ADDENDUM

WAIEHU PLANNED DEVELOPMENT

Waiehu, Maui
WATANABE, INC & KAWASHIMA
Attorneys At Law
Hawaii Building
745 Fort Street, 5th Floor
Honolulu, Hawaii 96813
Telephone (808) 544-8300

TO:                DATE: August 8, 1991
Office of Environmental
Quality Control
Central Pacific Plaza, 4th Flr. RE: Waiehu Planned Development
220 S. King Street
Honolulu, Hawaii 96813

THE FOLLOWING:

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Revised Environmental Impact Statement Addendum</td>
</tr>
</tbody>
</table>

IS/ARE TRANSMITTED HEREWITH:

[ ] FOR YOUR INFORMATION [ ] PER OUR CONVERSATION
[ ] FOR YOUR SIGNATURE AND RETURN [ ] PER YOUR REQUEST
[ ] FOR YOUR SIGNATURE AND [ ] FOR YOUR FILES
FORWARDING AS NOTED BELOW [XX] FOR YOUR APPROVAL
[ ] FOR YOUR REVIEW AND COMMENT [ ] SEE "REMARKS" BELOW

REMARKS: Returning the above to your office. Thank you.

By

BENJAMIN A. KUDO
Enclosed is a traffic study prepared as an addendum to the Waiehu Planned Development E.I.S., which was previously submitted to the OEQC for acceptance. The study addresses in detail the concerns expressed by certain E.I.S. reviewers, primarily with regard to the project's impact on existing traffic levels at peak hours.

The information contained in the report reflects actual and projected traffic impacts superseding Section 4 Anticipated Environmental Impacts and Mitigative Measures to Minimize Adverse Impacts, II. Primary Impacts, C. Infrastructure, 12. Access and Traffic, paragraphs 2 and 3.

In summary, the study concludes that traffic volumes along Kahekili Highways and Waiehu Beach Road will increase, although not in excess of respective roadway capacities. Levels of service will remain for the most part unchanged except for brief periods of lowered levels of service experienced by relatively few motorists.

Mitigative measures as recommended within the report should be complied with and incorporated in the final design plans.

Another traffic concern expressed is the relationship of the proposed project roads to the existing roads from adjacent subdivisions. No connections are proposed due to the desire of the adjacent residents to not have direct access to the project. In addition, the State Department of Transportation, Highway Division, has since reviewed the plans and concur that connection of the internal roadways to existing roads are not necessary. Also, in certain conditions, the existing topography...
prevents making a connection to existing roads. Although no
direct connection is planned at this time to Kuhio Place
(Piihana Road Extension), a connection can be made at some
future time when it is mutually desired by residents of the
project and adjacent residents.

We hope the additional information contained herein and in the
traffic study fulfills your requirements for acceptance of the
Waiehu Planned E.I.S.

Please do not hesitate to contact me if you have any questions
or need further clarification.

Thank you.

Sincerely,

WOOLSEY, MIYABARA & ASSOCIATES, INC.

Michael T. Miyabara, ASLA

MTM/sm

Encl.
TRAFFIC IMPACT STUDY
WAIEHU PLANNED DEVELOPMENT
WAIEHU, HAWAII

PREPARED FOR:
WOOSLEY, MIYABARA & ASSOCIATES, INC.

JUNE 1984

SUBMITTED BY:
PARSONS BRINCKERHOFF
QUADE & DOUGLAS, INC.
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WAIEHU PLANNED DEVELOPMENT
TRAFFIC IMPACT STUDY

INTRODUCTION

The Hawaii Housing Authority has proposed to develop approximately 133.5 acres in Waiehu, Maui for low to moderate income and gap group housing needs. The proposed development includes 680 detached single-family dwelling units, 60 attached, one-story elderly dwelling units and 60 rental apartments in one- and two-story buildings.

This study will report on the potential traffic impacts of the proposed project. This report includes a description of the existing traffic conditions, future traffic conditions without and with the proposed project and any mitigative measures, if necessary. Existing traffic peaks occur in the morning or AM (7:00 - 8:00 a.m.) and afternoon or PM (3:45 - 4:45 p.m.); the project's peak hours for traffic generation are assumed to coincide with these periods.

EXISTING CONDITION

The project site is vacant and overgrown with kiawe and koa haele trees. The land is presently used for pasture. There is no existing public access to the project site. A location map is shown in Figure 1.

Roadway System

The project site is bordered by two rural, two-lane highways, Kahekili Highway and Waiehu Beach Road. Kahekili Highway originates at its intersection with Market Street, Mokuau Road and
Piiliana Road in Wailuku. Waiehu Beach Road begins at its intersection with Lower Main Street and Kahului Beach Road near the Wailuku Industrial Park. Both of these highways extend in a general northerly direction and meet in a T-intersection in Waiehu, about two miles north of Wailuku. Kahekili Highway continues northward into Waihee, where the highway narrows and becomes generally unimproved.

**Traffic Conditions**

The description of existing traffic conditions is based on field observations and traffic counts taken in mid-May 1984. The field data was used to supplement and update the counts taken by the State Highways Division in 1979 and 1981. This study assumed five percent of the traffic is trucks.

Kahekili Highway carries two-way volumes of 170 vehicles per hour in the AM peak hour and 220 vehicles per hour in the PM peak hour. Analysis using Highway Capacity Manual procedures showed that Kahekili Highway operates at highway service level C during both peak hours. Levels of service are defined in the appendix.

Waiehu Beach Road handles two-way volumes of 430 and 460 vehicles per hour during the AM and PM peak hours, respectively. Waiehu Beach Road operates at highway level D during both peak hours. Highway service levels A and B are not obtainable on either Kahekili Highway or Waiehu Beach Road due to the highway geometrics and physical condition of these highways. The existing traffic volumes are shown in Figure 2.
KAHEKILI HWY.

60 →

PROJECT SITE

A.M. PEAK HOUR

KAHEKILI HWY.

130 →

PROJECT SITE

NOTE: Volumes have been rounded.

P.M. PEAK HOUR

EXISTING TRAFFIC VOLUMES

FIGURE 2
FUTURE TRAFFIC CONDITIONS WITHOUT PROJECT

The completion of existing or planned developments in the vicinity of the proposed project is expected to increase traffic volumes on Kahekili Highway and Waiehu Beach Road. The traffic generated by the proposed Piihana Project District (300 dwelling units), existing and proposed Waiehu Heights Subdivision (total 398 dwelling units), and the Hawaiian Home Lands' Paukukalo project (total 184 units) is assumed to have generation rates similar to the proposed project and similar travel characteristics to the existing traffic. Future traffic volumes, shown in Figure 3, assume completion of these projects and are used to assess future conditions without the proposed project.

Traffic volumes would increase, but the service levels on Kahekili Highway would remain at level C during both peak hours. Levels of service on Waiehu Beach Road would remain at level D during the AM peak hour, but drops to level E during the PM peak hour. This reduction in service level represents a reduction in speed and passing opportunities. Traffic would still be able to flow, since volumes are under capacity.

TRIP GENERATION

The traffic impact of the proposed project is quantified in trip generation which estimates the number of vehicles added to the roadway system by the proposed project. Points of origin and destinations are determined in trip distribution and travel routes are designated in traffic assignment.
MEMORANDUM

TO: Letitia N. Uyehara, Director
    Office of Environmental Quality Control

FROM: Russell Fukumoto
      Acting Executive Director

SUBJECT: Waiehu Planned Development
         Addendum to Environmental Impact Statement

Transmitted herewith please find one (1) original and 25 copies
of the Traffic Impact Study with all comments and required
responses to be incorporated as an addendum to the subject
Environmental Impact Statement (EIS).

Should you have any questions, please contact Kathy Whang Inouye,
Assistant Project Coordinator, at 848-3252 immediately.

Your cooperation in expediting approval of this EIS would be
greatly appreciated.

[Signature]

RUSSELL N. FUKUMOTO
Acting Executive Director

Attachments
KAHEKILI HWY.

80 →

PROJECT SITE

A.M. PEAK HOUR

KAHEKILI HWY.

210 →

PROJECT SITE

NOTE: Volumes have been rounded.

P.M. PEAK HOUR

FUTURE TRAFFIC VOLUMES (WITHOUT PROJECT)

FIGURE 3
Trip Generation Rates

Rates compiled by the Institute of Transportation Engineers were used in this study. Table 1 shows the trip generation rates used for various types of dwelling units.

Table 1

TRIP GENERATION RATES

<table>
<thead>
<tr>
<th></th>
<th>AM</th>
<th></th>
<th>PM</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enter</td>
<td>Exit</td>
<td>Enter</td>
<td>Exit</td>
</tr>
<tr>
<td>Single-Family Dwelling Unit</td>
<td>0.3</td>
<td>0.6</td>
<td>0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Apartment (Low-Rise)</td>
<td>0.1</td>
<td>0.4</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Elderly</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Internal trips, or trips between homes within the project site account for a small percentage of the total trips. Internal trips were subtracted from the total number of trips and the resulting net trips were assigned onto the roadway system. The total and net trip generation is shown in Table 2.

Table 2

TOTAL AND NET TRIP GENERATION

<table>
<thead>
<tr>
<th></th>
<th>Total Trip Generation</th>
<th>Net Trip Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak Hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter</td>
<td>222</td>
<td>212</td>
</tr>
<tr>
<td>Exit</td>
<td>444</td>
<td>434</td>
</tr>
<tr>
<td>PM Peak Hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enter</td>
<td>512</td>
<td>500</td>
</tr>
<tr>
<td>Exit</td>
<td>296</td>
<td>284</td>
</tr>
</tbody>
</table>

-7-
Trip Distribution

Origins and destinations of the generated trips are determined in trip distribution. The trip distribution indicators for this study are estimated future employment and population distributions on the island of Maui. A small amount of traffic would travel northward to Waihee; however, most of the traffic would travel southwest to Wailuku/Lahaina or southeast to Lower Wailuku/Kahului/East Maui. The indicators and trip distribution factors are shown in Table 3.

Table 3

TRIP DISTRIBUTION

<table>
<thead>
<tr>
<th>Indicators</th>
<th>North</th>
<th>Southwest</th>
<th>Southeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>7%</td>
<td>37%</td>
<td>56%</td>
</tr>
<tr>
<td>Employment</td>
<td>0%</td>
<td>42%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Trip Distribution Factors

AM Peak Hour

<table>
<thead>
<tr>
<th></th>
<th>Enter</th>
<th>Exit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.07</td>
<td>0.37</td>
<td>0.56</td>
</tr>
<tr>
<td>PM Peak Hour</td>
<td>0.00</td>
<td>0.42</td>
<td>0.58</td>
</tr>
<tr>
<td>Enter</td>
<td>0.05</td>
<td>0.38</td>
<td>0.57</td>
</tr>
<tr>
<td>Exit</td>
<td>0.05</td>
<td>0.38</td>
<td>0.57</td>
</tr>
</tbody>
</table>
Traffic Assignment

The travel routes the generated traffic is expected to utilize are designated in traffic assignment. The proposed project has two access points, one on Kahekili Highway and the other on Waiehu Beach Road. In general, the access point selection would be dependent on the trip origin and/or destination. Trips to and from Lahaina and the Wailuku civic center would tend to use the Kahekili Highway access, while trips to and from Lower Wailuku, Kahului and East Maui would most likely use the Waiehu Beach Road access. Trips towards Waihee could utilize either access with the majority using the Waiehu Beach Road access. A small amount of traffic headed towards Lower Wailuku, Kahului or East Maui may elect to by-pass the Waiehu Beach Road access to use the Kahekili Highway access because of their close proximity to the Kahekili Highway access. Figure 4 shows the project traffic assignment; Figure 5 shows the future traffic volumes with the project traffic.

PROJECT TRAFFIC IMPACTS

The proposed project is expected to increase traffic volumes on Kahekili Highway and Waiehu Beach Road. Kahekili Highway levels of service would remain at level C during the AM peak hour and drop to level D in the PM peak hour. Waiehu Beach Road would experience highway level of service E during the AM and PM peak hours; however, capacity would not be reached. The lowered highway levels of service represent a reduction in operating speed and opportunity to pass. Traffic would still flow since volumes are below capacity. Levels of service and volume-to-capacity ratios are summarized in Table 4.
NOTE: Volumes have been rounded.

P.M. PEAK HOUR

PROJECT TRAFFIC ASSIGNMENT

FIGURE 4
KAHEKILI HWY.

PROJECT SITE

A.M. PEAK HOUR

NOTE: Volumes have been rounded.

P.M. PEAK HOUR

FUTURE TRAFFIC VOLUMES (WITH PROJECT)

FIGURE 5
### Table 4

**LEVELS OF SERVICE**

<table>
<thead>
<tr>
<th></th>
<th>Existing AM</th>
<th>Existing PM</th>
<th>Future W/out Project AM</th>
<th>Future W/out Project PM</th>
<th>Future With Project AM</th>
<th>Future With Project PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highway Levels of Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kahekili Highway</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Waiehu Beach Road</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>E</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td><strong>Volume-to-Capacity Ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kahekili Highway</td>
<td>0.12</td>
<td>0.15</td>
<td>0.18</td>
<td>0.24</td>
<td>0.34</td>
<td>0.43</td>
</tr>
<tr>
<td>Waiehu Beach Road</td>
<td>0.28</td>
<td>0.30</td>
<td>0.42</td>
<td>0.46</td>
<td>0.67</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Intersection Levels of Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kahekili Highway</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Access Road-Shared Lane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Access Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separate Right Lane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Separate Left Lane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Waiehu Beach Road</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Access Road-Shared Lane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Access Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separate Right Lane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>Separate Left Lane</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>D*</td>
<td>E*</td>
</tr>
</tbody>
</table>

*These levels are experienced by a very small number of vehicles.
Two new T-intersections would be created where the project access roads connect to Kahekili Highway and Waiehu Beach Road. The project access road approaches should be stop-controlled at both intersections. These intersections were analyzed by the Critical Movement Analysis procedures for unsignalized intersections.

Kahekili Highway traffic is expected to experience little or no delay at the new intersection. If the project access road approach has only one shared lane for left and right turns, this approach would operate at level C during both the AM and PM peak hours. If separate right and left turn lanes were provided at the project access road approach, the approach would continue to operate at level C during both peak hours.

Traffic on Waiehu Beach Road would also experience little or no delays at the new intersection with the project access road. The project access road approach is expected to operate at level C during both peak hours if only one lane for turns out of the project site is provided. However, if separate turn lanes are provided, then the PM peak hour right turn lane is expected to improve to service level A operating conditions. The AM peak hour right turn lane would remain at level C conditions. The separate left turn lane is expected to operate at service levels D and E during the AM and PM peak hours, respectively. Levels D and E are unacceptable for unsignalized intersections, however, less than one percent of the vehicles entering this intersection would be affected. Therefore, the lowered service
levels for the left turn lane are considered to be not significant. Also a separate left turn lane would serve to decrease delays for the large number of right turning vehicles, especially during the PM peak hour.

Although left turn traffic off the highways to the project access road will experience little or no delays, through traffic flow in the same direction could be interrupted. An analysis of turn and through volumes indicates that a storage lane of 150 feet should be provided for the left turn from Waiehu Beach Road into the project access road. Provision of the turn lane, while not necessary to increase capacity or to maintain good levels of service, would serve to reduce the potential impact of the new intersection on Waiehu Beach Road. The lower volumes do not warrant a left turn lane on Kahekili Highway.
CONCLUSIONS AND RECOMMENDATIONS

Traffic volumes on both Kahekili Highway and Waiehu Beach Road are expected to increase. Traffic increases due to other projects as well as the proposed 800-unit residential project were identified; roadway capacities would not be exceeded.

This study also analyzed the new intersections formed by the project access road with the two highways. Based on this analysis, the following are recommended:

- Traffic on the project's access road approaching each highway intersection shall be stopped. Stop signs and pavement markings (stop bar) shall be provided.
- The project's access road approach to these intersections should be striped for separate left and right turn lanes to minimize delays.
- A left turn storage lane should be provided on Waiehu Beach Road to minimize interruptions to northbound traffic flow.
REFERENCES

1. State of Hawaii, Department of Transportation, Highways Division, Planning Branch. Count Station 3, Main Street at Waiehu Beach Road and Kahului Beach Road, 1983. Count Station 3-E, Kahekili Highway at Waiehu Beach Road, 1979.


APPENDIX

Although the Highway Capacity Manual and the Critical Movement Analysis require different calculations in the determination of service levels, the service level definitions in both methods are similar. Six levels of service, labelled A through F, from the best to worst conditions are defined. Characteristics of each level of service for highways and unsignalized intersections are described below. Level of Service C is typically used for highway design and Level of Service D is considered adequate for urban arterials; corresponding Level of Service for rural highways are B and C.

Highways
Level of Service A: A free flow situation with low volumes and high speeds. There is a high level of maneuverability with speeds controlled by driver discretion, speed limits, and physical constraints.

Level of Service B: A condition of stable flow, drivers may experience a slight reduction in operating speeds, but still have a reasonable amount of maneuverability.

Level of Service C: Stable flow continues although drivers may start to feel restricted as speeds and maneuverability become controlled by higher volumes. A satisfactory speed is still obtainable in this service level.
Level of Service D: Changes in operating conditions approach unstable flow. Volume fluctuations and temporary restrictions reduce operating speeds and maneuverability. Low comfort and convenience can be tolerated for short durations.

Level of Service E: Volumes are near or at capacity of the highway. Operating speeds are less than 30 mph and momentary stoppages may occur in this unstable flow.

Level of Service F: Capacity of highway section exceeded; conditions deteriorate. Forced flow situation with low speeds and unpredictable volumes dropping below capacity. Downstream congestion may cause delays of varying duration. The possibility exists that both speed and volume may drop to zero.

**Unsignalized Intersections** (stop or yield control)

Level of Service A: Little or no delay
Level of Service B: Short traffic delays
Level of Service C: Average traffic delays
Level of Service D: Long traffic delays
Level of Service E: Very long traffic delays at extreme congestion-failure
Level of Service F: Intersection blocked by external causes.
July 30, 1984

Ms. Lettice N. Uyehara, Director
Office of Environmental Quality Control
550 Maile Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

We have reviewed the traffic study prepared as an addendum to the environmental impact statement for the Wailehu planned development.

The study recommends adding a stop sign and bar, providing for turning lanes at intersections providing exit for the project, and a left turn storage lane on Wailehu Beach Road to prevent blocking northbound traffic.

Apart from noting the soundness of these recommendations, we have no additional comments to offer.

Sincerely,

[Signature]

Chairperson

cc: Mr. Kenneth Harada
DSSM, MHR

cc: Mr. Kenneth Harada (DSSM)

DEVELOPMENT COPY
July 30, 1984

Ms. Letitia M. Uyehara, Director
Office of Environmental Quality Control
550 Haleakaula Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

Re: Wailehua Planned Development

We have no comments on the "Traffic Impact Study" for the subject project. Thank you for giving us the opportunity to review the report.

Sincerely,

William S. Hamana
Director

cc: Mr. Kenneth Harada
File # 5D 64-11

Enclosure

Copy to:
Mr. Kenneth Harada, Project Coordinator
Department of Social Services and Housing
Hawaii Housing Authority
P. O. Box 17907
Honolulu, Hawaii 96817

Office of Environmental Quality Control
July 26, 1984

Ms. Letitia N. Uyehara, Director
Office of Environmental Quality Control
250 Hahamolina Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

Subject: Waiehu Planned Development

We have reviewed the addendum to the Environmental Impact Statement (Traffic Impact Study) for the Waiehu Planned Development, and wish to inform you that we have no comments to offer.

Thank you for the opportunity to review the addendum to the EIS. Please contact Mr. Edwin Ohno of our Housing Division if you have any questions.

Very truly yours,

VINCE BAGOTTO, JR.
Director of Social Concerns

Ms. Letitia N. Uyehara, Director
Office of Environmental Quality Control
250 Hahamolina Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Letitia Uyehara:

The Fourteenth Coast Guard District has reviewed the Waiehu Planned Development (EIS), and has no objection or constructive comments to offer at the present time.

Sincerely,

TIMOTHY C. THOMAS
U.S. Coast Guard
Acting, District Planning Officer
By direction of Commander,
Fourteenth Coast Guard District

Copy: Mr. Kenneth Nakada, Dept. of Social Services and Housing
Ms. Letitia H. Uyehara, Director
Office of Environmental Quality Control
550 Kekaaowena Street, Room 301
 Honolulu, Hawaii 96813

Dear Ms. Uyehara:

SUBJECT: Traffic Impact Study, Waiehu Planned Development,
Waiehu, Maui, Hawaii, June 1984

We have reviewed the subject study and have no comment to offer. Thank you for the opportunity to comment. This material was reviewed by WAC personnel.

Sincerely,

Edwin T. Morishige
EIS Coordinator

cc: Kenneth Harada

---

Ms. Letitia H. Uyehara, Director
Office of Environmental Quality Control
550 Kekaaowena Street, Room 301
Honolulu, HI 96813

Dear Ms. Uyehara:

SUBJECT: Addendum to EIS Waiehu Planned Development

The Department of Education has no comment to offer at this time on the Traffic Impact Study Addendum for the subject EIS.

Thank you for the opportunity to review the Addendum.

Sincerely,

Francis N. Hatake
Acting Superintendent

cc: T. Honda
Maui District
K?n? Kenneth Harada, 898

---

DEVELOPMENT COPY
AN EQUAL OPPORTUNITY EMPLOYER
STATE OF HAWAII
Office of Environmental Quality Control
550 Kahanamoku Street, V = 301
Honolulu, Hawaii 96813

Attention: Ms. Letitia N. Ueyehara
Director

Subject: Addendum to EIS
Wailea Planned Development
Wailea, Maui, Hawaii

We are in receipt of your transmission dated July 23, 1984 regarding subject addendum.

We have no comments concerning the traffic impact study addendum and are returning the addendum for your use.

Donald Chai
Distribution Engineering Supervisor

Enc.

cst./Kenneth Harada (State OSH-390)

DEVELOPMENT COPY

DEPARTMENT OF THE ARMY
PACIFIC OCEAN DIVISION, CORPS OF ENGINEERS
FT. SHAPLE, HAWAII 96750-5460

August 10, 1984

Mr. Kenneth Harada
Department of Social Services
and Housing
Hawaii Housing Authority
P. O. Box 1790
Honolulu, Hawaii 96817

Dear Mr. Harada:

Thank you for the opportunity to review the addendum to the EIS for Wailea Planned Development. The project site is designated Zone C or area of minimal flooding as identified under the Flood Insurance Study for Maui County. The Federal Insurance Administration. Zone C areas are not considered regulatory flood plain areas under the requirements of the National Flood Insurance Program (see Enclosures 1-3).

Sincerely,

Jack Cheng
Chief, Engineering Division

Enclosures

Copy Pursued:

Ms. Letitia N. Ueyehara, Director
Office of Environmental Quality Control
550 Kahanamoku St., Rm. 201
Honolulu, Hawaii 96817
Ref. No. P-275

August 30, 1984

Mr. Letitia M. Uyehara
Director
Office of Environmental Quality Control
510 Halamanui Street, Room 301
Honolulu, Hawaii 96813

Dear Mr. Uyehara:

Subject: Addendum to the Waiehu Planned Development, EIS, Maui

We have reviewed the subject addendum and have no comments.

Very truly yours,

[Signature]

cc: Mr. Kenneth Harada, Project Coordinator
Hawaii Housing Authority

[Table]

DEVELOPMENT COPY
AUG 24 1984

Dear Ms. Uyehara:

Subject: Environmental Impact Statement for the Waihe'e Planned Development

We have reviewed the subject document and have no comments.

Very truly yours,

[Signature]

TEUNAI TONIARAG
Acting State Public Works Engineer

Ms. Letitia N. Uyehara
Director
Office of Environmental Quality Control
350 Kalakaua Avenue
Room 101
Honolulu, Hawaii 96813

To: Ms. Letitia N. Uyehara, Director
Office of Environmental Quality Control

Subject: Addendum to Environmental Impact Statement (EIS) for Waihe'e Planned Development

Hawaii Housing Authority

Towers: 3-3-01, 10 and 52 Waihe'e, Kailua

Acres: 133.5

The Department of Agriculture has reviewed the subject addendum and does not have any comments to offer.

Thank you for the opportunity to comment.

[Signature]

AUG 22, 1984

Chairman, Board of Agriculture

DEVELOPMENT COPY

"Support Hawaiian Agricultural Products"
POLICE DEPARTMENT
COUNTY OF MAUI
P.O. BOX 1529
WAILUKU, MAUI 96793
AREA CODE 961-4541

August 3, 1984

Miss Lolita M. Uehara, Director
Office of Environmental Quality Control
550 Ka'anapali Street, Room 301
Honolulu, Hawaii 96813

Dear Miss Uehara:

After review of the initial document and assessment of the findings, we submit the following concerns:

1. Although the studies of present and proposed traffic levels on both Kahului Highway and Vaiaku Beach Road indicate that traffic volume will not increase in excess of existing roadway capacity, traffic volume in areas of Kahului Beach Park and Maui Beach Road intersection is a concern. Although the area is not as far away from the project, they will be adversely affected by the increase in traffic generated by the proposed development.

2. The traffic flow of vehicles exiting onto Vaiaku Beach Road from the Vaiaku Industrial Area via the Street is marked exacerbated by the peak traffic hours.

It is recommended that these concerns be further monitored.

Sincerely yours,

Joseph Cravalho
Chief of Police

cc: Kenneth Harada, Project Coordinator
Department of Social Services & Housing
Hawaii Housing Authority

STATE OF HAWAII
DEPARTMENT OF SOCIAL SERVICES AND HOUSING
HAWAII HOUSING AUTHORITY
P.O. BOX 1529
WAILUKU, MAUI 96793

August 31, 1984

Mr. Joseph Cravalho
Chief of Police
Police Department
County of Maui
P.O. Box 1529
Wailuku, Maui, Hawaii 96793

Dear Mr. Cravalho:

SUBJECT: Vaiaku Planted Development
Environmental Impact Statement Addendum

Thank you for your continued interest in the project and your review of the Maui Planted Development Environmental Impact Statement (EIS) and Addendum. In response to your comments, we offer the following:

Comment:

"It is recommended, based on these concerns (increased traffic volumes at Kamehameha Avenue, Vaiaku Beach Road/Kahului Beach Park intersection, and the Street/Vaiaku Beach Road intersection) that the impact of development on these 'feeder' areas be further monitored."

Response:

Although the traffic study (addendum to the EIS) concerned itself primarily with the immediate impacts of the development on the existing roads, your concern that the increased traffic may adversely affect these secondary areas is a valid one. We also concur that as this and other developments occur, further monitoring of the changing conditions should continue.

Again, we appreciate your review of the documents. Your letter will be incorporated into the amended EIS and a copy will be sent to you.

Sincerely,

ORIGINAL SIGNED BY

KENNETH HARADA
Project Coordinator
August 22, 1984

Ms. Letitia T. Uyehara, Director
Office of Environmental Quality Control
550 Hailekawili Street, Room 201
Honolulu, Hawaii 96813

Dear Ms. Uyehara:

Addendum to the Environmental Impact Statement for the
Wailehu Planned Development
Wailehu, Maui, Hawaii

In response to your letter of July 23, 1984 regarding the addendum to the EIS for the Wailehu Planned Development on Maui, Hawaii, we have reviewed the addendum with the assistance of George Curtis, Joint Institute for Marlines and Atmospheric Research, and Jacqui Miller and Antonio De Oteyza, Environmental Center.

In general, the traffic study provided in the addendum adequately addresses the concerns and questions raised by OQBC and others with regard to potential traffic impacts and levels of service that can be expected should the proposed development take place. We do suggest, however, that consideration be given to installing signals at the cited intersections. A discussion of what traffic and safety criteria would warrant signals and the acceptable levels of service if the intersections were signaled should be included in the addendum.

We appreciate the opportunity to comment.

Yours truly,

[Signature]

Doak C. Cox
Director

Cc: George Curtis
    Kenneth Heardo
    Department of Social Services and Housing
    Jacqui Miller
    Antonio De Oteyza

DEVELOPMENT COPY

AN EQUAL OPPORTUNITY EMPLOYER
Other warrants which deal with pedestrian volumes, school crossings, progressive movement and street networks would not apply at the locations of concern. The accident experience warrant requires over a 12-month period and cannot be addressed for future conditions at this time.

If the intersections were signalized, levels of service would be "A," indicating little or no delay. However, interruption of traffic flow on the major roads (Kahului Highway and Waiehu Beach Road) would occur and may cause undesirable operating conditions. Based on the data available and the traffic projections made, signalization of either intersection is not warranted and is not recommended.

Again, we appreciate your review of the documents. Your letter will be incorporated into the amended Environmental Impact Statement and a copy will be sent to you.

Sincerely,

KENNETH HARADA
Project Coordinator

Ms. Letitia N. Oyehara, Director
Office of Environmental Quality Control
559 Mailewaii Street, Room 301
Honolulu, Hawaii 96813

Dear Ms. Oyehara:

Re: Waiehu Planned Development Addendum

We have reviewed the addendum and offer the following comment.

A connection should be provided to the adjacent Waiehu Heights Subdivision at Mauipu Drive and the connection to Analio Street can be deleted. This eliminates the argument of adverse topography.

The connection would provide alternate access and improve emergency access and circulation patterns for the affected area.

Very truly yours,

RALPH HAYASHI
Director of Public Works

CC: Mr. Kenneth Harada, Proj Coord

DEVELOPMENT COPY
August 31, 1984

Mr. Ralph Hayashi, Director
County of Maui
Department of Public Works
200 South High Street
Wailuku, Maui, Hawaii 96793

Dear Mr. Hayashi:

SUBJECT: Waiehu Planned Development
Environmental Impact Statement Addendum

Thank you for your review of the addendum to the Waiehu Planned Development Environmental Impact Statement. In response to your comments we offer the following:

Comment:

"A connection should be provided to the adjacent Waiehu Heights Subdivision at Wallupe Drive and the connection to Atalio Street can be deleted. This eliminates the argument of adverse topography.

The connection would provide alternate routes and improve emergency access and circulation patterns for the affected area."

Response:

We have considered the possibility of providing a connection to the adjacent subdivision; however, during the planning of the project, it was concluded that this option be discarded because of the following:

1. The project, as designed, already has two circulation routes available—Waiehu Beach Road and Kahului Highway—and that a third alternate route would not substantially improve overall circulation for the project.

2. Providing a connection to the existing subdivision meant a loss of potential residential lots which would decrease the number of available units and/or increase the cost of the project and ultimately unit prices. Since every effort was made to keep the cost of housing down, a connection was not proposed.

3. In addition, a connector road may also adversely affect the collective sense of community identity for its residents by a loss of physical integrity.

Again, we appreciate your continued interest in the project and look forward to future discussions with you and your staff as the project continues to move toward fruition.

Thank you.

Sincerely,

[Signature]

KENNETH HARADA
Project Coordinator