway corridor. Given the existing and predicted traffic conditions that would result from the proposed development, a number of secondary impacts can be anticipated. Presently, Kalanianaʻole Highway has a maximum one way volume of 3,620 vehicles at peak hour which is far in excess of its capacity of 2,650 vehicles. Its volume-to-capacity ratio of 1.36 is the highest of any major arterial serving Honolulu's primary urban center, according to a report by Honolulu's Department of General Planning entitled, "Preliminary Report on Standards and Controls Related to Conditions Along Major Highways," July 1982, p. 10. We recommend that prior to the decision to amend the general plan, measures should be implemented so as to adequately address increased traffic congestion.

#### Tsunami hazard

Treatment of tsunami-hazard must take into account two means for hazard management measures:

- 1) Compliance with standards established by the National Flood Insurance Program, based on the estimated run-up height and horizontal extent of inundation of the 100-year tsunami, including the required elevation of the lowest habitable floor level of any structure.
- 2) Provision of adequate means for evacuation from the Civil Defense tsunami evacuation area (much larger than 100-year tsunami area), using either horizontal evacuation (out of area) or vertical evacuation (to safe upper floors of structures in the area).

#### Travel Industry

The extensive comments provided by the school of Travel Industry Management are included in full (see attached comments).

#### Archaeology

According to "Sites of Oahu," (Sterling and Summers, 1978) the Hawaii Kai area has great historical significance. Our reviewers have commented on the possible archaeological significance of the Queen's Beach area. Has an archaeological survey been conducted? If so, what plans are there for mitigation of possible effects on archaeological sites? We suggest that coordination with the office of historic preservation take place so as to address potential archaeological impacts prior to development.

#### Botany

Predominantly native plant communities, a phenomenon rarely encountered on Oahu are found along the flat, sandy strand habitat at Queen's Beach. Within these plant communities are living colonies of native plants, some of which also are rare on Oahu. These communities are dominated by Ilima or beach naupaka, and support many botanically and culturally interesting native Hawaiian strand plants such as: the hinahina, nehe, paohiika and Hawaiian cotton (mao), and beach 'akoko. In planning for this development, there is a significant need for preservation of native plant populations and communities, and protection from off-road vehicles. Without specific planning and management the native Hawaiian ecosystems at Queen's Beach will not survive.

Aesthetics/ Open space/ Scenic resources

The Queen's Beach area is considered a valuable scenic and aesthetic resource; as well as providing a buffer between the primary urban center and the relatively rural windward cities of Waimanalo, Enchanted Lake and Kailua. The major attributes create a unique setting as well as offering important interpretive education, scientific and research potential.

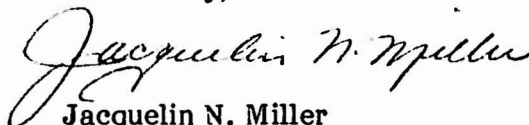
The shoreline portion of the proposed project area is within the established shoreline management area SMA boundary. It is our understanding that the entire portion makai of Kalaniana'ole Highway is being considered for inclusion in the SMA (Queen's Beach Park Feasibility Study, Department of Parks and Recreation, City and County of Honolulu, December 1984), and is consistent with Hawaii Coastal Zone Management Program.

A major purpose of the Coastal Zone Management Act (Public Law 92-583, 1972) is the preservation of scenic and aesthetic resources. This objective is particularly important for the State of Hawaii, known world-wide for its natural scenic beauty and unique landscape (study by Luciano Minerbi, Pacific Urban Studies and Planning Program, University of Hawaii and the Department of Planning and Economic Development). As major resort developments encroach onto the remaining "quality" areas on the island, this diminishes those scenic/educational areas which could otherwise be preserved and utilized in the future.

Conclusion

The decision as to whether the proposed designation of Hawaii Kai as a secondary resort will contribute to the general welfare and prosperity of Oahu must be based on a fully comprehensive and objective evaluation of the cumulative social and environmental effects of such a designation. We urge that the issues identified by our reviewers be considered prior to decision making on this important land use change.

Yours truly,



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Acting Associate Director

cc: OEQC  
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Acting Director, Environmental Center  
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Office of the Dean

November 21, 1985

MEMO TO: Jacquelin Miller  
Environmental Center

FROM: Chuck Y. Gee, Dean *CY*

SUBJECT: Comments on General Plan Amendment Proposal Hawaii Kai Secondary Resort

The following represent a collection of viewpoints regarding the above subject from appropriate members of the Travel Industry Management faculty:

## Economic Impact Observations

There are three possible economic impacts of resort development in Hawaii Kai:

1. East Oahu, especially Hawaii Kai, would become a more prosperous and developed area, and experience the many well-documented effects of tourism development (such as increased employment). This growth, however, is likely to cause further development along the coastline. Depending on the quality of this development, the impact could be either positive or negative. The resort could have positive impacts on employment and income of Waimanalo residents, but it is unclear whether the labor supply to support the resort would be available in the Hawaii Kai - Waimanalo area. The existing pattern of employment is for most people to work outside of the area and commute downtown, etc. As in the case of other resort areas, employees may come from outside the vicinity especially since there are no medium or low priced housing units in Hawaii Kai. The lack of labor supply within Hawaii Kai may pose operational problems for the resort and draw needed workers in the area away from existing jobs such that existing businesses in Hawaii Kai may face a labor "shortage."

2. If visitor arrivals meet or exceed the expected growth, this development will ensure that these visitors could be accommodated on Oahu. It will, however, further intensify the State's dependency on the tourist industry. Moreover, in view of current changes in the visitor market such as the direct flights to the Neighbor Islands, the projections cited as supporting evidence have many weaknesses since the data have not captured these changes until 1984. Also, one should recognize that DPED projections are based upon how much growth is needed to meet local employment needs over the future rather than upon market conditions which are likely to prevail. With the introduction of B747-400 aircraft which can fly nonstop for 6,000-8,000 miles, the danger of Hawaii being overflowed is real.
3. The nature of the proposed resort is likely to give the guest a vacation experience rather like a neighbor island vacation experience, since it is distant from Waikiki. This may mean that Oahu's percentage of visitors (especially repeat visitors) could increase. However, the market segment which the resort is intended to attract may be difficult to materialize as in the case of high income FIT's which everyone wants. Many may be unwilling to pay the higher rates needed for the resort to be profitable as in the case of family, academic travelers, and "kamaaina" visitors. It is also unlikely that the business traveler would stay there at all.

#### Social Impact Observations

The proposal to include Hawaii Kai (Ikekai) as a designated resort site for secondary tourism development has positive and negative social consequences. Given projected increases in tourist arrivals to Hawaii, development of Ikekai resort would have positive economic effects which would also result in social benefits. However, these benefits are mitigated by other social and environmental concerns:

1. From a preservation standpoint, maintaining Queen's Beach as a park can be justified if the goal is to preserve the natural setting along that shore for future generations. Although the developer does have plans to develop a park and has to allow public access to the beach by law, invariably, conversion of public park to private development has led to restrictions in access and use of beaches by locals.
2. The project may contribute to overdevelopment because it would be reducing further the pool of natural attractions which brings tourists to Hawaii in the first place and is also the essence of local lifestyles.

#### Transportation Issues

The Ikekai development project poses transport issues which at best, challenges our traffic engineers and at worst, will overwhelm an already inadequate urban transportation system on Oahu. The project comes



against a background of some 2.5 million vehicle trips per day and 1.5 million person trips per day, reflecting little use of shared vehicles, and confusion over H-3 and the proposed rail rapid transit system. Furthermore, traffic is forecasted to rise 25 percent the next 15 years, given the current general plan. Given this context, the Ikekai project raises several traffic-related concerns:

1. The applicant professes concern for "lifestyles consideration" (p. 7), e.g., accesses to beaches and other shoreline areas. If the current highway system is not increased, the development will not improve access, but rather, due to increased traffic congestion, reduce access to East Honolulu recreation areas. If the system is to be expanded, some of these areas must be claimed for the road itself and related facilities, and may otherwise degrade the quality of the areas.
2. The applicant suggests that an advantage of making Hawaii Kai a resort destination is that "it would be within driving distance of Waikiki and downtown Honolulu" (p. 7). Implicitly, at least, mass transit systems cannot or will not serve East Honolulu better than at existing levels. Residents along this route also might be legitimately concerned about property values and safety, both pedestrian and automobile.
3. The varied nature of the resort, e.g., oceanographic research facility, ocean cultural theme park, and international conference center (p. 8), itself suggests problems. The traffic pattern, in terms of direction and time of travel, would be significantly different than the current commuter flow. This would seem to suggest that the current use of high occupancy vehicle (HOV) lanes and alternate direction traffic control (coning roadways) would necessarily be subject to change.
4. Employee traffic to and from the resort would run counter to existing traffic patterns. Again, our current system for coping with peak period automobile usage would have to be reevaluated in light of this change.
5. Developers should at least be cognizant of the proposed rail mass transit system. If the system is built and if the resort is developed, the planning for each must certainly include the other. In the long run, in which many members of state and local government foresee with certainty that Oahu must have some type of fixed rail system, the developer's claims will be most effectively achieved if the resort is served by transit rather than by reliance on the private automobile.

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