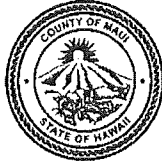


ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director



COUNTY OF MAUI

DEPARTMENT OF PLANNING

April 17, 2012

Mr. William Frampton, Olowalu Town, LLC
Ms. Heidi Bigelow, Olowalu Ekolu, LLC
2035 Main Street, Suite 1
Wailuku, Hawaii 96793

Dear Mr. Frampton and Ms. Bigelow:

SUBJECT: COMMENTS REGARDING THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS) FOR THE PROPOSED OLOWALU TOWN MASTER PLAN, OLOWALU, MAUI, HAWAII; TMK(S): (2) 4-8-003:084, 098-118, AND 124 (EAC 2012/0002)

The Department of Planning (Department) has the following comments in regards to your letter dated March 6, 2012 requesting comments on the Draft EIS.

The Department understands the proposed action includes the following:

- A State District Boundary Amendment (DBA) from Agriculture to Urban and Rural for approximately 460 acres; we note that the Environmental Impact Statement Preparation Notice (EISPN) proposed approximately 320 acres of land;
- The amendment would provide for the development of the Olowalu Town project on approximately 636 acres which is now proposed to be phased over a period of approximately ten (10) years; we note that the EISPN proposed a 30-year period; and
- The Olowalu Town project would include approximately 1,500 residential units, commercial and civic uses, parks and recreation sites, a cultural preserve, agricultural uses, a private domestic water system, a private wastewater system, and the relocation of Honoapi'ilani Highway.

Based on the foregoing, the Department provides the following comments on the Draft EIS:

1. If the Maui Island Plan is adopted prior to the submittal of the Final EIS, then include in the Final EIS an analysis of how the proposed project complies with the Maui Island Plan;
2. On pages 24, 160, 165, and 167 (and possibly other pages within the document) - It is stated that both the General Plan Advisory Committee (GPAC) and the Maui Planning Commission (Commission) recommended that the Master Plan be included in the Maui Island Plan's (MIP) growth boundaries. However, more complete information is warranted. Although the GPAC and Commission approved the inclusion of the Master Plan (as proposed) in a growth boundary, the Commission did not support any development makai of the existing Honoapi'ilani Highway.

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793

MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634

CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

Furthermore, whenever this information is mentioned in the Draft EIS, the fact that the Department did not support the inclusion of the Master Plan in a growth boundary should also be stated. We note that the Department's recommendation to Council to not include this Master Plan in a growth boundary is mentioned on page 176;

3. On page 23 - It is represented that the GPAC and Commission recommended inclusion in the MIP to "meet this estimated housing need". This is again not a completely accurate statement. The proposed directed growth areas proposed by the Department, without the inclusion of this project, meet 116 percent (4,024 units proposed, 3,456 needed) of the demand for the West Maui area. The inclusion of the Master Plan by both the GPAC and Commission would further exceed the projected housing demand. Please restate this information to reflect that the project will exceed the Department's estimated housing need and provide a rationale for exceeding the demand;
4. On page 27 - Please justify how this project, located four miles away from the edge of Lahaina, meets "Smart Location" for LEED Neighborhood Development standards. Specifically, "Smart Location" intent, "encourage(s) development within and near existing community and public transit infrastructure." Furthermore, requirements for all projects are to, "Either (a) locate the project on a site served by existing water and wastewater infrastructure or (b) locate the project within a legally adopted, publicly owned, planned water and wastewater service area, and provide new water and wastewater infrastructure for the project." The requirements further state that the project shall either be, "on an infill site", or "on site adjacent" (a site that is adjacent to previously developed lands);
5. Pages 33-38 - As stated by the Department in the EISPN comment letter dated August 6, 2010, obtain a Zoning and Flood Confirmation Form for all parcels within the entire Olowalu Town Master Plan project area. Please include a zoning map as an exhibit. Please also include in Table 5 the area for each Tax Map Key (TMK); the area that will need state land use reclassification within each TMK and what reclassification is needed (Urban or Rural);
6. On page 41 (and within other portions of the Draft EIS) - Olowalu is referred to as having been a "thriving plantation town" (e.g., "As recently as the 1930's, Olowalu was a thriving plantation town"). Throughout its history, Olowalu was a "camp" and at most a "village". Its plantation-era population was recorded as being "less than 500" persons. In 1899, on the eve of annexation, T.G. Thrum described the population at Olowalu in detail and noted that there were 167 persons residing there. They included 145 men, 22 women, and no children (Table of Sugar Plantation Laborers, October 31, 1899; Hawaiian Almanac and Annual, Thrum, 1899:176). In 1930, census-taker Kenichi Takayama recorded the population at Olowalu as being 447 persons. They consisted of 237 men, 79 women, and 131 children (Fifteenth Census of the United States, "Olowalu Village," Sheets 116-120A, April 1-11, 1930).

We have extensive information about West Maui's camps, villages, and towns, including Lahaina, Olowalu, Puukolii, and Ukumehame if you would like further clarification.

Given the available information, including census data, as well as Olowalu Company (OCO) and Pioneer Mill Company (PMCO) period documents, please change the references to the historical enclave of Olowalu from "Olowalu Town" to "Olowalu Camp" or "Olowalu Village" throughout the Draft EIS.

7. On page 49 – Figure 10 – This figure indicates that the majority – 80 percent - of the Master Plan Site Area has 'A' and 'B' classified soils, while about 19 percent of the site is of the lowest, least productive classification 'E'. It is noted that this area where the least productive AG soil exists is the area surrounding the Olowalu Stream – the precise area where the Master Plan proposes to retain as AG land within the Olowalu Cultural Reserve. Please explain why the area with the least productive AG soil is being retained as AG while the most productive AG soil areas would be rezoned;
8. Pages 32-55 – Given the State's desire to improve and increase the long-term sustainability of Hawaii's economy, the Draft EIS inadequately justifies the removal of 621 acres of agricultural land, including 121 acres of Prime Agricultural Land. The Final EIS should more carefully examine the loss of this particularly valuable prime and other important agricultural land with excellent soil characteristics. Suggesting that these 621 acres are a small percent of Maui's Agricultural lands neglects the fact that these are prime lands that demand special protection.

In addition, the Applicant should also make reference to Hawaii Revised Statutes (HRS) Ch. 226-13 regarding objectives and policies for the physical environment – land, air and water quality; and HRS Ch. 226-104 (b).1 through 5 – regarding priority guidelines for growth and land resources when discussing the redesignation of prime AG lands. Please explain how developing AG land, including Prime AG land, fits with these State policies.
9. On pages 55 and 66 - "BMPs will be implemented both prior to and during grading and construction to minimize opportunities for soil erosion; Olowalu Stream will not be altered during implementation of the Master Plan". Generally stating that BMPs will be implemented is vague. Please provide a detailed plan for how grading and construction activities will not adversely impact Olowalu Stream or the associated tributaries;
10. On page 60 - Please explain and justify why the proposed project, with some high-density areas, should be created in a known tsunami and flood hazard area;
11. On pages 60, 100, 102, 159, 218, and 220 (and possibly other pages within the Draft EIS) - There is a reference that the Applicant will adhere to a 50' or 150' setback along the shoreline. It should be noted that this is already a pre-existing condition for the area (shoreline) based on previous SMA approvals. It is noted that this

information regarding these existing conditions is finally presented on page 222 of the document. Please restate or reword this information on previous pages to accurately reflect existing conditions;

12. On page 62 - It is stated that there was evidence that Nene were present during the flora and fauna study. Additionally, it is noted that water features or temporarily irrigated areas may attract more Nene. There is no mention of incidental take or cooperation with the United State Fish and Wildlife Services (USFWS) under the Endangered Species Act. Please address this concern and what steps will be taken to address the protection of this endangered species;
13. On page 67 – Over the course of the GPAC and Commission review of the MIP, the Department received hours of oral testimony relating to the Master Plan. One (1) of the most frequent concerns discussed was for the coral reef health and nearshore water quality. A baseline study published in 2003, prior to upland development in the area, categorized the reef as “the best leeward reef in Maui and probably the whole state.” The recommendation of the report was that continued monitoring was necessary to determine the specified stressors that cause reef decline. “Monitoring reefs to develop indices of reef ‘health’, examining human impacts and placement of artificial reefs to reduce stress on natural reefs will provide tools for more effective management of tropical ecosystems. This work takes on particular relevance within boundary waters of the Hawaiian Islands Humpback Whale National Marine Sanctuary and as nearshore development encroaches upon the marine habitat” (Brown, et al). Please clarify if there will be additional plans for monitoring programs and analysis to mitigate impacts to nearshore water quality and coral reef health;
14. On pages 41, 72 -73 (and possibly other pages within the Draft EIS) - “In 1831, missionaries estimated 831 Hawaiians lived at Olowalu. Based [up] on the 1831 population, it is estimated that 2,000 or more Hawaiians resided at Olowalu before Western contact.” Please explain or provide a reference for this estimate;
15. On page 74 – “By 1878...the continuing decline in the number of Hawaiians...compelled Olowalu Plantation to hire Chinese workers.” The correct company name would be West Maui Plantation (1871-1881) (Olowalu Company was not established until 1881. (See Dorrance and Morgan, Sugar Islands, 2000:60-61, 64; and “Historic Context” in Wo Hing Society, Lāhainā, Maui. Yip and Solamillo, 2009:8). Please revise;
16. On page 75 – “In early 1931, Olowalu Company was sold to American Factors, Ltd...” PMCo acquired OCo for \$400,000.00 in May 1931 and the latter was dis-incorporated on December 31 of that year (*Annual report of the Pioneer Mill Company, Limited for the Year Ending December 31, 1931*:4, 15). Please revise and incorporate;

17. On page 75- "(Ainsworth)" as a citation. In order to meet standard reference requirements, one (1) must include author, followed by year, and page number. In addition, there are ten (10) pages of text that include quotes without citations. Please revise and add citations per examples included in these comments;
18. On page 112 – "The irrigation system in Olowalu is quite dated, with portions of it built in the late 19th and early 20th centuries...." The history of water development by OCo/PMCo is not included in a historical context and the infrastructure is not delineated on any map or graphic. Given its age and associations, the infrastructure may be eligible for listing in the National Register of Historic Places and may have an adverse impact on this resource, which will have to be mitigated before improvements and a new water development program are implemented. Please add a section on the history of OCo/PMCo water development and associated cultural resources, as well as potential impacts and mitigation measures proposed for consideration. These will have to be submitted to State Historic Preservation Division (SHPD) for review, concurrence, and approval;
19. On page 114 – "In 1876 two Maui residents started the Olowalu Plantation..." Please clarify and cite the dates and persons named in the Draft EIS for consistency throughout the document;
20. On pages 115 and 116 – There is little or no historical information provided for the years spanning 1932-1962, which is required to fully document the fifty-year terminus for the Period of Significance, and little information on what transpired through 1990. Please include and revise text accordingly;
21. On page 128 - Although the information provided on the Socio-Economic housing demand forecast is correct, please also include that the need for housing in West Maui to be only 3,456 additional units by the year 2030, beyond those lands already entitled. Please also include new information that this number is now further reduced to 2,574 units (or 2,307 units if 267 ohana units are also built) with the inclusion of entitled lands at Pulelehua;
22. On pages 129-154 – The Draft EIS superficially discusses the likely impacts to public services and infrastructure that will result from the project. In most cases the Draft EIS merely states that the services (e.g., police, emergency response, solid waste) will be provided in West Maui or even more remotely, in the Wailuku/Kahului area.

The Final EIS must include a more meaningful discussion of the impact of providing public services to the proposed new community, particularly since many of those services are located several miles away and/or would have to be expanded to meet these new demands. It is insufficient to merely state that the hospital or police facilities are located a certain distance from Olowalu, or that a fire station site will be discussed for possible inclusion in the public/quasi-public area. The Final EIS should provide qualification of the anticipated impacts to these public services, similar to how traffic impacts and educational impacts are qualified by the number of trips or number of students that the project will generate. For example, the Final EIS

could indicate how many additional police, fire, emergency response and solid waste personnel and vehicles would be needed to maintain their current level of service in the region. If the Final EIS were to also include estimated costs for the provision of these expanded services, it could also estimate the Real Property Tax revenue that the project would generate and that could serve to offset some of these costs.

23. On pages 134-136 – The Draft EIS estimates 462 new students, from elementary to high school. As part of this discussion, the Olowalu Town Master Plan states that (p.135) a 10-15 acre site for an educational facility will be provided. Please indicate whether this site will conform to Department of Education (DOE) standards for Elementary, Middle, and High School locations. Please also provide information on what DOE standards and 'warrants' are for new school construction, for example, whether the new school-age child population anticipated at Olowalu will include enough children to warrant the construction of a new elementary, middle and/or high school within the Olowalu Town Master Plan.

Furthermore, traffic Impacts of children commuting off-site to attend school indicates that there will be 462 new students within Olowalu; unless a school facility is built within the Olowalu Town, these students will all have to travel off-site to attend school. Please provide a discussion of the traffic impacts to Honoapi'ilani Highway – north and south of Olowalu Town – as a result of 462 students traveling to school(s) located in Lahaina or elsewhere.

24. On page 137 – Please clarify if the recreational activities and parks proposed for the master plan will be private or public;
25. On page 140 - Please expand your analysis to include the impact to visitors and residents who commute and use Honoapi'ilani Highway, both north (to Puamana) and south (to Maalaea) of the project, when the highway in these areas will remain at one (1) lane in each direction. We note that the highway will continue to operate at a level of service of E and F, as indicated in other traffic reports received by the Department. Further, the statement, "It is estimated that the level of service of the highway will be "C" or better" should be clarified that this prediction is only for the section of the highway being relocated, and not for the length of the entire highway (specifically from Maalaea to Lahaina). Impacts and mitigation for traffic impacts to Honoapi'ilani Highway, between Maalaea and Lahaina, should be evaluated;
26. On page 161 (and other pages within the Draft EIS) - It is repeatedly stated that the Master Plan is consistent with the County's Pali to Puamana Parkway Master Plan. However, this is misleading as the County's plan does not propose any additional development (e.g., urban uses) makai of the existing highway; does not comport exactly as depicted in the Master Plan; and did not include the many acres of development located mauka of the existing highway. Furthermore, as mentioned on pages 166 and 167, to compare the 28 acres of proposed park in the Pali to Puamana Parkway Master Plan to the 223 acres of green space in the entire proposed Olowalu Master Plan is apples-to-oranges and should be modified to reflect that the plans do not encompass the same project area;

27. On page 166 – Although the Hawaii Department of Transportation (HDOT) has begun the initial stages of drafting an EIS for the relocation of Honoapiʻilani Highway (from Maalaea to Launiupoko), the effort has been on-going and tedious. The Applicant's language in this section gives the impression that the project is underway; however, the Draft EIS has yet to be finished and there has been no planning or funding secured for the project. Please verify with HDOT, and include information in this section on the status of the project and its estimated timeline;
28. On pages 165-169 – The Department notes that the project is located several miles from major regional activity centers on the island, including Maui's larger employment centers. Further, the Draft EIS does not clearly address the level of public infrastructure, services and facilities needed to support the project. Without this information being provided, the projects potential impacts upon public services, facilities and resources cannot be clearly determined;
29. There are a number of references made throughout the Draft EIS that refer to incorrect Table numbers. The Department suggests that a thorough review of any reference to a Table be made for the entire document (e.g., on pages 210 and 211, Table 6 is referenced for land use designations. Table 6, however, is the "Master Plan Preliminary Implementation Time Schedule");
30. Please include a map of the Draft Flood Insurance Rate Map (FIRM) and provide an analysis between the current map and the proposed Draft FIRM and its impact on the Master Plan;
31. Please provide a map of the tsunami inundation zone;
32. Appendix J: View Analysis. As stated by the Department in the EISPN comment letter dated August 6, 2010, please provide computer generated photos of the area with the proposed development. The Draft EIS should provide a more detailed written analysis of the affect of 1,500 residences, 375,000 square feet of commercial space, and public facilities on existing scenic resources. This analysis should include 'Photoshop' and/or SketchUp model renderings of the primary view corridors through the site with building envelopes of Olowalu Town mocked up as it would be completely built out. Photographs 1 – 6 especially should provide both 'before' and 'after' images of the scenic resources, i.e., as they exist at present (before) and as they will be impacted with the addition of Olowalu Town development (after);
33. Appendix K - The consultant for the Market Study bases their assertion that all 1,500 units at Olowalu would be absorbed by the real estate market in eight (8) to ten (10) years on the assumption that future development projects that are within the Maui Island Plan's Directed Growth boundaries could meet with community resistance or financial difficulties, and not be built, thus leaving room for Olowalu's units to be absorbed in the market (page iii). The Draft Maui Island Plan already includes a surplus of dwelling units in the West Maui Community Plan area. Please provide an analysis of market absorption that does not rely on other projects not being constructed – that is, what would be the market absorption rate if all approved future

projects within the current growth area boundaries are built and entered into the West Maui real estate market;

34. Appendix L – This assessment neglects to account for numerous CIP and operational expenditures that will be necessitated by the Olowalu Town project, and it overestimates government revenues.

Missing from the calculations are the County's costs to provide the following services: police, fire, civil defense, housing and human concerns, solid waste, public works, development services, and planning. Notably lacking was the cost of providing facilities and vehicles (fire, police, solid waste) that would be needed to serve these 4,000+ residents and 1,500 homes.

Similarly, there is an underestimate of the costs to provide many additional State services for the 4,000+ new residents. These range from schools, medical facilities, prisons and highways, and the maintenance of these and many other CIP projects. Just as the costs to government were underestimated, projected County and State revenues have been overestimated. The Final EIS should correct these calculations and present an accurate projection of the economic costs and realistic potential revenues to Maui County and to the State of Hawaii.

35. The Countywide Policy Plan and West Maui Community Plan objectives and policies - The Department notes that the Applicant did not adequately address or respond to many relevant objectives and policies contained within these documents that appear to be in conflict with the Master Plan. The Department asks that the Applicant further expand its analysis on those policies and objectives discussed and include others that were completely omitted from the Draft EIS; and
36. The following are general comments and recommendations are provided regarding Cultural Resources:

Olowalu Draft EIS Vol II Appendices, "Pu'u honua: The Legacy of Olowalu" and "Archaeological Literature Review" are both well-researched and well-written documents. The latter report in particular presents data in formats which benefit both the professional and the layperson and establishes new thresholds for the use of applied GIS and data collection. In addition, the recommendations that are included are consistent with Cultural Resource Management best practices and for that reason, provide an excellent example on how to integrate new development with cultural resource preservation.

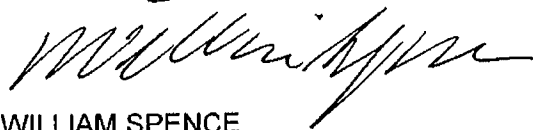
However, one important recommendation for the Olowalu Cultural Reserve (OCR) remains absent and should be included: a multi-property nomination to the Hawai'i and National Registers of Historic Places for all sites contained in the OCR as well as sites identified along the shoreline. Please include.

Mr. William Frampton, Olowalu Town, LLC
Ms. Heidi Bigelow, Olowalu Ekolu, LLC
April 17, 2012
Page 9

In addition, given the quality of the Draft EIS appendices, it is problematic that the historical information presented in Olowalu Draft EIS, Vol. I includes a number of errors and inconsistencies. The historical narrative found on the Applicant's website "Olowalu Town," written by Gail Ainsworth, is well-written and contains much important information. Aside from an absence of sources and references, Ms. Ainsworth's complete text should have been incorporated into Vol. I or, at minimum, should have been provided as an appendix in Vol. II, with references added as either footnotes or endnotes. Time constraints do not allow a more in-depth review of the material; however, some of the most obvious errors in the narrative have been provided in this comment letter for revision and or correction. Please add Ms. Ainsworth's text as an appendix to Vol. II.

Thank you for the opportunity to comment. If you require further clarification, please contact Staff Planner Kathleen Ross Aoki at kathleen.aoki@mauicounty.gov or at (808) 270-5529.

Sincerely,

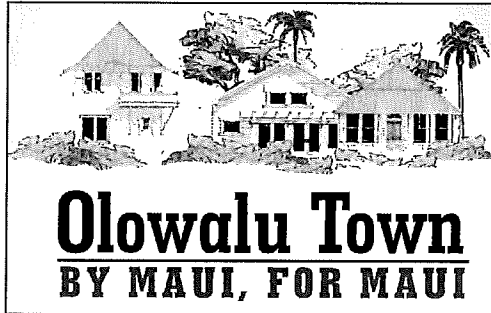


WILLIAM SPENCE
Planning Director

xc: Clayton I. Yoshida, AICP, Planning Program Administrator (PDF)
John F. Summers, Planning Program Administrator (PDF)
Kathleen Ross Aoki, Staff Planner (PDF)
David Yamashita, Long Range Division Planner Supervisor (PDF)
Orlando "Dan" Davidson, Executive Director, State Land Use Commission
Colleen Suyama, Munekiyo & Hiraga, Inc.
EAC File
General File

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2035 MAIN STREET WAILUKU HAWAII 96793
OFFICE: 808-249-2224 / FAX: 249-2333

October 26, 2015

William Spence, Director
Department of Planning
2200 Main Street, Suite 315
Wailuku, Hawaii 96793

SUBJECT: *Draft Environmental Impact Statement for the Proposed Olowalu Town Master Plan at Olowalu, Hawaii*

Dear Mr. Spence:

Thank you for your letter dated April 17, 2012 providing comments on the Draft Environmental Impact Statement (EIS) for the Olowalu Town Master Plan (OTMP). Olowalu Town LLC offers the following information in response to the comments noted in your letter:

Comment No. 1:

If the Maui Island Plan is adopted prior to the submittal of the Final EIS, then include in the Final EIS an analysis of how the proposed project complies with the Maui Island Plan:

Response:

The Maui Island Plan (MIP) was adopted by Ordinance No. 4004 on December 28, 2012. As such, the EIS will include an analysis of how the OTMP complies with the MIP. See Exhibit "1".

Comment No. 2:

On pages 24, 160, 165, and 167 (and possibly other pages within the document) -It is stated that both the General Plan Advisory Committee (GPAC) and the Maui Planning Commission (Commission) recommended that the Master Plan be included in the Maui Island Plan's (MIP) growth boundaries. However, more complete information is

warranted. Although the GPAC and Commission approved the inclusion of the Master Plan (as proposed) in a growth boundary, the Commission did not support any development makai of the existing Honoapiilani Highway.

Furthermore, whenever this information is mentioned in the Draft EIS, the fact that the Department did not support the inclusion of the Master Plan in a growth boundary should also be stated. We note that the Department's recommendation to Council to not include this Master Plan in a growth boundary is mentioned on page 176;

Response:

We appreciated the opportunity for continuing dialogue with the Department to address the Department's initial concerns. As previously mentioned, the referenced pages in the Draft EIS have been updated to include adoption of the MIP. Please note that we appreciated your support to incorporate the OTMP as part of the Directed Growth Map during the Council's deliberation of the MIP. Refer to **Exhibit "1"**.

Comment No. 3:

On page 23 -It is represented that the GPAC and Commission recommended inclusion in the MIP to "meet this estimated housing need". This is again not a completely accurate statement. The proposed directed growth areas proposed by the Department, without the inclusion of this project, meet 116 percent (4,024 units proposed, 3,456 needed) of the demand for the West Maui area. The inclusion of the Master Plan by both the GPAC and Commission would further exceed the projected housing demand. Please restate this information to reflect that the project will exceed the Department's estimated housing need and provide a rationale for exceeding the demand;

Response:

During the MIP review process, the General Plan Advisory Committee (GPAC), Maui Planning Commission (MPC) and Maui County Council (Council) were aware that the demand projections and projects included in the growth boundaries, including the OTMP, would exceed the projections. Notwithstanding, we understand that the projections prepared by the Planning Department held value and purpose with respect to guiding land use allocation decisions during the MIP development process.

At the same time, however, we believe that the projections should be considered a long range planning tool with a degree of flexibility. From a project planning and development standpoint, factors which affect development feasibility and timing include market conditions, financial capacity of the development entity, and regulatory, infrastructural and policy considerations affecting a particular parcel or region (e.g., water availability). With this in mind, not all projects will be initiated within the time frame of the MIP and we

believe the inclusion of OTMP in the MIP growth boundary is within thresholds which would not adversely impact the goals, objectives and policies and implementing actions of the MIP.

Comment No. 4:

On page 27 -Please justify how this project, located four miles away from the edge of Lahaina, meets "Smart Location" for LEED Neighborhood Development standards. Specifically, "Smart Location" intent, "encourage(s) development within and near existing community and public transit infrastructure." Furthermore, requirements for all projects are to, "Either (a) locate the project on a site served by existing water and wastewater infrastructure or (b) locate the project within a legally adopted, publicly owned, planned water and wastewater service area, and provide new water and wastewater infrastructure for the project." The requirements further state that the project shall either be, "on an infill site", or "on site adjacent" (a site that is adjacent to previously developed lands);

Response:

Olowalu has historically been used for housing. Although it is a rural community with basic infrastructure and limited commercial and public facilities such as the Olowalu Store, Leoda's Kitchen and Pie Shop, and Olowalu Church, it is four (4) miles south of Lahaina. We note that the OTMP will be served by an existing water system, to be upgraded by us and operated by the Olowalu Water Company (OWC), a public service water purveyor operating under the Hawaii Public Utilities Commission (PUC). In addition, development of OTMP will entail the privately funded construction of the wastewater collection, transmission and treatment system for the OTMP, which will also be governed by the PUC. These infrastructure elements will be available concurrent with project implementation to meet the needs of the OTMP community.

LEED Neighborhood Development follows the values and principles of the "New Urbanism" movement, as articulated by the Congress for the New Urbanism. Project architect and planner, Andres Duany is a leader in "New Urbanism" and LEED Neighborhood Development. Besides infill and adjacent site locations, LEED Neighborhood Development principles address other options to accomplish "Smart Location". See Appendix "A-1" of the DEIS. One option is to locate projects along an existing or planned "Transit Corridor or Route with Adequate Transit Service" where at least 50 percent of dwelling units and nonresidential building entrances are within a ¼-mile walking distance of bus stops, or within a ½-mile walking distance of bus/rapid transit stops. OTMP is master planned to meet these criteria. Residents will be encouraged to walk or bike to employment centers, shopping, public facilities, and recreation areas which are planned to be within ¼-mile of residential areas. Within the OTMP future bus stops will be coordinated with the County of Maui Department of

Transportation (CDOT) to ensure that the bus stops meet or exceed the County's criteria and can be integrated into the County Bus Routes. Further, the OTMP includes a 160-foot wide corridor for the future realignment of Honoapiilani Highway inland, which can accommodate a future transit corridor from Maalaea to Lahaina.

Comment No. 5:

Pages 33-38 -As stated by the Department in the EISPN comment letter dated August 6, 2010, obtain a Zoning and Flood Confirmation Form for all parcels within the entire Olowalu Town Master Plan project area. Please include a zoning map as an exhibit. Please also include in Table 5 the area for each Tax Map Key (TMK); the area that will need state land use reclassification within each TMK and what reclassification is needed (Urban or Rural);

Response:

As requested, Zoning and Flood Confirmation Forms for all parcels located within the OTMP project area (TMK Nos. (2) 4-8-003:84, 98 through 118, and 124) were submitted to the Department for completion. Completed forms verifying the existing land use designations for all of the parcels are provided as Appendix "B" in the EIS. A zoning map for the project site (Ordinance No. 297) has been included in the EIS as Figure 9. Additionally, as requested, Table 4 in the EIS includes the area of each parcel within the OTMP, as well as the proposed State Land Use reclassification for each parcel and the existing County land use designations. See **Exhibit "2"**.

Comment No. 6:

On page 41 (and within other portions of the Draft EIS) -Olowalu is referred to as having been a "thriving plantation town" (e.g., "As recently as the 1930's, Olowalu was a thriving plantation town"). Throughout its history, Olowalu was a "camp" and at most a "village". Its plantation-era population was recorded as being "less than 500" persons. In 1899, on the eve of annexation, T.G. Thrum described the population at Olowalu in detail and noted that there were 167 persons residing there. They included 145 men, 22 women, and no children (Table of Sugar Plantation Laborers, October 31, 1899; Hawaiian Almanac and Annual, Thrum, 1899: 176). In 1930, census-taker Kenichi Takayama recorded the population at Olowalu as being 447 persons. They consisted of 237 men, 79 women, and 131 children (Fifteenth Census of the United States, "Olowalu Village", Sheets 116-120A, April 1-11, 1930).

We have extensive information about West Maui's camps, villages, and towns, including Lahaina, Olowalu, Puukolii, and Ukumehame if you would like further clarification. Given the available information, including census data, as well as Olowalu Company (OCo) and Pioneer Mill Company (PMCo) period documents, please change the

references to the historical enclave of Olowalu from "Olowalu Town" to "Olowalu Camp" or "Olowalu Village" throughout the Draft EIS.

Response:

We appreciate your comments regarding the population in Olowalu during the plantation-era and that during this period Olowalu was home to various immigrants who worked for the plantation. In describing the location of where these workers lived in Olowalu, the area has been referred to as both "Olowalu Town" and "Olowalu Camp". In the context of identifying location, the reference to "Olowalu Town" in the Draft EIS is, therefore, deemed appropriate.

Comment No. 7:

On page 49 -Figure 10 -This figure indicates that the majority -80 percent -of the Master Plan Site Area has 'A' and 'B' classified soils, while about 19 percent of the site is of the lowest, least productive classification 'E'. It is noted that this area where the least productive AG soil exists is the area surrounding the Olowalu Stream -the precise area where the Master Plan proposes to retain as AG land within the Olowalu Cultural Reserve. Please explain why the area with the least productive AG soil is being retained as AG while the most productive AG soil areas would be rezoned;

Response:

Of the 636 acres within OTMP, approximately 270 acres or approximately 43 percent are classified as Land Study Bureau (LSB) "A" lands, while approximately 245 acres or approximately 39 percent are classified as LSB "B" lands. Approximately 121 acres or approximately 19 percent of the lands within OTMP are classified as LSB "E" lands.

As illustrated in Figure 10 of the Draft EIS, there are lands which are adjacent to the upper portions of Olowalu Stream which have been designated as "E". Although these lands are identified as the least productive, the cultivation of "kalo" and other traditional Hawaiian crops within the Olowalu Cultural Reserve (OCR), has demonstrated that the "E" - designated portions along Olowalu Stream can be put to productive agricultural use. These lands are important to traditional Hawaiian crops in the context of its location adjacent to Olowalu Stream within the OCR. Furthermore, not all lands that are designated LSB "A" and "B" lands are proposed to be redistricted into the Urban District. The LSB "A" and "B" lands located along the lower portion of Olowalu Stream are proposed to be left in the State Land Use Agricultural District. Although there are LSB "A" and "B" lands proposed to be redistricted into the Rural District, this does not preclude future owners from practicing agriculture on their property. We note that the State Land Use law (Hawaii Revised Statutes Chapter 205), with respect to the State Rural District provides in relevant part "Rural districts shall include activities or uses as

characterized by low density residential lots of not more than one (1) dwelling house per one-half acre, except as provided by County ordinance pursuant to Section 46-4(c), in areas where “city-like” concentration of people, structures, streets, and urban level of services are absent, and where small farms are intermixed with low density residential lots”.

Within the OTMP, approximately 175 acres or approximately 28 percent of the land will be retained in the State Land Use Agricultural District of which 28 acres will be developed into approximately 14 farmsteads.

Agricultural activities are an important part of the OTMP’s goal of becoming a sustainable development. Agricultural pursuits will not be limited to only those lands within the State Land Use Agricultural District, but will be encouraged throughout the OTMP. It should be noted that agricultural pursuits by individual homeowners or neighborhood communities through establishment of individual or community gardens will also be encouraged.

Comment No. 8:

Pages 32-55 – Given the State’s desire to improve and increase the long-term sustainability of Hawaii’s economy, the Draft EIS inadequately justifies the removal of 621 acres of agricultural land, including 121 acres of Prime Agricultural land. The Final EIS should more carefully examine the loss of this particularly valuable prime and other important agricultural land with excellent soil characteristics. Suggesting that these 621 acres are a small percent of Maui’s Agricultural lands neglects the fact that these are prime lands that demand special protection.

The Applicant should also make reference to Hawaii Revised Statutes (HRS) Ch. 226-13 regarding objectives and policies for the physical environment -land, air and water quality; and HRS Ch. 226-104 (b).1 through 5 -regarding priority guidelines for growth and land resources when discussing the redesignation of prime AG lands. Please explain how developing AG land, including Prime AG land, fits with these State policies.

Response:

We note that farming is not the sole means of improving or increasing the long-term sustainability of Hawaii’s economy. Other ways include providing homes and places of work in close proximity so that people can spend less time commuting and more time engaging in their communities, and providing homes at prices that allow more of Hawaii’s families to purchase their own homes and build equity. The OTMP contains approximately 526 acres of potentially productive farmland. This land is largely vacant, and has been fallow/not in large scale agricultural production since 1999. Upon the completion of OTMP, approximately 28 acres within OTMP will be kept as small farms.

In addition, approximately 175 acres or approximately 28 percent of the land within the OTMP will be retained in the State Agricultural District. In response to your comments, additional analysis of the impact on agriculture was conducted. The Impacts on Agriculture report prepared by Plasch Econ Pacific LLC will be included in the EIS. See **Exhibit "3"**.

Since 1990, the contraction and eventual closure of Pioneer Mill Co. (sugarcane) and Maui Pineapple Co. released over 19,000 acres of good farmland in Central and West Maui. While some of this former plantation land was planted in other crops (e.g., seed corn and coffee) and some was developed for homes, most of it remains available for farming. For comparison, the entire County has an estimated 1,700 acres in food crops (vegetables, melons, and fruits) grown mostly for the Hawaii market. Statewide, the supply of good farmland exceeds 170,000 acres compared to about 87,400 acres in crop, of which about 10,300 acres are food crops grown mostly for the Hawaii market, and about 77,100 acres are crops grown mostly for export (sugar, seeds, macadamia nuts, coffee, etc.). The supply of available farmland is large because all but two (2) of Hawaii's many sugar and pineapple plantations have ended operations.

Hawaii has a long history of strong support of agriculture. But since 1983 (nearly 30 years ago), there has been no significant growth in diversified crop acreage with the single exception of seed corn, which has grown at an average rate of 300 acres per year. Following the closures of plantations on Oahu, food-crop acreage expanded there, but this was followed by declines on the Neighbor Islands.

It should also be noted that in advanced economies, such as Europe, the U.S. mainland, and Hawaii, there is a strong and well-established trend of growing vegetables and melons hydroponically in greenhouses. For example, most tomatoes sold in U.S. supermarkets are now grown hydroponically, as exemplified by the Olowalu Tomato Farm. In comparison to field farming, hydroponic farming in greenhouses provides higher quality produce; generates far higher yields; allows for year-round production regardless of season; provides secure production unaffected by droughts and storms; does not require good-quality farmland; requires much less land, water and energy; and requires no pesticides or herbicides.

Within the 636-acre OTMP, approximately 19 percent of the soils are classified as "Prime" under the Agricultural Lands of Importance to the State of Hawai'i (ALISH) rating system, while about 40 percent is considered "Other Important" agricultural lands, and the remainder has no designation under the ALISH system. As such, the OTMP will result in a relatively small loss of "Prime" agricultural land of which there is a large supply on Maui and statewide. The growth in demand for farmland has been slow over the past 30 years and the trend towards hydroponic farming indicate that "Prime" farmland will be less important to food production than it has been in the past. As a result, ample farmland will remain available to accommodate the future growth of

diversified agriculture, food self-sufficiency, and food security. In compliance with constitutional mandates and State and County plans, more than sufficient land is being preserved to accommodate the future growth of agriculture while addressing other community needs (i.e., housing, commercial and industrial needs, recreation, etc.).

As requested, the EIS includes Chapter 226, HRS, relating to objectives and policies for the physical environment and the Priority Guidelines. See **Exhibit "4"**.

We note that the priority guidelines relating to HRS 226-104(b)1 – 5, reflect conditions which should be considered in the broader context of the MIP and agricultural opportunities being provided within the OTMP itself. The MIP, through its Urban Growth Boundary (UGB) and Rural Growth Boundary (RGB) delineations for Olowalu acknowledges that this locale is appropriate for higher intensity uses. In this regard, water source for the OTMP is considered adequate to meet the demands of the proposed project, while at the same time serving the needs of the proposed agricultural uses within the OTMP. The OTMP will provide an adequate allocation of open space and park areas. Significantly, the MIP has determined Olowalu to be an appropriate area for future urban and rural growth to meet the island's continuing need for housing and quality livable neighborhoods. The MIP expresses public policy with respect to new urban core areas.

Comment No. 9:

On pages 55 and 66 – "BMPs will be implemented both prior to and during grading and construction to minimize opportunities for soil erosion; Olowalu Stream will not be altered during implementation of the Master Plan". Generally stating that BMPs will be implemented is vague. Please provide a detailed plan for how grading and construction activities will not adversely impact Olowalu Stream or the associated tributaries;

Response:

OTMP will require several land use entitlements before construction can be initiated. During each phase of OTMP implementation, greater specificity regarding grading and construction activities will be provided. At the County level, OTMP is proposed to be a Project District, which is a three phase approval process. Portions of the OTMP area are also located within the Special Management Area (SMA) of the Island of Maui. During review of these permits by the Maui County Council, Maui Planning Commission and Maui Planning Department, site specific plans and engineering and drainage reports will be required.

OTMP will comply with Chapter 20.08 Soil Erosion and Sedimentation, Maui County Code and the Rules for the Design of Storm Water Treatment Best Management Practices adopted by the Department of Public Works in 2012, which encourages Low

Impact Development (LID). In addition, the project will be subject to the State of Hawaii Department of Health regulations relating to water quality. A National Pollutant Discharge Elimination System (NPDES) permit will also be required for project implementation.

OTMP proposes to utilize storm water treatment Best Management Practices (BMPs) that encourages LID. Appendix "B-1" in the Draft EIS is a storm water management plan for OTMP which proposes BMPs such as bio-retention rain gardens, swales, rain barrels and tanks. Subsurface tanks on the individual residential lots to vegetated roofs, permeable paving, subsurface storm water management systems, and hydrodynamic devices for commercial and public facilities are also BMP measures to be considered. The proposed open space and park areas will also be utilized for storm water detention and retention basins as well as include reinforced turf surfaces and infiltration trenches. Table 5.1 in Appendix "B-1" in the Draft EIS identifies the storm water BMPs for OTMP and where these measures will be utilized. Implementation of the storm water management plan is expected to minimize impacts on Olowalu Stream and the associated tributaries, as well as the ocean. Such measures are consistent with the principles of LID.

Comment No. 10:

On page 60 - Please explain and justify why the proposed project, with some high-density areas, should be created in a known tsunami and flood hazard area;

Response:

The EIS includes additional information on the project and its location within the tsunami inundation zone and flood hazard area. The overlay of the OTMP over the flood insurance rate map in Figure 13 of the Draft EIS identifies a major portion of OTMP in Zone "X" (unshaded). However, there are portions of the OTMP within Zone "X" (shaded) on the outer fringes of Olowalu Stream with moderate flood hazard with average depths of less than 1 foot. The proposed drainage improvements, such as detention basins and LID measures, are expected to reduce the potential for flooding. A portion of the OTMP is located in Flood Zone "AO" along Olowalu Stream and adjacent to Kapaiki. However, these areas are proposed as agricultural lots along Olowalu Stream and park use, respectively. The area in Zone "VE" coastal flood area with velocity hazard (wave action) is within the existing 150 ft. shoreline setback area where no structures are allowed.

Comment No. 11:

On pages 60,100,102,159,218, and 220 (and possibly other pages within the Draft EIS) -There is a reference that the Applicant will adhere to a 50' or 150' setback along the

shoreline. It should be noted that this is already a pre-existing condition for the area (shoreline) based on previous SMA approvals. It is noted that this information regarding these existing conditions is finally presented on page 222 of the document. Please restate or reword this information on previous pages to accurately reflect existing conditions;

Response:

The existing 150-foot setback established with and conditioned within the Special Management Area Use Permit approved for the Olowalu Subdivision in 2000 has been noted at the setback's first reference in the EIS and clarified throughout the document.

Comment No. 12:

On page 62 -It is stated that there was evidence that Nene were present during the flora and fauna study. Additionally, it is noted that water features or temporarily irrigated areas may attract more Nene. There is no mention of incidental take or cooperation with the United State Fish and Wildlife Services (USFWS) under the Endangered Species Act. Please address this concern and what steps will be taken to address the protection of this endangered species;

Response:

Information on the Endangered Species Act (ESA) and cooperation with the USFWS in connection with the endangered nene has been included in the EIS. However, nene are strong fliers that can range over large areas on a daily basis, such as the entire southern half of West Maui especially within the West Maui mountains. They are known to appear in areas that have succulent grasses on which they like to feed, such as golf courses, parks, large lawns or even hydro-mulched road banks. It is noted that the water features or irrigated parks in the OTMP are not dangerous to nene.

These features do not create a "take". Education is the best avoidance strategy, and may include actions such as the placement of signs at strategic access points to any water features or irrigated fields. These signs would identify the nene (a drawing or picture) and include a statement of its endangered status and warn against harming these special birds. See **Exhibit "5"**.

Comment No. 13:

On page 67 - Over the course of the GPAC and Commission review of the MIP, the Department received hours of oral testimony relating to the Master Plan. One (1) of the most frequent concerns discussed was for the coral reef health and nearshore water quality. A baseline study published in 2003, prior to upland development in the area,

categorized the reef as "the best leeward reef in Maui and probably the whole state". The recommendation of the report was that continued monitoring was necessary to determine the specified stressors that cause reef decline. "Monitoring reefs to develop indices of reef 'health', examining human impacts and placement of artificial reefs to reduce stress on natural reefs will provide tools for more effective management of tropical ecosystems. This work takes on particular relevance within boundary waters of the Hawaiian Islands Humpback Whale National Marine Sanctuary and as nearshore development encroaches upon the marine habitat" (Brown, et al). Please clarify if there will be additional plans for monitoring programs and analysis to mitigate impacts to nearshore water quality and coral reef health;

Response:

Responding to concerns over the coral reef health and nearshore water quality, a comprehensive water quality assessment and marine biota study was prepared for the OTMP. Marine Research Consultants, Inc. reviewed the 2003 baseline study during the preparation of the detailed comprehensive study for the OTMP, which is included in the Draft EIS as Appendix "D".

Results of the baseline assessment of the marine environment off the proposed OTMP project site in West Maui reveal a diverse set of distinct reef habitats. The reefs at Olowalu are somewhat unique in that sediment deposition (or lack thereof), rather than wave forces, appears to be the major determinant of physical and biotic reef structure. Along the northern side of Hekili Point, sediment deposition emanating from Olowalu Stream creates a habitat where coral communities are limited to species and growth forms that can withstand the conditions created by sediment deposition. South of Hekili Point, a shallow, wide, triangular-shaped reef flat, formed from deposition of alluvial material from Olowalu Stream, terminates in a fore-reef composed of actively accreting corals assemblages that show little or no effect of sediment stress. Reefs at the southeastern end of the project site (14-Mile Marker) also showed distinct indications of sediment stress, although presently no major streams discharge regularly in this area. It is noted that prior to its realignment, the outlet to the ocean from Olowalu Stream was at Hekili Point which may account for the sediment stress.

Groundwater flow rate and the loading of nitrogen and phosphorus discharged along the project's shoreline are expected to be reduced by six (6) percent over present conditions as a result of the development of OTMP. The extent of offshore effects would be reduced due to more rapid mixing of the smaller volume of discharged groundwater to background marine concentration. Because groundwater presently has essentially no effect on existing marine communities, the small changes to groundwater fluxes associated with the proposed project are not anticipated to have negative impacts to the ocean.

It is anticipated that the proposed drainage improvements, BMPs and storm water management plan will sustain or reduce the amount of storm water runoff into the ocean, as well as the associated sedimentation. The OTMP is not expected to adversely impact the reef environment and nearshore water quality. However, if deemed necessary, periodic monitoring of water quality similar to programs established at Wailea, Makena and Kaanapali Resorts may be implemented.

With respect to the foregoing conditions and management measures, the proposed action is not anticipated to affect the Humpback Whale National Marine Sanctuary.

Comment No. 14:

On pages 41, 72-73 (and possibly other pages within the Draft EIS) – “In 1831, missionaries estimated 831 Hawaiians lived at Olowalu. Based [up] on the 1831 population, it is estimated that 2,000 or more Hawaiians resided at Olowalu before Western contact”. Please explain or provide a reference for this estimate;

Response:

Western contact brought diseases that devastated the native Hawaiian population. It is estimated 45 years after Western contact the Hawaiian population on Maui decreased by as much as half by 1823. As noted in the Draft EIS, missionaries in 1831 estimated 831 Hawaiians lived in Olowalu and just five (5) years later, another missionary census estimated Olowalu’s population, combined with Ukumehame, at only 718, a 25 percent decline from 1831. By the time of the 1866 census the population had decreased by 80 percent. Also, prior to the missionary census of 1831, in 1790 Captain Simon Metcalfe killed more than 100 Hawaiians during the Olowalu Massacre which added to the decline of the Hawaiian population.

It is widely accepted that there was a significant population of Hawaiians living in Olowalu before Western contact, and that this population had been cut in half with the arrival of Western diseases. Within Olowalu Valley and along the original stream route, traditional Hawaiian agricultural practices were fairly intense and based primarily on *lo`i* agriculture. There were approximately 1,124 *lo`i kalo*, 28 *`uala* (potato) patches, 27 *kula* (open field or pasture) and 31 plots of land with unspecified land uses. When examining this level of agricultural intensity during the mid-1800s, and its correlation to population, Marion Kelly presents missionary estimates for the productivity of *lo`i kalo* as a minimum of 10 to 30 individuals per acre (Kelly 1989). Based on the intensity of agriculture and these estimates, it is estimated that 2,000 or more Hawaiians resided in Olowalu before western contact. See **Exhibit “6”**.

The historic information on the Hawaiian and plantation population in Olowalu included in the Draft EIS is to illustrate that Olowalu has traditionally been a sustainable community.

Comment No. 15:

On page 74 – “By 1878.... the continuing decline in the number of Hawaiians ... compelled Olowalu Plantation to hire Chinese workers”. The correct company name would be West Maui Plantation (1871-1881) (Olowalu Company was not established until 1881. (See Dorrance and Morgan, Sugar Islands, 2000:60-61,64; and “Historic Context” in Wo Hing Society, Lahaina, Maui. Yip and Solamillo, 2009:8). Please revise;

Response:

We acknowledge the Olowalu Sugar Company was not established until 1881, however, on Page 74 of the Draft EIS, based on the work of Hawaiian history researcher Gail Ainsworth she identifies Olowalu Plantation (1875-1880) as bringing in Chinese workers to Olowalu. With this reference, we have retained the name Olowalu Plantation in the EIS document.

Comment No. 16:

On page 75 – “In early 1931, Olowalu Company was sold to American Factors, Ltd...” PMCo acquired OCo for \$400,000.00 in May 1931 and the latter was dis-incorporated on December 31 of that year (Annual report of the Pioneer Mill Company, Limited for the Year Ending December 31, 1931: 4, 15). Please revise and incorporate;

Response:

The EIS has been revised to include your department’s reference to the sale of the Olowalu Sugar Company to American Factors, Ltd., owners of Pioneer Mill Company on May 1931 for \$400,000.00 as well as the un-incorporation of Olowalu Sugar Company. See **Exhibit “7”**.

Comment No. 17:

On page 75- “(Ainsworth)” as a citation. In order to meet standard reference requirements, one (1) must include author, followed by year, and page number. In addition, there are ten (10) pages of text that include quotes without citations. Please revise and add citations per examples included in these comments;

Response:

We appreciate your comments regarding standard reference requirements within the Draft EIS document. The historic information available on the Olowalu Town website and in the Draft EIS was summarized from Ms. Gail Ainsworth's work *Olowalu: A History*, 2011, prepared for the West Maui Land Company.

The Draft EIS also summarized the information provided by Ms. Ainsworth and are not direct quotes attributed to any particular individual. As such, the EIS uses the general citation of the source of the information which is Ainsworth, 2011.

Comment No. 18:

On page 112 – “The irrigation system in Olowalu is quite dated, with portions of it built in the late 19th and early 20th centuries.... “The history of water development by OCo/PMCo is not included in a historical context and the infrastructure is not delineated on any map or graphic. Given its age and associations, the infrastructure may be eligible for listing in the National Register of Historic Places and may have an adverse impact on this resource, which will have to be mitigated before improvements and a new water development program are implemented. Please add a section on the history of OCo/PMCo water development and associated cultural resources, as well as potential impacts and mitigation measures proposed for consideration. These will have to be submitted to State Historic Preservation Division (SHPD) for review, concurrence, and approval;

Response:

The historical information on the Olowalu Sugar Company and Pioneer Mill Company irrigation systems have been expanded. See **Exhibit “8”**. As noted in the Archaeological Literature Review and Field Inspection (Appendix F in the Draft EIS) the following irrigation features were identified:

Site 3172 Concrete Irrigation Ditch identified for Preservation as an operating Irrigation Ditch which is located outside of the OTMP boundary

CSH-4 Plantation-era reservoir (cut basalt brick and mortar) to be preserved. The roadway that may have affected the site has been realigned to avoid the site.

Both features will not be affected by the OTMP.

The Archaeological Literature Review and Field Inspection also recommends that either an Archaeological or Architectural Inventory Survey of features of the intact historic irrigation system within OTMP be undertaken. As recommended, during OTMP

implementation site specific archaeological and/or architectural inventory surveys will be conducted during which time your recommendation regarding documentation and eligibility to the National Register of these historic irrigation features can be considered in coordination with SHPD.

Comment No. 19:

On page 114 – “In 1876 two Maui residents started the Olowalu Plantation...” Please clarify and cite the dates and persons named in the Draft EIS for consistency throughout the document;

Response:

As requested, the names of the two (2) Maui residents Milton Phillip and Goodale Armstrong have been included. See **Exhibit “9”**.

Comment No. 20:

On pages 115 and 116 -There is little or no historical information provided for the years spanning 1932-1962, which is required to fully document the fifty-year terminus for the Period of Significance, and little information on what transpired through 1990. Please include and revise text accordingly;

Response:

Pages 115 and 116 in the Draft EIS is a brief summary of agriculture in Olowalu in the context of the agricultural assessment. The detailed historical information on agriculture is included under Archaeological Resources of the Draft EIS beginning on page 70 of the Draft EIS. Information from the Cultural Impact Assessment on the period spanning the late 1990's to Modern Era has been included in the EIS. See **Exhibit “10”**.

Comment No. 21:

On page 128 -Although the information provided on the Socio-Economic housing demand forecast is correct, please also include that the need for housing in West Maui to be only 3,456 additional units by the year 2030, beyond those lands already entitled. Please also include new information that this number is now further reduced to 2,574 units (or 2,307 units if 267 ohana units are also built) with the inclusion of entitled lands at Pulelehua;

Response:

We appreciate your clarification of the 2006 Socio Economic projections prepared for the MIP. The forecast in the Draft EIS reflected a continuing increase in housing demand through the planning horizon year of 2030. Further, since the 2006 forecast, the 2011 *Hawaii Housing Study* prepared for the County of Maui, Department of Housing and Human Concerns also indicated the continuing increase in housing demand. Of the 48,817 housing units in the County of Maui in 2011, West Maui contained 4,022 units of which 21 percent were crowded, double-up or both indicating a shortage of resident housing in West Maui. In comparison, county-wide it was 19 percent indicating a higher shortage of resident housing in the West Maui region.

Although the 2006 forecast allocated housing to the various community plan regions, it is important to recognize that those seeking housing opportunities exercise choice in determining their ideal living location. Other factors determine where residents choose to live, such as, but not limited to location, cost, housing type, available services, employment, recreation, and the environment. Therefore, although the forecasts used in the MIP indicates a surplus of dwelling units in the West Maui region, the homes to be provided at OTMP, as well as Pulelehua, should not be restricted to only West Maui but should be considered in the context of the housing needs of the entire island of Maui.

Comment No. 22:

On pages 129-154 -The Draft EIS superficially discusses the likely impacts to public services and infrastructure that will result from the project. In most cases the Draft EIS merely states that the services (e.g., police, emergency response, solid waste) will be provided in West Maui or even more remotely, in the Wailuku/Kahului area.

The Final EIS must include a more meaningful discussion of the impact of providing public services to the proposed new community, particularly since many of those services are located several miles away and/or would have to be expanded to meet these new demands. It is insufficient to merely state that the hospital or police facilities are located a certain distance from Olowalu, or that a fire station site will be discussed for possible inclusion in the public/quasi-public area. The Final EIS should provide qualification of the anticipated impacts to these public services, similar to how traffic impacts and educational impacts are qualified by the number of trips or number of students that the project will generate. For example, the Final EIS could indicate how many additional police, fire, emergency response and solid waste personnel and vehicles would be needed to maintain their current level of service in the region. If the Final EIS were to also include estimated costs for the provision of these expanded services, it could also estimate the Real Property Tax revenue that the project would generate and that could serve to offset some of these costs.

Response:

The Assessment of Economic and Fiscal Impact prepared by ACM, Inc. evaluated the estimated construction costs, multipliers, tax rates, interest rates, earnings estimates, demographic information and per capita government expenditures in determining the economic and fiscal impacts of the Master Plan. As the project proceeds through the various entitlement processes more specificity will be provided.

In the meantime, in response to your comments, the EIS has been amended to include additional information on impacts on public services. The Police Department has indicated the full build-out of the OTMP will likely require an additional patrol beat consisting of six (6) police officers to cover a 24-hour period who would operate out of the Lahaina Police Station. The new police beat is estimated to cost \$360,000 annually for salaries and benefits and \$51,000.00 for a new police vehicle which would be replaced every four (4) years. A new Police Station in Olowalu Town is not required. If deemed necessary in the future, a police substation or a shared public facility can be accommodated in Olowalu Town. (Assistant Chief Lawrence Hudson) See **Exhibit "11"**.

The applicants have been in discussion with the Department of Fire and Public Safety (Fire) regarding a new fire station location in Olowalu Town. A new fire station in Olowalu Town will improve the coverage by Fire for West Maui. It will provide enhanced coverage between the Pali and Lahaina Town area for not only Olowalu Town but also the agricultural subdivisions that have been developed between Ukumehame and Launiupoko. Refer to **Exhibit "11"**.

A new fire station is anticipated to require a total of 15 personnel to cover three (3) shifts with five (5) personnel each. A new fire station would also require a fully equipped fire engine which is estimated to cost approximately \$1 million. The annual cost of operating a fire station is estimated to be approximately \$1.25 million. It is estimated that a new fire station would cost on the order of \$11 million to construct. (Captain Paul Haake) Refer to **Exhibit "11"**.

Relative to solid waste, as stated in the Draft EIS, Olowalu Town will generate approximately 3,450 tons of residential solid waste and 1,580 tons of commercial solid waste totaling approximately 5,030 tons annually. The County of Maui's 2009 Integrated Solid Waste Management Plan (ISWMP) utilized the 2030 population projections and estimates that the Central Maui Landfill which serves all of Maui, except Hana, has adequate capacity to accommodate commercial and residential waste needs through the year 2026.

According to the Department of Environmental Management (DEM), Solid Waste Division (SWD) the Olowalu area is not served by the County of Maui. As Olowalu

Town is constructed and the number of homes increases discussion will be initiated with the DEM, SWD to initiate service to the single family homes in the area. According to DEM, SWD an automated truck and driver can accommodate up to 1,000 single family residential homes. Refer to **Exhibit "11"**.

The single-family residents will pay appropriate user fees to the County of Maui for its solid waste collection. The multi-family units, commercial and public facilities will require a private refuse collection company to provide solid waste services. It is noted that the County's Olowalu Recycling and Refuse Convenience Center is located immediately adjacent to the northern boundary of the OTMP.

Regarding your comment on hospital services, currently only Maui Memorial Medical Center provides hospital care for the entire island. The EIS noted that a privately owned and operated community hospital is planned in Kaanapali in the Kaanapali 2020 project approximately 8 miles from the OTMP which is intended to serve the West Maui region, including the OTMP. As a major regional facility community hospitals are not constructed in every community. The planned community hospital in Kaanapali will make it more convenient for West Maui residents who currently need to travel to Central Maui for hospital care, as well as eliminate potential medical problems when the highway to Central Maui is closed. Refer to **Exhibit "11"**.

Comment No. 23:

On pages 134-136 -The Draft EIS estimates 462 new students, from elementary to high school. As part of this discussion, the Olowalu Town Master Plan states that (p.135) a 10-15 acre site for an educational facility will be provided. Please indicate whether this site will conform to Department of Education (DOE) standards for Elementary, Middle, and High School locations. Please also provide information on what DOE standards and 'warrants' are for new school construction, for example, whether the new school-age child population anticipated at Olowalu will include enough children to warrant the construction of a new elementary, middle and/or high school within the Olowalu Town Master Plan.

Furthermore, traffic Impacts of children commuting off-site to attend school indicates that there will be 462 new students within Olowalu; unless a school facility is built within the Olowalu Town, these students will all have to travel off-site to attend school. Please provide a discussion of the traffic impacts to Honoapi'i ilani Highway-north and south of Olowalu Town -as a result of 462 students traveling to school(s) located in Lahaina or elsewhere.

Response:

According to the Department of Education's Analysis of the West Maui School Impact District, "the primary consideration in determining where to locate a new public school is convenience to public school students. New schools should be located where there will be large numbers of new houses". Currently, while approximately 10 to 15 acres of the OTMP will be set aside for an educational facility to be constructed by the Department of Education (DOE) or other educational provider, a specific site for the facility has not yet been determined. Although Olowalu Town LLC and Olowalu Ekolu LLC envision the facility to be constructed within a portion of the area designated for Public Amenities, the exact location of the site will be determined through further coordination with the DOE or other educational provider.

The DOE has provided written comment on the Draft EIS noting that the project calls for the provision of an approximately 10- to 15-acre site and recommended contact with the DOE to discuss details of the proposed site and impact fees. The applicant maintains its commitment to working with the DOE or other educational provider to determine a mutually agreeable location for a school facility. It is also noted that during the "Olowalu Talk Story" and further discussions with the community, a variety of suggestions were received regarding the type of school to be established in Olowalu. Those suggestions included a DOE-operated school, charter school and private school ranging from elementary, middle and high school, as well as a combination thereof.

School bus transportation is currently provided to Olowalu Town residents to Princess Nahienaena, Lahaina Intermediate and Lahainaluna High Schools. There is one route from Olowalu Town which uses a 42-passenger bus. (Source: By telephone, Transport Officer Robert Joseph, September 2012) Initially, until a new school can be constructed in the OTMP students would utilize the available school bus service to Lahaina Town. If the student enrollment increases beyond the existing 42-passenger bus the bus can be increased to a 72-passenger bus or separate routes established to the different schools. As the student population increases a school can then be constructed in the Master Plan. The student population would then be able to transfer to the new school in Olowalu Town. See **Exhibit "12"**.

Comment No. 24:

On page 137 - Please clarify if the recreational activities and parks proposed for the master plan will be private or public;

Response:

Recognizing the need for both inland and coastal recreational resources throughout the island, proposed recreational-related improvements associated with the project, while

located within the OTMP area and along its shores, will be open to and enjoyed by the public. The Final EIS has been revised to note such. See **Exhibit "13"**.

Comment No. 25:

On page 140 -Please expand your analysis to include the impact to visitors and residents who commute and use Honoapiilani Highway, both north (to Puamana) and south (to Maalaea) of the project, when the highway in these areas will remain at one (1) lane in each direction. We note that the highway will continue to operate at a level of service of E and F, as indicated in other traffic reports received by the Department. Further, the statement, "It is estimated that the level of service of the highway will be "C" or better" should be clarified that this prediction is only for the section of the highway being relocated, and not for the length of the entire highway (specifically from Maalaea to Lahaina). Impacts and mitigation for traffic impacts to Honoapiilani Highway, between Maalaea and Lahaina, should be evaluated;

Response:

In pre-consultation meetings with the State of Hawaii, Department of Transportation (HDOT), the scope of the traffic study was discussed. The HDOT agreed that the traffic traveling through Olowalu Town is primarily Maui residents and visitors traveling between Maalaea and Lahaina which are captured in the highway traffic counts conducted by traffic consultant, Roger Dyar. Traffic in the area is mainly through traffic. As such, with the agreement of HDOT, the traffic study was limited to the length of the highway from roughly the Olowalu Recycling and Refuse Convenience Center to approximately mile marker 14 or so. The TIAR analyzed the impacts and proposed mitigative measures such as limiting access to the OTMP area to three (3) intersections and the use of O-turns that allows traffic to enter and exit Olowalu Town without hindering the flow of traffic through Olowalu. With these mitigative measures the Level of Service (LOS) is expected to be "C" or better.

The relocation of the highway in Olowalu is part of a comprehensive highway improvement project by the HDOT. Implementation of the segment through Olowalu will be coordinated with other segments of the highway improvements, such as the Proposed Relocation of Lahaina Bypass Southern Terminus. Eventually, the highway capacity will improve for the length of Honoapiilani Highway from Maalaea to Lahaina Town. We note that the HDOT is separately undertaking planning and environmental impact disclosure for the Honoapiilani Highway Realignment/Widening, Maalaea to Launiupoko Project.

Comment No. 26:

On page 161 (and other pages within the Draft EIS) -It is repeatedly stated that the Master Plan is consistent with the County's Pali to Puamana Parkway Master Plan. However, this is misleading as the County's plan does not propose any additional development (e.g., urban uses) makai of the existing highway; does not comport exactly as depicted in the Master Plan; and did not include the many acres of development located mauka of the existing highway. Furthermore, as mentioned on pages 166 and 167, to compare the 28 acres of proposed park in the Pali to Puamana Parkway Master Plan to the 223 acres of green space in the entire proposed Olowalu Master Plan is apples-to-oranges and should be modified to reflect that the plans do not encompass the same project area;

Response:

As noted in the MIP, the Pali to Puamana Parkway Master Plan is envisioned as a series of passive and active recreational areas. Although the highway alignment and acreages in the OTMP do not reflect the exact boundaries identified in the proposed Pali to Puamana Parkway Master Plan, it meets the purpose and intent of the Plan by making provisions for a realigned highway as well as parks and open space makai of the existing Honoapiilani Highway

The adopted MIP notes that the distinct boundaries and specific locations of parks, open space and recreational uses will be further defined as a part of the West Maui Community Plan review process. Specifically, the MIP states:

"The distinct boundaries of parks and open space, specific locations of the recreational uses, and the precise amenities will be further defined during the West Maui Community Plan Update and the project review and approval process."

Comment No. 27:

On page 166 - Although the Hawaii Department of Transportation (HDOT) has begun the initial stages of drafting an EIS for the relocation of Honoapiilani Highway (from Maalaea to Launiupoko), the effort has been on-going and tedious. The Applicant's language in this section gives the impression that the project is underway; however, the Draft EIS has yet to be finished and there has been no planning or funding secured for the project. Please verify with HDOT, and include information in this section on the status of the project and its estimated timeline;

Response:

There are ongoing discussions with the HDOT. Although there is no planning or funding for the Relocation of Honoapiilani Highway (from Maalaea to Launiupoko), in discussions with HDOT, they have indicated that their preparation of the Draft EIS is still being pursued. The HDOT has not established an estimated timeline when the Draft EIS will be completed.

Comment No. 28:

On pages 165-169 -The Department notes that the project is located several miles from major regional activity centers on the island, including Maui's larger employment centers. Further, the Draft EIS does not clearly address the level of public infrastructure, services and facilities needed to support the project. Without this information being provided, the projects potential impacts upon public services, facilities and resources cannot be clearly determined;

Response:

As noted in the Draft EIS a key component of the proposed OTMP is the planning concept of "New Urbanism" and "Smart Growth". As such, the OTMP is planned as a complete community consisting of housing, public infrastructure and facilities, supporting commercial, recreation and open space. As a sustainable community, the economic viability of the project is essential. The OTMP includes potential centers of employment within Olowalu Town, such as offering daily goods and services to the community's residents. Initially the project will be supported largely by highway traffic and tourists. As the residential uses in the project are developed, the local residents will have a more important role in supporting the commercial uses in the project.

As previously stated, impacts to public facilities and services have been addressed in response to your Department's Comment No. 22.

Relative to infrastructure improvements, the Draft EIS includes consultant reports and conceptual plans for water, sewer, drainage and roadway systems to support the project. Water resources are available to support the project and the applicant proposes to develop new infrastructure for sewers, drainage and roadways concurrently with the project.

Greater engineering design specificity on infrastructure will be addressed as the OTMP progresses towards implementation. As the project is in the preliminary stage of the various land entitlements and permits, site specific information on infrastructure have not been included in the EIS. Rather, engineering design concepts and schematic-level

calculations have been prepared to validate the viability of proposed design solutions and technologies.

OTMP is proposed to be a Project District, and is located within the Special Management Area (SMA) of the island of Maui. The Project District process involves three (3) phases that are reviewed by the Maui County Council, Maui Planning Commission and Department of Planning and approved by the appropriate body. Also, the SMA Use Permit for each specific development component of the OTMP located within the SMA will be required. During these entitlement and permitting processes more specific design development plans and reports will be included for review.

As with other development projects, the applicant will front the costs of initial infrastructure improvements to the extent required. Where partnerships with other private development and governmental entities are possible, such partnerships for funding will be pursued. As the project is implemented and product sales and tenant leases are executed, revenues from these transactions will be used to repay infrastructure financing debt and enable financing arrangements for subsequent phases of the OTMP.

Comment No. 29:

There are a number of references made throughout the Draft EIS that refer to incorrect Table numbers. The Department suggests that a thorough review of any reference to a Table be made for the entire document (e.g., on pages 210 and 211, Table 6 is referenced for land use designations. Table 6, however, is the "Master Plan Preliminary Implementation Time Schedule");

Response:

Thank you for your comment. We have reviewed the EIS to ensure the proper tables are referenced.

Comment No. 30:

Please include a map of the Draft Flood Insurance Rate Map (FIRM) and provide an analysis between the current map and the proposed Draft FIRM and its impact on the Master Plan;

Response:

The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) for the Olowalu areas was revised and adopted on September 19, 2012. As such, a new FIRM is in the EIS. See **Exhibit "14"**.

Comment No. 31:

Please provide a map of the tsunami inundation zone;

Response:

The FIRM map includes the VE and AE zones which are the tsunami inundation zone. Refer to **Exhibit “14”**. However, we have included a tsunami evacuation map. See **Exhibit “15”**.

Comment No. 32:

Appendix J: View Analysis. As stated by the Department in the EISPN comment letter dated August 6, 2010, please provide computer generated photos of the area with the proposed development. The Draft EIS should provide a more detailed written analysis of the effect of 1,500 residences, 375,000 square feet of commercial space, and public facilities on existing scenic resources. This analysis should include ‘Photoshop’ and/or SketchUp model renderings of the primary view corridors through the site with building envelopes of Olowalu Town mocked up as it would be completely built out. Photographs 1-6 especially should provide both ‘before’ and ‘after’ images of the scenic resources, i.e., as they exist at present (before) and as they will be impacted with the addition of Olowalu Town development (after);

Response:

The OTMP addresses at a conceptual level, land uses and their spatial relationships, along with attendant density implications. We believe that the view analysis presented in Appendix “J” of the Draft EIS appropriately provides information with respect to view considerations, consistent with the conceptual stage of the OTMP’s land use planning. Detailed design scenarios which address building massing, building orientation, and landscape planting plans at specific locations as they relate to specific users or uses, will be developed in subsequent phases of project development. In this regard, OTMP will require several entitlements before construction can be initiated. During each phase of OTMP implementation greater specificity regarding views will be provided. OTMP is proposed to be a Project District, which is a three (3) phase approval process, and is located within the SMA of the Island of Maui. During review of these permits by the Maui County Council, Maui Planning Commission and Maui Planning Department site specific view analysis will be required. For example, SMA permitting analysis as well as Project District Phase II and Phase III processes will provide opportunity for project related view analysis.

Comment No. 33:

Appendix K -The consultant for the Market Study bases their assertion that all 1,500 units at Olowalu would be absorbed by the real estate market in eight (8) to ten (10) years on the assumption that future development projects that are within the Maui Island Plan's Directed Growth boundaries could meet with community resistance or financial difficulties, and not be built, thus leaving room for Olowalu's units to be absorbed in the market (page iii). The Draft Maui Island Plan already includes a surplus of dwelling units in the West Maui Community Plan area. Please provide an analysis of market absorption that does not rely on other projects not being constructed -that is, what would be the market absorption rate if all approved future projects within the current growth area boundaries are built and entered into the West Maui real estate market;

Response:

During review of the MIP, for planning purposes, housing was allocated to the various community plan regions. However, it is important to recognize that those seeking housing opportunities do not necessarily observe projections identified in each of the community plan regions. Other factors determine where residents choose to live, such as, but not limited to location, cost, housing types, available services, employment, recreation, and the environment. Therefore, although the MIP indicates a surplus of dwelling units in the West Maui Community Plan area, the Olowalu Town Master Plan should not be restricted to only West Maui but should be considered in the context of the housing needs of the entire island of Maui.

As previously mentioned, we understand that the projections of the Department hold value and purpose with respect to guiding land use allocation decisions through the MIP development process. We also believe that the projections should be considered a long range planning tool with a degree of flexibility. From a project planning and development standpoint, factors which affect development feasibility and timing include market conditions, financial capacity of the development entity, and regulatory, infrastructural and policy considerations affecting a particular parcel or region (e.g. water availability).

In the 18 years leading up to 2030, there will likely be fallout in the planned projects that comprise the 11,600 forecasted units. In the past there have been numerous projects planned and approved which have been either delayed or never built. Whether for financial reasons or regulatory or policy constraints, certain projects will not be built.

In Lahaina, Villages at Leialii began in the 1980s but was halted after construction of infrastructure for its first village. As a consequence, West Maui lost a large portion of its proposed inventory and the anticipation of affordable housing in Lahaina suddenly

disappeared. In the ensuing years, West Maui's need for affordable housing continued, with a large amount of new inventory built during this period consisting of resort homes.

In summary, from a technical and analytical standpoint, the assumption that some projects will not be implemented, combined with an unconstrained free market assumption (i.e., units in West Maui will not necessarily be purchased by those living in West Maui), provides a reasonable basis for deriving market absorption conclusions as set forth in Appendix K of the Draft EIS.

Comment No. 34:

Appendix L - This assessment neglects to account for numerous CIP and operational expenditures that will be necessitated by the Olowalu Town project, and it overestimates government revenues.

Missing from the calculations are the County's costs to provide the following services: police, fire, civil defense, housing and human concerns, solid waste, public works, development services, and planning. Notably lacking was the cost of providing facilities and vehicles (fire, police, solid waste) that would be needed to serve these 4,000+ residents and 1,500 homes.

Similarly, there is an underestimate of the costs to provide many additional State services for the 4,000+ new residents. These range from schools, medical facilities, prisons and highways, and the maintenance of these and many other CIP projects. Just as the costs to government were underestimated, projected County and State revenues have been overestimated. The Final EIS should correct these calculations and present an accurate projection of the economic costs and realistic potential revenues to Maui County and to the State of Hawaii.

Response:

The projections for the cost of providing facilities, infrastructure, services and operational expenses as well as projected revenues were obtained utilizing estimated construction costs, acceptable multipliers, tax rates, interest rates, earnings estimates, demographic information and per capita government expenditures. Underlying the assessment's projections is the premise that each community is not a self-contained town all to itself. For instance, when budgets are forecasted by government agencies, they are based on expected overall growth on the island. Whether this growth occurs in Haiku, Kahului, Kula or Lahaina, expenses are budgeted based on the anticipated changes.

Although OTMP is expected to have approximately 4,000 residents upon completion, they will not all be brand new to the island. OTMP will not have 1,500 families

immigrating to the island and placed into its new homes. Appendix L of the Draft EIS notes that the new buyers will primarily consist of existing Maui residents who are already receiving and benefiting from government services, facilities and infrastructure. As populations on the island begin to shift to OTMP, the government budget for resources will need to be proportionately reallocated to accommodate both the existing and new population centers.

In summary, we believe that the technical analysis undertaken to draw conclusions with respect to fiscal impact considerations are appropriate.

Comment No. 35:

The Countywide Policy Plan and West Maui Community Plan objectives and policies - The Department notes that the Applicant did not adequately address or respond to many relevant objectives and policies contained within these documents that appear to be in conflict with the Master Plan. The Department asks that the Applicant further expand its analysis on those policies and objectives discussed and include others that were completely omitted from the Draft EIS; and

Response:

As the Applicants we are respectful of the various policy directives of the various County General Plan documents, including the County-wide Policy Plan, Maui Island Plan and West Maui Community Plan. The general plan framework provides the needed strategic guidance for the future of Maui County. We recognize that the multidisciplinary and multi-functional aspects of the general plan hierarchy may indicate areas of competing priorities. It is through the land use entitlement process that evidence presented will facilitate determination of relative priorities as they relate to the various goals, objectives, and policies. The EIS includes what the applicants believe to be the most pertinent goals, objectives, and policies. If specific policy statements are not included in the EIS, this should not be misinterpreted as a disregard for any functional goal, objective or policy of the general plan system. Instead, there is recognition through reference of the County-wide Policy Plan, Maui Island Plan and West Maui Community Plan in the EIS, that decision-making bodies have access to all documents and should specific policy based issues arise which may require further discussion, those then can be addressed during the deliberation phase of the land use entitlements process.

We have reviewed the general plan documents and have included the pertinent goals, objectives, and policies in the EIS. See **Exhibit "16"** and refer to **Exhibit "1"**.

Comment No. 36:

The following are general comments and recommendations are provided regarding Cultural Resources:

Olowalu Draft EIS Vol II Appendices, "Pu'u honua: The Legacy of Olowalu" and "Archaeological Literature Review" are both well-researched and well-written documents. The latter report in particular presents data in formats which benefit both the professional and the layperson and establishes new thresholds for the use of applied GIS and data collection. In addition, the recommendations that are included are consistent with Cultural Resource Management best practices and for that reason, provide an excellent example on how to integrate new development with cultural resource preservation.

One important recommendation for the Olowalu Cultural Reserve (OCR) remains absent and should be included: a multi-property nomination to the Hawai'i and National Registers of Historic Places for all sites contained in the OCR as well as sites identified along the shoreline. Please include.

Response:

During OTMP implementation and in consultation with the OCR your request to pursue nomination of the sites within the OCR to the Hawaii and National Registers will be considered. Of particular interest to the OCR is a potential nomination to be placed on the National Register. Such standing would provide an opportunity to obtain Federal preservation grants for planning and rehabilitation, Federal investment tax credits, preservation easements to nonprofit organizations, and International Building Code fire and life safety code alternatives. However, the decision to pursue historic register recognition lies with the OCR and not the Applicants. To the extent that sites along the shoreline, beyond the limits of the OCR, are worthy of nomination consideration, we would have no objections to participating in the nomination process.

Comment:

In addition, given the quality of the Draft EIS appendices, it is problematic that the historical information presented in Olowalu Draft EIS, Vol. I includes a number of errors and inconsistencies. The historical narrative found on the Applicants' website "Olowalu Town", written by Gail Ainsworth, is well-written and contains much important information. Aside from an absence of sources and references, Ms. Ainsworth's complete text should have been incorporated into Vol. I or, at minimum, should have been provided as an appendix in Vol. II, with references added as either footnotes or endnotes. Time constraints do not allow a more in-depth review of the material; however, some of the most obvious errors in the narrative have been provided in this

comment letter for revision and or correction. Please add Ms. Ainsworth's text as an appendix to Vol. II.

Response:

Inclusion of information researched by Ms. Gail Ainsworths was obtained from the website <http://www.olowalu.net>. This site is accessible to the public should there be a need for further review of this reference.

We appreciate the input provided and will be including a copy of your department's letter and this response letter in the Final EIS for the project. A copy of the Final EIS will be submitted to your department.

Very truly yours,



William Frampton
Frampton & Ward LLC



Dave Ward
Frampton & Ward LLC

WF

cc: Daniel E. Orodenker, Executive Officer, Land Use Commission
Peter Martin, Olowalu Ekolu, LLC
Jennifer Lim, Carlsmith Ball, LLP
Colleen Suyama, Munekiyo Hiraga

project and will incorporate innovative, efficient, and sustainable technologies to minimize adverse impacts to the environment.

The Master Plan will preserve important open space and cultural resources. Approximately 223 acres of parks and open space will be provided. In addition, no development will occur within 150 feet of the shoreline.

The development of the Master Plan both Alternatives 1 and 2 embodies the core principles advocated by the Countywide Policy Plan. Importantly, since 2005, the Maui community, especially the Olowalu community, has been involved in the project's planning process. Respecting its natural environment and cultural heritage, the Master Plan is both Alternatives 1 and 2 are modeled after the Hawaiian ahupua'a system of land use recognizing the importance of Olowalu Stream and the connection between the ocean and mountain environments, as well as the rich cultural heritage of the area. The Master Plan Both Alternatives 1 and 2 incorporates the principles of sustainability, cultural preservation and economic diversity to create neighborhoods sensitive to its environment and cultural heritage.

The Master Plan Both Alternatives 1 and 2 proposes to establish an economic base consisting of agriculture, community needs, and support services and new entrepreneurialism to support the community's sustainability goals. The Master Plan is for Alternatives 1 and 2 is envisioned to disperse population growth into a distinct community from Lāhainā Town separated by agricultural open space and topographic boundaries. The Master Plan alternatives includes retaining approximately 28 acres of agricultural lands in Olowalu as 14 agricultural homesteads and, as part of well as expand the OCR in order to perpetuate native Hawaiian agricultural practices.

In summary, the Master Plan is both Alternatives 1 and 2 are consistent with the themes and principles of the Countywide Policy Plan.

Maui Island Plan

The second component of the Maui County General Plan 2030 is the MIP. The MIP will set forth an islandwide land use strategy for Maui and encompasses a managed and directed growth plan which includes the delineation of urban and rural growth boundaries. The MIP has undergone review by the GPAC and the MPC and is currently under review by the Maui County Council. Both the GPAC and MPC recommended the inclusion of the Master Plan in the MIP. The Planning Director's transmittal of the MIP to the Maui County Council on

October 16, 2009 excluded the Master Plan from the MIP's directed growth boundaries. While the process for review and approval of the MIP is ongoing, the applicant will continue to be an active participant in the MIP process. Due to the uncertainties surrounding the timing of the County Council's approval of the MIP and the lengthy entitlement process for the proposed project, the applicant is continuing to proceed with land entitlement applications for the proposed project while the MIP review continues. If the MIP is adopted prior to the submittal of the Final EIS, the Final EIS will address the project's compliance with the MIP goals, objectives, and policies. It is noted that the respective regional community plans will be updated following the adoption of the MIP. Refer to **Appendix "O"**. The MIP is applicable to the island of Maui only, providing more specific policy-based strategies for population, land use, transportation, public and community facilities, water and sewage systems, visitor destinations, urban design, and other matters related to future growth.

As provided by Chapter 2.80B, the MIP shall include the following components:

1. *An island-wide land use strategy, including a managed and directed growth plan*
2. *A water element assessing supply, demand and quality parameters*
3. *A nearshore ecosystem element assessing nearshore waters and requirements for preservation and restoration*
4. *An implementation program which addresses the County's 20-year capital improvement requirements, financial program for implementation, and action implementation schedule*
5. *Milestone indicators designed to measure implementation progress of the MIP*

It is noted that Ordinance No. 4004 does not address the component relating to the implementation program. Chapter 2.80B of the Maui County Code, relating to the General Plan, was amended via Ordinance No. 3979, October 5, 2012, to provide that the implementation program component be adopted no later than one (1) year following the effective date of Ordinance No. 4004. In December 2013 and March 2014, the Council approved time extensions for approval and adoption of the implementation chapter of the MIP. The implementation program component of the MIP was adopted by Ordinance No. 4126 on May 29, 2014.

The MIP addresses a number of planning categories with detailed policy analysis and recommendations which are framed in terms of goals, objectives, policies and implementing actions. These planning categories address the following areas:

1. *Population*
2. *Heritage Resources*
3. *Natural Hazards*
4. *Economic Development*
5. *Housing*
6. *Infrastructure and Public Facilities*
7. *Land Use*

An essential element of the MIP is its directed growth plan which provides a management framework for future growth in a manner that is fiscally, environmentally, and culturally prudent. Among the directed growth management tools developed through the MIP process are maps delineating UGB, small town boundaries (STB), and RGB. The respective boundaries identify areas appropriate for future growth and their corresponding intent with respect to development character.

The MIP designates Olowalu as an appropriate location for future growth on its Directed Growth Maps. The mauka portion of the proposed Master Plan for Alternative 1 is located within the UGB and RGB. The lands makai of Honoapiʻilani Highway in Alternative 1 are not included in the UGB. However, the MIP states that “the future delineation of potential urban growth areas makai of the existing Honoapiʻilani Highway may be undertaken in conjunction with updates or amendments to the West Maui Community Plan” (MIP at 8-64). Such delineation may consider the need to protect adjacent coastal and marine ecosystems (including the reefs at Olowalu), enhance public shoreline access and open space, and implement the proposed Pali to Puamana Parkway plan. See **Figure 29** and **Appendix “R”**.

Alternative 2 does not include the makai lands and is in the UGB and RGB in the MIP. Refer to **Figure 29** and **Appendix “R”**.

In addition, both Alternatives 1 and 2 have been reviewed with respect to pertinent goals, objectives, policies and implementing actions of the MIP. A summary of policy statements most relevant to the proposed action is provided below:

CHAPTER 1 POPULATION

Goal: Maui’s people, values, and lifestyles thrive through strong, healthy, and vibrant island communities.

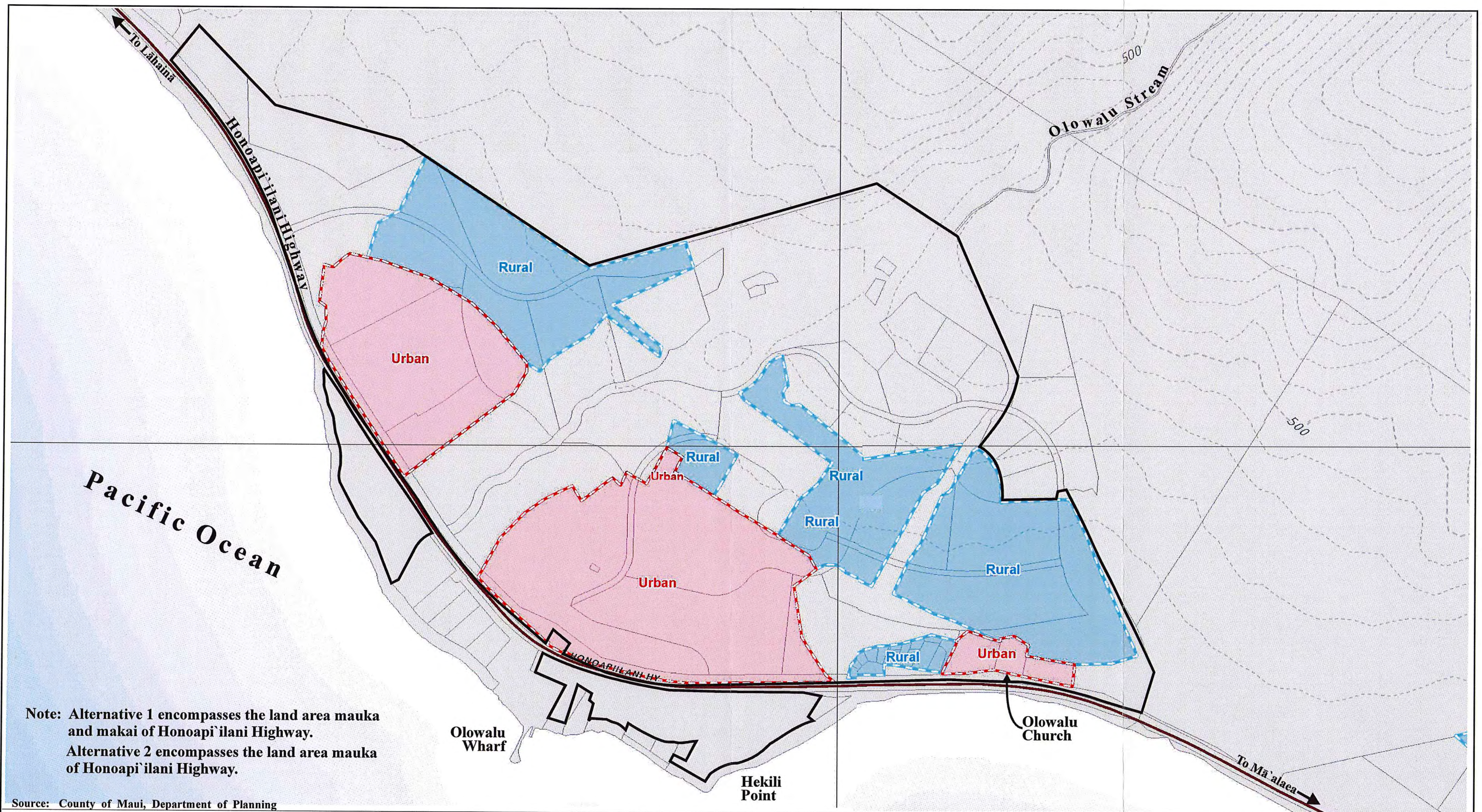


Figure 29

Proposed Olowalu Town Master Plan Maui Island Plan Map

NOT TO SCALE



Objective: Greater retention and return of island residents by providing viable work, education, and lifestyle options.

Policy: Expand housing, transportation, employment, and social opportunities to ensure residents are able to comfortably age within their communities.

CHAPTER 2 HERITAGE

Cultural, Historic, and Archaeological Resources

Goal: Our community respects and protects archaeological and cultural resources while perpetuating diverse cultural identities and traditions.

Objective: An island culture and lifestyle that is healthy and vibrant as measured by the ability of residents to live on Maui, access and enjoy the natural environment, and practice Hawaiian customs and traditions in accordance with Article XII, Section 7, Hawai'i State Constitution, and Section 7-1, Hawai'i Revised Statutes (HRS).

Policies: Ensure traditional public access routes, including native Hawaiian trails, are maintained for public use.

Support the education of visitors and new residents about the customs and etiquette of the Hawaiian culture, as well as other cultures.

Objective: Enhance the island's historic, archaeological, and cultural resources.

Policy: Support opportunities for public involvement with the intent to facilitate the protection and restoration of historic and archeological sites, including consultation with stakeholders.

Shoreline, Reefs, and Nearshore Waters

Goal: An intact, ecologically functional system of reef, shoreline, and nearshore waters that are protected in perpetuity.

Objective: Improved reef health, coastal water quality, and marine life.

Policy: Create additional mechanisms, where needed, to contain and control runoff and pollution.

Objective: Water quality that meets or exceeds State Clean Water Act standards.

Policies: Reduce the amount of impervious surface and devise site plan standards that aim to minimize storm runoff and Nonpoint Source (NPS) pollution.

Require an on-site monitoring program, where applicable, when grading may pose a threat to water quality or when recommended in the Erosion and Sediment Control Plan (ESCP).

Avoid development actions that impair Maui's reef systems and remove identified stressors.

Phase out cesspools and restrict the use of septic systems in ecologically sensitive coastal areas by converting to environmentally-friendly alternative sewage treatment systems, and connecting to central sewerage systems when and where feasible.

Prohibit the development of new wastewater injection wells, except when unavoidable for public health and safety purposes.

Implementing Action: Transition from the use of wastewater injection wells to appropriate, environmentally sound methods of wastewater disposal, and promote the beneficial reuse of wastewater effluent.

Objective: Acquire additional shoreline lands and shoreline access rights.

Watersheds, Stream and Wetlands

Goal: Healthy watersheds, streams, and riparian environments.

Objective: Greater protection and enhancement of watersheds, streams, and riparian environments.

Policies: All present and future watershed management plans shall incorporate concepts of ahupua`a management based on the interconnectedness of upland and coastal ecosystems/species.

Support regulations to require developments to utilize ahupua`a management practices.

Work with private and non-profit entities to educate the public about the connection between upland activities within the watershed and the impacts on nearshore ecosystems and coral reefs.

Objective: Decreased NPS and point source pollution.

Policies: Support the use of Low Impact Development (LID) techniques such as those described in the State of Hawai`i LID Practitioner's Guide (June 2006), as amended.

Encourage farmers and ranchers to use agricultural Best Management Practices (BMPs) to address NPS pollution.

Objective: Greater preservation of native flora and fauna biodiversity to protect native species.

Policies: Work with appropriate agencies to eliminate feral ungulate populations and invasive species.

Support the work of conservation groups and organizations that protect, reestablish, manage, and nurture sensitive ecological areas and threatened indigenous ecosystems.

Implementing Action: Develop strategic partnerships with conservation groups and organizations to maximize Federal, State, County, and private funding; and increase cooperation to achieve conservation goals.

Objective: Enhance the vitality and functioning of streams, while balancing the multiple needs of the community.

Wildlife and Natural Areas

Goal: Maui's natural areas and indigenous flora and fauna will be protected.

Objective: A comprehensive management strategy that includes further identification, protection, and restoration of indigenous wildlife habitats.

Policy: Identify and inventory the following:

- (1) Natural, recreational, and open space resources;
- (2) Flora and fauna with medium, high, and very high concentrations of threatened or endangered species; and
- (3) Location and extent of invasive species.

Objective: A decrease in invasive species through programs and partnerships that eradicate undesirable species and protect native habitat.

Objective: Greater protection of sensitive lands, indigenous habitat, and native flora and fauna.

Policies: Secure an interconnected network of sensitive lands, greenways, watercourses, and habitats.

Protect Maui's sensitive lands.

Scenic Resources

Goal: Maui will continue to be a beautiful island steeped in coastal, mountain, open space, and historically significant views that are preserved to enrich the residents' quality of life, attract visitors, provide a connection to the past, and promote a sense of place.

Objective: A greater level of protection for scenic resources.

Policies: Protect views to include, but not be limited to, Haleakalā, `Īao Valley, the Mauna Kahalawai (West Maui Mountains), Pu`u O`la`i, Kaho`olawe, Molokini, Moloka`i, and Lāna`i, Mauna Kea, Mauna Loa, sea stacks, the Pacific Ocean, and significant water features, ridgelines, and landforms.

Protect “night sky” resources by encouraging the implementation of ambient light ordinances and encouraging conversion of all sources that create excessive light pollution, affecting our ability to view the stars.

Protect ridgelines from development where practicable to facilitate the protection of public views.

Protect scenic resources along Maui’s scenic roadway corridors.

Implementing Action: Establish design guidelines that integrate techniques such as development clustering, greenbelts, and open space buffers, site plan configuration to protect view planes, building design and height limitations, setbacks from public roadways, landscaping, and other techniques.

CHAPTER 3 NATURAL HAZARDS

Goal: Maui will be disaster resilient.

Objective: Greater protection of life and property.

Policy: Encourage the use of construction techniques that reduce the potential for damage from natural hazards.

CHAPTER 4 ECONOMIC DEVELOPMENT

Economic Diversification

Goal: Maui will have a balanced economy composed of a variety of industries that offer employment opportunities and well-paying jobs and a business environment that is sensitive to resident needs and the island’s unique natural and cultural resources.

Objective: A more diversified economy.

Policies: Support the creation of new jobs and industries that provide a living wage.

Facilitate and expedite permits and approvals.

Objective: Increase activities that support principles of sustainability.

Policies: Support industries that are sustainable, and culturally and environmentally sensitive.

Encourage and support local businesses.

Support the development of economic development clusters in targeted industry sectors.

Encourage all businesses to save energy, water, and other resources.

Objective: Improve the island's business climate.

Policies: Ensure an adequate supply of affordable workforce housing.

Develop neighborhoods and communities that are attractive to the workforce of a diversified economy.

Visitor Industry

Objective: Comprehensively manage future visitor-unit expansion.

Policy: Allow, where permitted by the community plan, the development of business hotels and small, sensitively-designed inns.

Agriculture

Goal: Maui will have a diversified agricultural industry contributing to greater economic, food, energy security, and prosperity.

Policies: Strive to substitute food/agricultural product imports with a reliable supply of locally produced food and agricultural products.

Encourage growing a diverse variety of crops and livestock to ensure the stewardship of our land while safeguarding consumer safety.

Implementing Action: Encourage the development of community gardens, including gardens on greenbelts that separate communities.

Emerging Sectors

Goal: A diverse array of emerging economic sectors.

Policy: Support new industries that are environmentally and culturally sensitive such as health and wellness, sports and outdoor activities, cultural activities, the arts, film-making, entertainment, and digital media.

Small Business Development

Goal: Small businesses will play a key role in Maui's economy.

Policies: Assist traditional "mom and pop" business establishments.

Support community markets and venues that sell locally-made produce, goods, and services.

Health Care Sector

Goal: Maui will have a health care industry and options that broaden career opportunities that are reliable, efficient, and provide social well-being.

Objective: Expand the economic benefits of the health care sector.

Policy: Encourage expansion and improved access to emergency care in all communities.

Education and Workforce Development

Goal: Maui will have effective education and workforce development programs and initiatives that are aligned with economic development goals.

Policy: Encourage the education and training of our residents to meet the needs of a diversified economy.

CHAPTER 5 HOUSING

Goal: Maui will have safe, decent, appropriate, and affordable housing for all residents developed in a way that contributes to strong neighborhoods and a thriving island community.

Objectives: More livable communities that provide for a mix of housing types, land uses, income levels, and age.

Provide affordable housing, rental or in fee, to the broad spectrum of our island community.

Provide infrastructure in a more timely manner to support the development of affordable housing.

Policies: Prioritize the development of infrastructure that supports the development of affordable housing.

Tailor infrastructure requirements to correspond with appropriate level-of-service standards to help control housing costs and to maintain safety.

Objectives: A wider range of affordable housing options and programs for those with special needs.

Reduce the cost to developers of providing housing that is affordable to families with household incomes 160 percent and below of annual median income.

Policy: Require the construction of affordable for-sale and rental housing units as part of the construction of new housing developments.

CHAPTER 6 INFRASTRUCTURE AND PUBLIC FACILITIES

Wastewater

Goal: Maui will have wastewater systems that comply with or exceed State and Federal regulations; meet levels-of-service needs; provide adequate capacity to accommodate projected demand; ensure efficient, effective, and environmentally sensitive operation; and maximize wastewater reuse where feasible.

Policy: Establish new wastewater treatment plant(s) outside the tsunami zone.

Objective: Adequate levels of wastewater service with minimal environmental impacts.

Policies: Meet or exceed all State and Federal standards regulating wastewater disposal or reuse.

Strongly encourage the phase out of cesspools.

Objective: Increase the reuse of wastewater.

Water

Goal: Maui will have an environmentally sustainable, reliable, safe, and efficient water system.

Objectives: More comprehensive approach to water resources planning to effectively protect, recharge, and manage water resources including watersheds, groundwater, streams, and aquifers.

Increase the efficiency and capacity of the water systems in striving to meet the needs and balance the island's water needs.

Policies: Maximize the efficient use of reclaimed wastewater to serve non-drinking water needs.

Acquire and develop additional sources of drinking water.

Transportation

Goal: An interconnected, efficient, and well-maintained, multimodal transportation system.

Objective: Provide for a more integrated island-wide transportation and land use planning program that reduces congestion and promotes more efficient (transit-friendly) land use patterns.

Policies: Plan for an integrated multi-modal transportation system comprised of public transit, bicycle, pedestrian, automobile, and other transportation modes.

Refocus transportation investment from the construction of additional roadways only for the automobile to the expansion of a multimodal transportation system.

Encourage the use of “complete streets” design methods.

Objective: Safe, interconnected transit, roadway, bicycle, equestrian, and pedestrian network.

Policies: Ensure transit-, roadway-, and pedestrian-facilities design and level-of-service standards respect the unique character of our communities.

Prioritize transportation improvements list to cost-effectively meet existing and future needs consistent with the MIP.

Require new development, where appropriate, to integrate sidewalks, pathways, bikeways, and transit infrastructure into new commercial and residential projects while enhancing community character.

Transit

Goal: An island-wide transit system that addresses the needs of residents and visitors and contributes to healthy and livable communities.

Objective: An integrated transit system that better serves all mobility needs of Maui's residents and visitors.

Policies: Maximize access to public transit in town centers, commercial districts, and employment centers.

Expand regional and inter-regional transit services, where appropriate, in heavily traveled corridors and within communities.

Increase the frequency of current service, add additional bus routes as demand requires, and transition to nonpolluting transit vehicles, as funding permits.

Provide adequate transit infrastructure (e.g., bus pullouts, waiting benches and shelters, signs) along existing and future transit right-of-ways.

Parks

Goal: Maui will have a diverse range of active and passive recreational parks, wilderness areas, and other natural-resource areas linked, where feasible, by a network of greenways, bikeways, pathways, and roads that are accessible to all.

Policies: Support, consistent with the MIP, the implementation of open-space and recreational plans, such as the Pali to Puamana Parkway Master Plan and the *Upcountry Greenways Master Plan*.

Utilize the ahupua'a approach by integrating mauka-to-makai natural landscapes into an island-wide parks and recreation functional plan.

Provide a balanced mix of passive and active parks, including neighborhood, community, and regional parks, in each community plan area.

Objective: Achieve parks and recreation opportunities to meet the diverse needs of our community.

Policies: Establish appropriate level-of-service standards at the neighborhood, community, and regional levels.

Identify and acquire parks and recreational facilities that address existing park inadequacies and complement and enhance neighborhoods, communities, and natural land features.

Design park facilities to preserve and enhance natural site characteristics, maximize views, protect environmental and cultural sites, and minimize water demands.

Acquire lands along the shoreline, between coastal roadways and the ocean.

Encourage the development of regional parks, district parks, and greenways in a manner that helps to contain sprawl, provide separation between distinct communities, or offer open space within urban communities.

Require large master-planned communities that incorporate a mixture of park facilities pursuant to parks standards and functional plans.

Support public-private partnerships to implement the acquisition and development of parks when consistent with the General Plan.

Objective: An expanded network of greenways, trails, pathways, and bikeways.

Policies: Link existing and future park sites, natural areas, the shoreline, and residential areas with a network of bikeways, pedestrian paths, trails, and greenways.

Collaborate with the State and private land owners to ensure perpetual access and proper stewardship of traditional trails and access systems.

Public Facilities

Goal: Maui will have adequate public facilities that meet the diverse needs of residents.

- Policies:** Adequately plan and fund public safety facilities (fire, police, ambulance, civil defense) to meet community needs.
- Encourage public-private partnerships to identify and resolve public facility plan shortcomings when consistent with the General Plan.
- Incorporate community/area residents' input to determine the appropriate location and design of public facilities.

Schools and Libraries

- Goal:** Maui will have school and library facilities that meet residents' needs and goals.
- Objective:** Assist in providing appropriate school and library facilities in a timely manner and in strategic locations.
- Policies:** Work in partnership with all educational institutions to meet current and future needs including appropriate location, timing, and design of future facilities.
- Encourage the Department of Education to build and maintain smaller, community-oriented schools.
- Support partnerships (public/private/nonprofit) to build and staff new schools and improve existing facilities.
- Objective:** Provide a more expansive network of safe and convenient pedestrian-friendly streets, trails, pathways, and bikeways between neighborhoods and schools where appropriate.
- Policy:** Encourage the State to build new school facilities in appropriate locations that minimize time and distance for students to travel to and from school.
- Implementing Action:** Encourage the State to build new school facilities in appropriate locations that minimize time and distance for students to travel to and from school.

Health Care

Goal: All of Maui residents will have the best possible health care to include healthy living, disease prevention, as well as acute and long-term care.

Policies: Support the immediate development of a critical access hospital in West Maui.

Improve medical service to remote and outlying regions.

Energy

Goal: Maui will meet its energy needs through local sources of clean, renewable energy, and through conservation.

Policies: Support energy efficient systems, processes, and methods in public and private operations, buildings, and facilities.

Encourage the installation of renewable energy systems, where appropriate.

CHAPTER 7 LAND USE

Agricultural Lands

Policy: Strongly discourage the conversion of productive and important agricultural lands (such as sugar, pineapple, and other produce lands) to rural or urban use, unless justified during the General Plan update, or when other overriding factors are present.

Objective: Support and facilitate connectivity between communities.

Policy: Discourage land use and urban design that impedes interconnectivity between adjacent communities.

Rural Areas

Goal: Maui will have a rural landscape and lifestyle where natural systems, cultural resources, and farm lands are protected and development enhances and compliments the viability and character of rural communities.

Policies: Focus development to areas inside urban, small town, and rural growth boundaries to preserve natural, cultural, and agricultural resources.

Encourage the use of alternative stormwater management techniques that minimize land disturbance and preserve natural drainage features.

Encourage green belts, open space buffers, and riparian zones to minimize conflicts between agriculture and residential uses.

Objective: More appropriate service/infrastructure standards to enhance and protect the island's rural character and natural systems.

Policies: Minimize impermeable surfaces within rural areas.

Use infrastructure, public service, and design standards that are appropriate to rural areas.

Discourage land use and urban design that impede interconnectivity between adjacent communities.

Urban Areas

Goal: Maui will have livable human-scale urban communities, an efficient and sustainable land use pattern, and sufficient housing and services for Maui residents.

Objective: Facilitate and support a more compact, efficient, human-scale urban development pattern.

Policies: Encourage the development and implementation of neighborhood design standards that are environmentally friendly, such as LEED for Neighborhood Development (LEED –ND) standards.

Promote agriculture by encouraging community gardening, community-supported agricultural programs, and farmers markets within and adjacent to urban areas.

Discourage land use and urban design that impedes inter-connectivity between adjacent communities.

Objective: Facilitate more self-sufficient and sustainable communities.

Policies: When developing new communities, provide sufficient lands for commercial, appropriate industrial, educational, spiritual, and non-profit uses to serve the daily needs of community residents.

Site community facilities such as schools, parks, libraries, and community centers within walking and biking distance of residences.

Develop communities that provide sufficient parks, schools, libraries, and other essential public facilities and services to serve resident needs.

Promote agriculture by encouraging community gardening, edible landscaping, community-supported agricultural programs, and farmers markets within and adjacent to urban areas.

CHAPTER 8: DIRECTED GROWTH

The Directed Growth Maps include UGB, RGB, and STB as a directed growth strategy for Maui island. According to the MIP the UGBs, STBs, and RGBs are used to identify and protect farms and natural areas from sprawl and to promote the efficient use of land, and the efficient provision of public facilities and services within the respective growth boundaries. The UGBs, STBs, and RGBs take into account future growth projections through 2030, the availability of infrastructure and services, environmental constraints, and an approximate density of land development to determine the placement of the boundary. Land outside of the UGB is intended to remain rural in character with a strong agricultural and natural-resource

presence. The MIP designated Olowalu as an appropriate location for future growth and establishes UGB and RGB boundaries in this locale.

Alternative 1 and Alternative 2 of the OTMP have been reviewed with respect to the following directed growth goals and policies of the MIP:

Urban and Small Town Growth Area

Goal: Maui will have well-serviced, complete, and vibrant urban communities and traditional small towns through sound planning and clearly defined development expectations.

Policies: Community plans shall provide for urban density land use designations only within UGBs and Small Towns. The County may only support and approve State Urban Land Use Designations for areas within UGBs, STBs, and Rural Villages.

New development shall be consistent with the UGBs, STBs, and all other applicable policies of the MIP. New urban-density development shall not be allowed outside of a UGB or STB.

Rural Growth Areas

Goal: Maui will maintain opportunities for agriculture and rural communities through sound planning and clearly defined development expectations.

Policies: New development shall be consistent with RGB and all other applicable policies and requirements of the MIP. Public, quasi-public, civic, and limited commercial or industrial uses may be allowed in the RGB when the proposed uses demonstrate a public need and are consistent with the Community Plan and zoning.

Environmental protection and compatibility will be a top priority in rural growth areas.

Rural growth areas include Rural Residential Areas and Rural Villages. Rural residential areas may be designated when they are located in association with or on the border of urban growth areas or small towns; and/or when they

provide for complete, self-sufficient rural communities with a range of uses to be developed at densities that do not require urban infrastructure.

Urban-scale infrastructure and public facilities shall not be provided in rural areas except as described in the defined Level-of-Service (LOS) standards. There should be no expectations of urban services in rural areas.

The unique character and function of existing small towns and rural communities shall be protected to retain and preserve their sense of place.

Preserve rural landscapes in which natural systems, cultural resources, and agricultural lands are protected and development compliments rural character and contributes to the viability of communities and small towns.

The MIP addresses the following regions: Wailuku-Kahului; Kīhei-Mākena, Makawao-Pukalani-Kula; Paʻia-Haʻikū; West Maui; and Hāna. The West Maui region includes the Olowalu sub-region. According to the MIP, Olowalu Town is intended to meet the needs of Maui residents as a revitalized and sustainable community. Olowalu Town will provide housing, employment, recreational, and cultural opportunities in the context of a mixed-use sustainable community that preserves the area's natural cultural and historic resources. It is envisioned as a pedestrian-friendly community that integrates a variety of housing types with employment opportunities, commercial, and recreational uses developed concurrently with public services and infrastructure.

Olowalu Town will be designed to recognize and perpetuate the land and resource management system of the ahupuaʻa, provide public access between the ocean and mountains, and protect the natural environment.

UGB and RGB were established in Olowalu mauka of Honoapiʻilani Highway. Refer to **Figure 29** and **Appendix "R"**. However, the MIP states that "the future delineation of potential urban growth areas makai of the existing Honoapiʻilani Highway may be undertaken in conjunction with updates or amendments to the West Maui Community Plan" (MIP at 8-64). Such delineation may consider the need to protect adjacent coastal and marine ecosystems, enhance public shoreline access and open space, and implement the proposed Pali to Puamana Parkway plan. The distinct boundaries of parks and open space, specific location of the recreational uses, and the precise amenities will be further defined during the West Maui Community Plan update and

the project review and approval process. Both Alternatives 1 and 2 will require a Community Plan Amendment.

FG. WEST MAUI COMMUNITY PLAN

Within Maui County, there are nine (9) community plan regions. From a General Plan implementation standpoint, each region is governed by a community plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters. The proposed Master Plan project is located within the West Maui Community Plan region. The existing land use designations for the Master Plan area under the Community Plan are set forth in the existing West Maui Community Plan Land Use Map. The lands underlying the Master Plan area are designated “Agricultural”, “Open Space”, and “Park (Golf Course)” on the Land Use Map. Refer to **Figure 8** and **Table 4**.

At the appropriate time, the Applicants will file a Community Plan Amendment (CPA) application to change the designation from “Agricultural”, “Conservation”, and “Park (Golf Course)” to “Project District” to reflect the land use spatial relationships and allocations set forth in the proposed Master Plan. This land use entitlement action will apply to both Alternative 1 and Alternative 2.

Examples of goals, objectives, and policies from the West Maui Community Plan supporting the proposed Master Plan are provided below:

LAND USE

Goal:

An attractive, well-planned community with a mixture of compatible land uses in appropriate areas to accommodate the future needs of residents and visitors in a manner that provides for the stable social and economic well-being of residents and the preservation and enhancement of the region’s open space areas and natural environmental resources.

Objectives and Policies:

- Protect and enhance the quality of the marine environment.

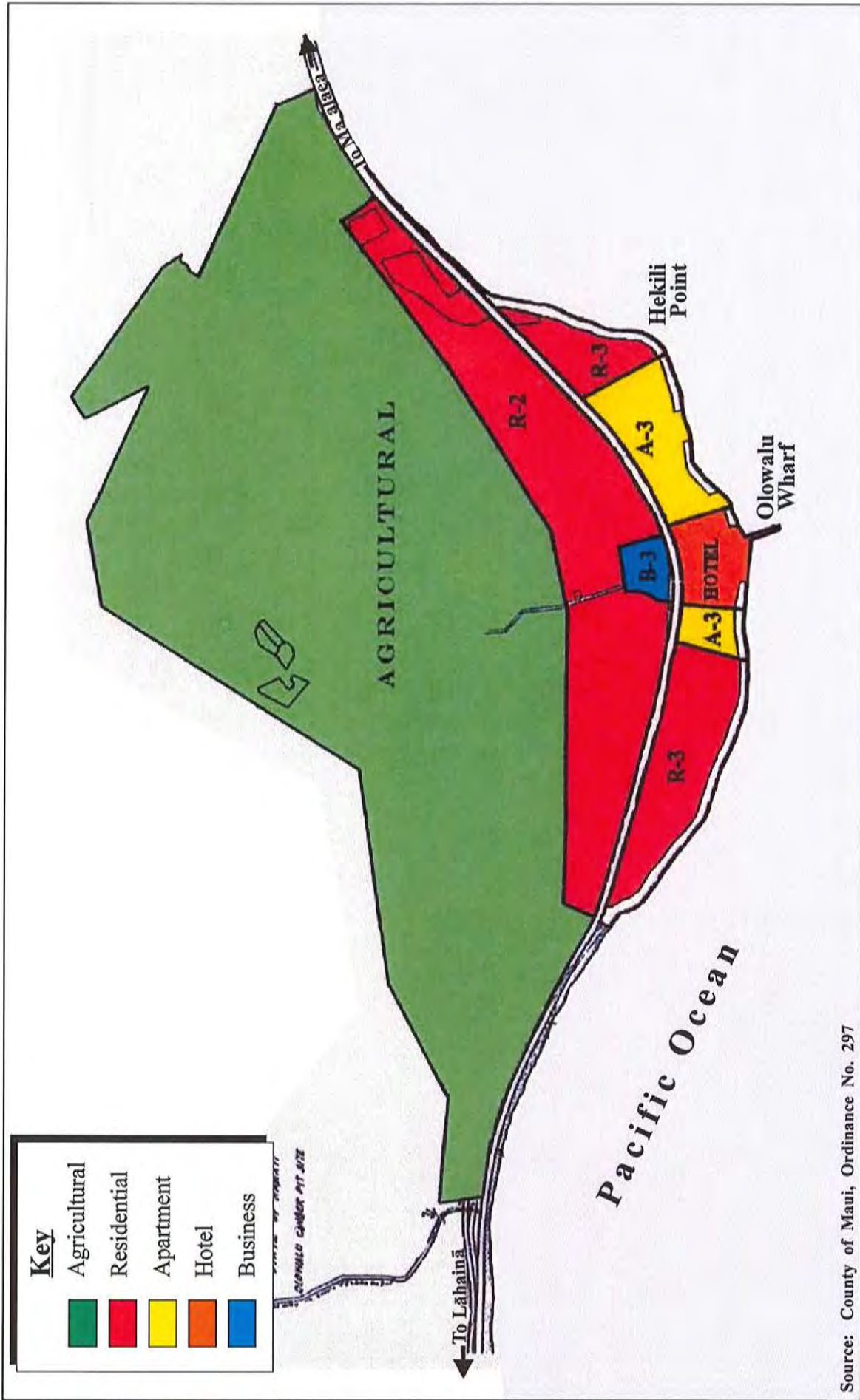


Figure 9

Proposed Olowalu Town Master Plan
Land Zoning Map No. 7

NOT TO SCALE



Prepared for: Olowalu Town, LLC and Olowalu Ekolu, LLC

Table 4. Existing and Proposed Land Use Designations

Tax Map Key	*Area of Parcel	Existing State Land Use District	Proposed State Land Use District Amendment and Area Proposed for Reclassification	Maui Island Plan	Existing West Maui Community Plan	Proposed West Maui Community Plan Amendment	Existing County Zoning	Proposed Change in Zoning	Special Management Area
(2)4-8-003:084**	29 acres	Agricultural/Conservation (4.646 Acs)	Agricultural to Urban: 24.225 Acs	Planned Growth Area, Outside Growth Boundaries, Park, Outside Protected Area***	Park, Open Space, Agriculture	Project District	Hotel, A-2 Apartment, R-3 Residential, Agricultural	Project District	Within
(2)4-8-003:098 (por.)	15 acres	Agricultural	Agricultural to Rural: 14.584 Acs. To Remain Agricultural: 0.443 Ac.	Rural, Portion Outside Planned Growth Area, Protected Area	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:099 (por.)	16 acres	Agricultural	Agricultural to Rural: 11.383 Acs. To Remain Agricultural: 4.192 Acs.	Rural, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Area	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:100 (por.)	27 acres	Agricultural	Agricultural to Urban: 6.239 Acs. Agricultural to Rural: 16.244 Acs. To Remain Agricultural: 4.63 Acs.	Rural, Urban, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Area	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:101 (por.)	29 acres	Agricultural	Agricultural to Urban: 5.423 Acs. Agricultural to Rural: 18.384 Acs. To Remain Agricultural: 5.572 Acs.	Rural, Urban, Planned Growth Area, Portion Outside Growth Boundaries	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:102 (por.)	17 acres	Agricultural	Agricultural to Urban: 16.790 Acs. Agricultural to Rural: 0.006 Ac. To Remain Agricultural: 0.085 Ac.	Rural, Urban, Planned Growth Area, Outside Protected Area	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:103 (por.)	28 acres	Agricultural	Agricultural to Urban: 27.799 Acs.	Urban, Planned Growth Area, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:104 (por.)	50 acres	Agricultural	Agricultural to Urban: 40.311 Acs. To Remain Agricultural: 9.99 Acs.	Urban, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:105 (por.)	41 acres	Agricultural	Agricultural to Urban: 29.387 Acs. Agricultural to Rural: 10.945 Acs. To Remain Agricultural: 0.402 Ac.	Rural, Urban, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:106 (por.)	17 acres	Agricultural	Agricultural to Urban: 8.406 Acs. Agricultural to Rural: 3.509 Acs. To Remain Agricultural: 4.762 Acs.	Rural, Urban, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:107 (por.)	41 acres	Agricultural	Agricultural to Urban: 0.247 Ac. Agricultural to Rural: 33.089 Acs. To Remain Agricultural: 7.807 Acs.	Rural, Urban, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:108	81 acres	Agricultural (59 Acs.)/ Conservation (22 Acs.)	No change	Outside Growth Boundaries, Sensitive Land, Outside Protected Areas	Agriculture, Conservation	Project District	Agricultural	Project District	Outside

Table 4. Existing and Proposed Land Use Designations (Continued)

Tax Map Key	*Area of Parcel	Existing State Land Use District	Proposed State Land Use District Amendment and Area Proposed for Reclassification	Maui Island Plan	Existing West Maui Community Plan	Proposed West Maui Community Plan Amendment	Existing County Zoning	Proposed Change in Zoning	Special Management Area
(2)4-8-003:109 (por.)	16 acres	Agricultural	Agricultural to Rural: 15.753 Acs. To Remain Agricultural: 0.414 Ac.	Rural, Planned Growth Area, Portion Outside Growth Boundaries, Sensitive Land, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:110 (por.)	17 acres	Agricultural	Agricultural to Rural: 7.352 Acs. To Remain Agricultural: 9.868 Acs.	Rural, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:111 (por.)	17 acres	Agricultural	Agricultural to Urban: 8.740 Acs. Agricultural to Rural: 4.752 Acs. To Remain Agricultural: 3.09 Acs.	Urban, Rural, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:112 (por.)	25 acres	Agricultural	Agricultural to Urban: 10.106 Acs. To Remain Agricultural: 14.504 Acs.	Urban, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:113	25 acres	Agricultural	Agricultural to Urban: 25.202 Acs. Agricultural to Rural: 0.009 Ac.	Rural, Urban, Planned Growth Area, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:114 (por.)	29 acres	Agricultural	Agricultural to Urban: 21.647 Acs. Agricultural to Rural: 4.796 Acs. To Remain Agricultural: 2.396 Acs.	Urban, Rural, Planned Growth Area, Portion Outside Growth Boundaries, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:115 (por.)	26 acres	Agricultural	Agricultural to Urban: 8.319 Acs. Agricultural to Rural: 4.976 Acs. To Remain Agricultural: 12.889 Acs.	Rural, Urban, Planned Growth Area, Portion Outside Growth Boundaries, Park, Sensitive Land, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:116 (por.)	16 acres	Agricultural	Agricultural to Urban: 1.357 Acs. To Remain Agricultural: 14.681 Acs.	Outside Growth Boundaries, Park, Sensitive Land, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:117 (por.)	16 acres	Agricultural	Agricultural to Rural: 13.384 Acs. To Remain Agricultural: 2.205 Acs.	Rural, Planned Growth Area, Portion Outside Growth Boundaries, Sensitive Land, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Outside
(2)4-8-003:118 (por.)	43 acres	Agricultural/Conservation	Agricultural to Urban: 17.98 Acs. Agricultural to Rural: 8.709 Acs. To Remain in Agricultural and Conservation: 16.02 Acs.	Urban, Rural, Planned Growth Area, Portion Outside Growth Boundaries, Park, Sensitive Land, Outside Protected Areas	Agriculture	Project District	Agricultural	Project District	Portion In
(2)4-8-003:124** (por.)	16 acres	Agricultural/Conservation (0.21 Ac.)	Agricultural to Urban: 14.04 Acs. To Remain Agricultural: 1.83 Acs.	Planned Growth Area, Outside Growth Boundaries, Outside Protected Areas***	Agriculture/Open Space	Project District	Agricultural, R-3 Residential	Project District	Within
Source: County of Maui, Department of Planning 2014 and R.T. Tanaka Engineers, Inc. Note: * Rounded to nearest whole number ** Parcels excluded in Alternative 2 *** MIP includes footnote that potential urban growth areas makai of the existing Honoapiʻilani Highway may be undertaken in conjunction with updates or amendments to the West Maui Community Plan									

EXHIBIT “3”

***CD of Impacts on Agriculture
Report (Plasch Econ Pacific LLC)
(Included in Original Letter Only)***

5. **§Section 226-13 Objectives and policies for the physical environment--land, air, and water quality.**

Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:

- a. Maintenance and pursuit of improved quality in Hawai'i's land, air, and water resources.
- b. Greater public awareness and appreciation of Hawai'i's environmental resources.

To achieve the land, air, and water quality objectives, it shall be the policy of this State to:

- a. Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.
- b. Encourage design and construction practices that enhance the physical qualities of Hawai'i's communities.

6. **§Section 226-14 Objective and policies for facility systems--in general.**

Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

To achieve the general facility systems objective, it shall be the policy of this State to:

- a. Accommodate the needs of Hawai'i's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.
- b. Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.
- c. Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.

- b. Provide a wide range of activities and facilities to fulfill the cultural, artistic, and recreational needs of all diverse and special groups effectively and efficiently.
- c. Enhance the enjoyment of recreational experiences through safety and security measures, educational opportunities, and improved facility design and maintenance.
- d. Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.
- e. Ensure opportunities for everyone to use and enjoy Hawai'i's recreational resources.
- f. Assure the availability of sufficient resources to provide for future cultural, artistic, and recreational needs.

13. Section 226-25 Objective and policies for socio-cultural advancement--culture.

Planning for the State's socio-cultural advancement with regard to culture shall be directed toward the achievement of the objective of enhancement of cultural identities, traditions, values, customs, and arts of Hawai'i's people.

To achieve the culture objective, it shall be the policy of this State to:

- a. Foster increased knowledge and understanding of Hawai'i's ethnic and cultural heritages and the history of Hawai'i.
- b. Support activities and conditions that promote cultural values, customs, and arts that enrich the lifestyles of Hawai'i's people and which are sensitive and responsive to family and community needs.

The foregoing State Plan objectives and policies will be advanced through the implementation of the proposed Master Plan for Alternatives 1 and 2.

The State Plan also includes priority guidelines which identify desirable courses of action in six (6) major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, quality education, and principles of sustainability. Examples of State priority guidelines relevant to the proposed Master Plan for Alternatives 1 and 2 are discussed below:

1. **Section 226-103 Economic priority guidelines.**

Priority guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawai'i's people and achieve a stable and diversified economy:

- Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:
 - (A) An industry that can take advantage of Hawai'i's unique location and available physical and human resources.
 - (B) A clean industry that would have minimal adverse effects on Hawai'i's environment.
 - (C) An industry that is willing to hire and train Hawai'i's people to meet the industry's labor needs at all levels of employment.
 - (D) An industry that would provide reasonable income and steady employment.

Priority guidelines to promote the growth and development of diversified agriculture and aquaculture:

- Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.
- Assist in providing adequate, reasonably priced water for agricultural activities.
- Encourage public and private investment to increase water supply and to improve transmission, storage, and irrigation facilities in support of diversified agriculture and aquaculture.
- Encourage the development and expansion of agricultural and aquacultural activities which offer long-term economic growth potential and employment opportunities.
- Support the continuation of land currently in use for diversified agriculture.

Priority guidelines for water use and development:

- Maintain and improve water conservation programs to reduce the overall water consumption rate.
- Encourage the improvement of irrigation technology and promote the use of non-drinking water for agricultural and landscaping purposes.

Priority guidelines for energy use and development:

- Encourage the development, demonstration, and commercialization of renewable energy sources.
- Encourage the development and use of energy conserving and cost-efficient transportation systems.

2. **Section 226-104 Population growth and land resources priority guidelines.**

Priority guidelines to effect desired statewide growth and distribution:

- Manage a growth rate for Hawai'i's economy that will parallel future employment needs for Hawai'i's people.
- Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.
- Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.

Priority guidelines for regional growth distribution and land resource utilization:

- Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.
- Pursue rehabilitation of appropriate urban areas.
- Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.
- Identify critical environmental areas in Hawai'i to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.

- Utilize Hawai'i's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.
- Protect and enhance Hawai'i's shoreline, open spaces, and scenic resources.

3. Section 226-105 Crime and criminal justice.

Priority guidelines in the area of crime and criminal justice:

- Support law enforcement activities and other criminal justice efforts that are directed to provide a safer environment.

4. Section 226-106 Affordable housing.

Priority guidelines for the provision of affordable housing:

- Seek to use marginal or nonessential agricultural land and public land to meet housing needs of low- and moderate-income and gap-group households.
- Encourage the use of alternative construction and development methods as a means of reducing production costs.
- Encourage public and private sector cooperation in the development of rental housing alternative.
- Give higher priority to the provision of quality housing that is affordable for Hawai'i's residents and less priority to development of housing intended primarily for individuals outside of Hawai'i.

5. Section 226-107 Quality education.

Priority guidelines to promote quality education:

- Explore alternatives for funding and delivery of educational services to improve the overall quality of education;
- Development resources and programs for early childhood education.

6. Section 226-108 Sustainability.

Priority guidelines and principles to promote sustainability shall include:

- Encouraging balanced economic, social, community, and environmental priorities;
- Promoting a diversified and dynamic economy;
- Encouraging respect for the host culture;
- Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;
- Considering the principles of the ahupua'a system; and
- Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawai'i.

7. Section 226-109 Climate Change Adaptation.

Priority guidelines to prepare the State to address the impacts of climate change, including impacts to the areas of agriculture; conservation lands; coastal and nearshore marine areas; natural and cultural resources; education; energy; higher education; health; historic preservation; water resources; the built environment, such as housing, recreation, transportation; and the economy shall:

- Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;
- Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;
- Explore adaptation strategies that moderately harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;
- Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;
- Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;

- Encourage planning and management of the natural and built environments that effectively integrate climate change policy.

There are also priority guidelines identified in the Hawai'i State Plan that require consideration of competing policy directions. These are illustrated by the following:

1. The priority guidelines to promote the growth and development of diversified agriculture and aquaculture includes the following:

Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.

Comment: With the demise of the plantation in 1999, the former sugarcane lands have been left fallow and unproductive. Limited agricultural uses exist on these former sugarcane lands consisting of the tomato and tree farms and the efforts of the OCR to re-establish the *lo`is* and promote native plants. Although land is being removed from agricultural use, it will have other benefits to the community which advance other priority guidelines. The Master Plan for Alternatives 1 and 2 will provide housing and employment opportunities as well as preserve cultural resources and enhance recreation in the Olowalu area.

As noted previously, according to the Agricultural Assessment, agriculture in the future will become more efficient in the use of land and resources. Hydroponic farming, represented by the tomato farm, will increase and will produce higher yields on less land, use of less water, and is not dependent on soil characteristics.

2. The priority guidelines and principles for regional growth distribution and land resource utilization also includes the following:

Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.

Comment: Although Alternatives 1 and 2 are not within an existing urban area, they are located in an area historically utilized for housing first by native Hawaiians and more recently as plantation housing before enactment of Chapter 205, HRS and

the State Land Use Districts. Basic infrastructure, such as drinking and non-drinking water systems and transportation networks, are available in Olowalu Town. Implementation of the Master Plan for Alternatives 1 and 2 will be undertaken concurrent with the development of infrastructure and public services and facilities, such as development of a sewage treatment facility and transmission lines, construction of a drainage system, additional transportation networks, upgraded water systems and provisions for public facilities such as fire and police protection, educational facility and parks. In this context, the Master Plan for Alternatives 1 and 2 meets the intent of the priority guidelines relating to growth and land resources while providing housing and employment opportunities to Maui residents.

The State Functional Plans define actions for implementation of the Hawai'i State Plan through the identification of needs, problems and issues, and recommendations on policies and priority actions which address the identified areas of concern. ~~Twelve (12)~~Thirteen (13) State Functional Plans were adopted in the 1980s and updated in 1984, 1989, 1990, and 1991. The proposed Master Plan ~~is~~for Alternatives 1 and 2 is consistent with the following State Functional Plans' objectives:

1. **Education Functional Plan**

Objective A(4): Services and Facilities. Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual community needs.

Objective C(2): Hawai'i's Cultural Heritage. Promote educational programs which enhance understanding of Hawai'i's cultural heritage.

Comment: ~~The Master Plan~~Alternatives 1 and 2 includes the provision of educational facilities. It is envisioned that the future educational facilities within the Master Plan for Alternatives 1 and 2 will incorporate lessons learned within the OCR as core components of its curriculum.

2. **Employment Functional Plan**

Objective D: Improve Quality of Life for workers and families.

Comment: The proposed project provides for a mix of commercial, public/quasi-public, and residential facilities, allowing residents the opportunity to live near

and open space interspersed among residential and commercial development removing the existing dry grasses that are a fuel hazard. This development pattern will provide for fuel breaks that will reduce the fire hazard in the region. Besides grazing, interim measures include clearing buffers for fire breaks by removing vegetation along property boundaries adjacent to residential areas such as Kapa'iki.

Many of the dryland native plants that grow in leeward West Maui are ideally adapted to the soils and climate. The OCR has succeeded in cultivating a number of these species. The Master Plan for Alternatives 1 and 2 will incorporate these native plants in the landscaping scheme for the project, to the extent practicable.

As noted in the Flora and Fauna Survey, Nēnē are wide-ranging, opportunistic birds that are attracted to certain types of water features and other types of irrigated and open landscapes where lush grasses grow. The geese like to spend some time feeding and resting in such places but then move to other widespread and diverse sites over the course of each day. Individually, these sites could be considered important habitats for these endangered geese, but would not be considered critical to their survival. The irrigated pasture within the project site, where the tracks of the nēnē were seen in mud, is a type of temporary habitat that is useful to the nēnē in the broad scheme of things in West Maui. Unlike the blades of wind turbines, these features are not dangerous to nēnē and mitigation measures are not warranted.

The best avoidance strategies involve educational warnings such as placement of signs at strategic access points to any water features or irrigated fields. These warning signs would identify the nēnē (a drawing or picture), include a statement of its endangered status and warn against harming these special birds.

The Endangered Species Act (ESA) provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The federal agencies tasked with implementation of the Act are the U.S. Fish and Wildlife Service (USFWS) and NOAA. Section 10 of the ESA regulates a range of activities affecting plants and animals designated as endangered or threatened, and the habitats upon which they depend. With some exceptions, the ESA prohibits activities affecting these protected species

and their habitats unless authorized by a permit from the USFWS or NOAA. Incidental take permits are required when non-Federal activities will result in take of threatened or endangered species. Through consultation with the USFWS and NOAA, the law promotes the protection of those listed species. Although the Flora and Fauna Survey noted that the irrigated pasture within the project site is a type of temporary habitat for the nēnē, rather than critical to its survival, consultation with USFWS and NOAA will continue through project design to ensure the protection of those listed species.

It is noted that the Flora and Fauna Survey recommended the creation of a more attractive and permanent shallow-sided water feature within the upper portion of the OCR that would attract nēnē as well as ae'o, 'alae ke'oke'o, and koloa. Such water features within the Master Plan for Alternatives 1 and 2 could provide good habitat for the endangered nēnē and serve as an educational and cultural component of this project.

The Flora and Fauna Study also recommended that vegetation which serves as habitats for the endangered Hawaiian Hoary bat (ōpe'ape'a) also be retained. Although the bat was not found during the survey, they may be present during the winter months when insect populations spike. The bats roost individually in trees and shrubs, under ledges in gulches during the day and are active in the evening and throughout the night. The Master Plan for Alternatives 1 and 2 proposes approximately 223 acres of land set-asides for parks and open space. Open space areas include the OCR along the Olowalu Stream that will retain vegetation that may serve as habitats for the Hawaiian Hoary bat.

Although the Master Plan areas for Alternatives 1 and 2 itself are not a suitable habitats for protected seabirds which are known to nest high in the West Maui Mountains during the summer and fall months, these birds must fly over the lowlands during the evening and early morning hours to get to their burrows and to return to the open ocean. During the late fall when young birds are inexperienced and uncertain fliers, they are often confused by bright lights, which may cause them to crash into the light source. As such, all

All major outdoor light sources within the project area, such as street lights and flood lights, will be shielded so that light is directed downward to avoid confusion for young seabirds. In Alternative 1, there will be no structures

H.III. DESCRIPTION OF THE EXISTING CONDITIONS, POTENTIAL IMPACTS AND PROPOSED MITIGATION MEASURES

A. PHYSICAL ENVIRONMENT

1. Existing and Surrounding Land Use

a. Existing Conditions

The approximately 636-acre Master Plan area is located approximately fourteen (14) miles southwest of Wailuku and four (4) miles southeast of Lāhainā Town.

In a regional context, Olowalu has historically been a settlement area. Prior Within Olowalu Valley and along the original stream route, traditional Hawaiian agricultural practices were fairly intense and based primarily on *lo`i* agriculture. There were approximately 1,124 *lo`i kalo*, 28 *`uala* (potato) patches, 27 *kula* (open field or pasture), and 31 plots of land with unspecified land uses. When examining this level of agricultural intensity during the mid-1800s, and its correlation to population, Marion Kelly presents missionary estimates for the productivity of *lo`i kalo* as a minimum of 10 to 30 individuals per acre (Kelly, 1989). Based on the intensity of agriculture and these estimates, prior to western contact it, is estimated that up to 2,000 Hawaiians were living and thriving in Olowalu. As recently as the 1930s, Olowalu was a thriving plantation towncamp which included employment related to the agricultural use of the land, housing for employees, a school, medical facilities, stores, theater, recreational facilities and places of worship (Ainsworth, 2011). Olowalu, during the hey-day of the plantation era, was a multi-cultural and multi-generational community. The closure of the Olowalu Mill in August 1931 and the subsequent relocation and consolidation of mill operations to with Pioneer Mill in Lāhainā Town marked the decline of the once thriving Olowalu community (Ainsworth, 2011).

Prior to the closure of Pioneer Mill in 1999, lands within the Olowalu area were cultivated in sugarcane. Today, land uses found in Olowalu include

Western Influence

As foreign influence became more pervasive following the unification of the Hawaiian Islands under Kamehameha, Lāhainā became the center for West Maui because of favorable conditions for sailing craft.

Along with western influence came diseases that decimated the Hawaiian population 45 years after western contact. It is estimated that the Hawaiian population on Maui decreased by as much as half by 1823. In 1831, missionaries estimated 8312 Hawaiians lived at Olowalu (Schmitt 1973).
~~Based on the 1831 population~~

Within Olowalu Valley and along the original stream route, traditional Hawaiian agricultural practices were fairly intense and based primarily on *lo`i* agriculture. There were approximately 1,124 *lo`i kalo*, 28 *`uala* (potato) patches, 27 *kula* (open field or pasture), and 31 plots of land with unspecified land uses. When examining this level of agricultural intensity during the mid-1800s, and its correlation to population, Marion Kelly presents missionary estimates for the productivity of *lo`i kalo* as a minimum of 10 to 30 individuals per acre (Kelly, 1989). Based on the intensity of agriculture and these estimates, it is estimated that 2,000 or more Hawaiians resided in Olowalu before western contact.

Five (5) years after the 1831 census, the missionary census put Olowalu's population, combined with Ukumehame's, at only 718 showing a further decline. In 1866, the census indicated the population of Olowalu had further decreased to 169, a 76 percent drop from 1836. Nearly 100 percent of the residents were full-blooded Hawaiian and the predominant occupation reported on the census was *mahi`ai*, or someone involved in agriculture. In 1878, the census was counted by the Hawaiian kingdom with 231 people living in Olowalu.

The first Christian missionaries arrived on Maui in 1823 and made Lāhainā the first Protestant mission station on the island. Olowalu, shortly thereafter, became an outstation of the Lāhainā mission. The Olowalu outstation also served the people of Ukumehame. As an outstation, Olowalu did not have its own minister, instead relying on visits from Lāhainā. A succession of Lāhainā missionaries successfully converted the Hawaiians of Olowalu.

The Pioneer Mill Company built the Honokohau ditch in 1904 to bring water to the arid coastal lands. With the construction of the Honokohau ditch, the Pioneer Mill Company was able to reach back into the mountain valleys and obtain water in a system developed by the Honolua Ranch, effectively delivering about 20 mgd to the Pioneer Mill fields. This main ditch was augmented over the years with seven (7) additional ditches.

Water delivered by the supply ditch from Olowalu Stream amounted to 1,000,000 gallons per day (GPD), and 14 artesian wells could produce an additional 2,000,000 gallons. Water was stored in two (2) reservoirs with a total 1,000,000-gallon capacity. Two (2) 70-horsepower pumps could move 3,000,000 GPD for irrigation. During the dry months, the amount of water in the ditches and wells declined.

Olowalu Landing

In 1910, Olowalu Landing consisted of a rock pier built up with small boulders which ran about 200 feet into the sea. The pier supported a square wooden-frame derrick and an extension of the company's railroad line. In 1914, Olowalu Landing served as one (1) of 12 landings on Maui where the Inter-Island Steamship Company scheduled regular stops. Steamers carried freight, passengers and mail to and from Olowalu. Freight shipments were limited to Olowalu Company and the C. Sam Lung store almost exclusively. Because of difficulty in shipping sugar at low tide, in 1919 the company built a new boat landing 250 feet further out and deepened the boat channel.

~~In 1917, Olowalu Company began a program to line the ditches with concrete to retain water, first in Olowalu and later in Ukumehame. In 1918, Olowalu Company embarked on major improvements which included rebuilding the Olowalu mill and building a new and larger warehouse. During World War I, there was a shortage of laborers and the Olowalu Company began recruiting laborers from the Philippines. In 1932, the mill at Olowalu was dismantled and shipped to the Philippine islands (Gilmore, 1936).~~

Pioneer Mill Company

In early May of 1931, Olowalu Company was sold to American Factors, Ltd. (Amfac) who had owned the much larger adjoining Pioneer Mill Company

plantation for \$400,000.00. On December 31, 1931, the Olowalu Sugar Company was un-incorporated and placed within the holdings of Pioneer Mill Company (Burns, 1932). The sale of Olowalu included 1,178 acres of fee-simple land and all its sugar equipment and railroad. The sale of Olowalu to Amfac proved to be the last major land addition to Pioneer Mill, bringing the size of the plantation to more than 14,000 acres. With the sale of Olowalu Company the mill was closed and all milling was transferred to Pioneer's Lāhainā mill as well as its offices (Ainsworth, 2011).

The Pioneer Mill Company was established as a partnership in 1862, between James Campbell, Henry Turton, and Benjamin Pittman. The first Pioneer Mill plantation lands were deeded to the partners by Benjamin Pittman for the price of \$30,000.00 (Conde and Best, 1973). How Pittman obtained such a sizable piece of land is unknown, however, one may posit that the first Pioneer Mill lands were in Launiupoko ahupua'a which was acquired by Thomas Phillips in 1840 (Wong-Smith in Graves, 1991).

The Pioneer Mill was incorporated in 1885 and sold to H. Hackfeld & Company, the predecessor of Amfac, Inc. (Wong-Smith in Graves and Goodfellow, 1991).

General reorganization of the Pioneer Mill Company began around the turn of the 20th century. A prospectus for change describes assets of the four (4) main cane fields composing the company at that time (Conde and Best, 1973):

- Lāhainā - 1,000 acres of land on the flat and outside of small kuleanas, (land areas claimed by the Hawaiians under royal grants), the land is fee simple (could be deeded).
- Launiupoko - 2,900 acres of fee simple land, lying between Lāhainā and Olowalu.
- Wahikuli - A tract of government land of 5,000 acres, under lease for eighteen years, lies between Lāhainā and Kā'anapali.
- Kā'anapali - Some 3,600 acres at various levels, fee simple land, beyond Wahikuli.

The 1931 expansion of Pioneer Mill Company into Olowalu and Ukumehame was expected to bring an additional 3,000 tons of sugar per year (Pioneer Mill

Annual, the year of 1953 marked the final elimination of railroad use in the Pioneer Mill Company (Conde and Best, 1973).

Foreign Laborers

During the latter part of the century the sugar industry boomed, causing an increased need for labor. Olowalu's labor force not only increased to approximately 149 to 167 laborers, but it became more ethnically diverse. By 1904, the workforce consisted of Hawaiians, Americans, Europeans, Portuguese, Puerto Ricans, Chinese and Japanese. Americans and Europeans dominated management and skilled positions. Hawaiians worked in skilled and semi-skilled jobs while Japanese, Chinese and Puerto Ricans handled field jobs. During World War I, there was a shortage of laborers and the Olowalu Company began recruiting laborers from the Philippines.

Olowalu Irrigation System

Minimal rain at Olowalu made the plantation totally dependent on irrigation. In 1904, water moved along a six-mile supply ditch from Olowalu Valley and was distributed via four (4) miles of additional ditches. It is estimated that the first well drilled at Olowalu for the plantation was sunk in 1905 (Well 11), a single shaft with 670 feet of lateral tunnels designed to skim three (3) million gallons per day (mgd) of fresh irrigation water from sources beneath the Olowalu plains. In around 1908, an additional well was drilled at Ukumehame, a pump that had a capacity of 1-¼ mgd (Stearns and Macdonald, 1942). Following the development of the water system, field production increased and by 1930 sugar yields rose from 1,480 tons to 2,966 tons (Haneberg, 1931). In 1917, Olowalu Company began a program to line the ditches with concrete to retain water, first in Olowalu and later in Ukumehame.

With the acquisition of Olowalu Sugar Company, Pioneer Mill Company invested in improvements to the two (2) small and relatively crude water systems. In 1933, the first inclined shaft in the territory of Hawai'i was drilled at Olowalu (Well 10) under the direction of C.A. Brown which resulted in a yield of 5.25 mgd (Stearns and MacDonald, 1942). The following year, Well 12 was drilled at Ukumehame to replace the 1908 well. This well had a yield of 4.75 mgd (Stearns and McDonald, 1942).

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Olowalu Sugar Company

In 1875, in anticipation that the sugar industry would rebound Lāhainā, businessman Milton Philip started to acquire land in Olowalu and Ukumehame. By 1876, the sugar industry rebounded. Another Maui resident, Goodale Armstrong, also acquired Olowalu property and together with Milton Philip started the Olowalu Plantation in 1876 utilizing former crown and *kuleana* land. By 1878, the Olowalu Plantation produced its first crop and completed its first mill. (Ainsworth, 2011).

Phillip and Armstrong formally organized the Olowalu Sugar Company in 1881 on lands given up by the West Maui Plantation. The sugar venture was originally represented by the agency of Mcfarlane & Co., with shares in the plantation purchased by Theophilus Harris Davies, who became the agent for the enterprise in the late 1880s.

The history of the Olowalu Sugar Company included the construction of a mill and wharf development at Olowalu prior to 1884 (Wright, 1974). In addition to processing cane harvested from the fields of Olowalu and Ukumehame (**Table 22**), the mill was also contracted to process the cane harvested by Maunalei Sugar Company, a Lānaʻi island enterprise. Cane harvested by the Maunalei Sugar Company in Keomuku was shipped from Halepalaoa to be processed at Olowalu beginning with the 1899 crop. Processing of the Lānaʻi cane continued until 1901 with the closing of the Maunalei Sugar Company (Conde and Best, 1973).

Sugar crop figures for the Olowalu plantation are listed in **Table 22** for the years leading up to annexation with the United States (listed as tons) (based on figures reported in the Louisiana planter and sugar manufacturer weekly for the years indicated).

Table 22. Sugar Crops from 1891 through 1900 by Tons

1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
760	859	702	937	905	1,163	1,112	1,425	1,502	1,480

Late 1900s to Modern Era

In the late 1900s and toward the end of the Sugar Era in Lāhainā, small scattered residential lots were present within the current project area along the shoreline at Olowalu and in the upper reaches of the valley. These isolated house lots are referred to as *kuleana* (Kimo Falconer, in Robins et al., 1994) and likely represent original boundaries of land claims made during the Māhele.

Travel to Lāhainā was over the gravel Pali Road which originally was built for horses and later improved to allow automobile travel. Federal aid enabled the Territory of Hawai'i's Highway Department to pave a two and half mile stretch of road at Olowalu in 1938. The work slightly realigned the lanes toward the ocean and made the road almost entirely straight. The one-lane bridge just outside the village, a well-known Olowalu feature, was widened to accommodate two (2) cars at the same time (Ainsworth, 2011).

In 1950, Territorial Contractors began construction of the Olowalu Pali section of what was then termed the Sunset-Skyline highway, replacing the old Pali Road. This segment stretched from McGregor Point to Olowalu (Ainsworth, 2011).

Part of this effort included "Operation Puka-in-the Pali", the construction of Hawai'i's first highway tunnel. Signifying the importance of this accomplishment, the launching of construction was marked by a blessing and *lu'au* for 600. Blasting began in September 1950 from the Wailuku end and progressed at six (6) feet a day. Workers emerged on the other side in February 1951. The 315-foot long tunnel and 5.2-mile highway officially opened in October 1951 to territory-wide fanfare (Ainsworth, 2011).

The widening and surfacing of the 2.6-mile section of the Pali Road going from Olowalu to Lāhainā began in 1951. Highway officials did not consider the work done in 1938 on this stretch of highway, described then as "light paving", to be adequate (Ainsworth, 2011).

During the 1970s, Maui Electric installed a power line between Mā'alaea and the town of Lāhainā. The existing line stretches over elevations of between roughly 600 and 2,600 feet above mean sea level. A *pu'u*, commonly referred

to as “cut mountain”, is located between Olowalu and Launiupoko and presently is a former quarry or “borrow pit”. Immediately west of the *pu`u* is an old landfill site formerly operated by the County of Maui.

With the closure of Pioneer Mill in 1999, lands that were formerly cultivated in sugarcane were either left fallow, in pasturage, or have been subdivided out of larger landholdings for development of agricultural subdivisions in Launiupoko and Ukumehame.

b. Archaeological Investigation

An archaeological literature review and field inspection was conducted by Cultural Surveys Hawai'i, Inc. (CSH) onfor the ~~Master Plan area~~OTMP. Requisite archaeological inventory studies and the review and acceptance of subsequent historic preservation mitigation plans for the project area were carried out between October 1998 and July 2002 culminating in seven (7) separate documents and related State Historic Preservation Division (SHPD) correspondence. See **Appendix “F-1G-1”**.

A total of 41 historic properties, some consisting of multiple features, were identified and recorded during previous archaeological studies within the project area. See **Figure 1423**. The historic properties were evaluated in accordance with the following SHPD criteria:

- Criterion A. Be associated with events that have made a significant contribution to broad patterns of our history;
- Criterion B. Be associated with the lives of persons significant in our past;
- Criterion C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possesses high artistic values;
- Criterion D. Have yielded, or is likely to yield, information important for research on prehistory or history; or

- Include as part of the project at least one (1) drop-off point, available to all project occupants, for potentially hazardous office or household wastes; or locate the project in a local government jurisdiction that provides collection services. Examples of household hazardous wastes include paints, solvents, oil, and batteries. If a plan for post collection disposal or use does not exist, establish one.
- Include as part of the project at least one (1) compost station or location, available to all project occupants, dedicated to the collection and composting of food and yard wastes; or locate the project in a local government jurisdiction that provides composting services. If a plan for post collection use does not exist, establish one.
- On every mixed-use or nonresidential *block* or at least every 800 feet, whichever is shorter, include recycling containers adjacent to other receptacles or recycling containers integrated into the design of the receptacle.
- Recycle and/or salvage at least 50 percent of nonhazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and specifies whether the materials will be stored on-site or comingled. Excavated soil and land-clearing debris do not contribute to this credit. Calculations can be done by weight or volume but must be consistent throughout.

As the project progresses, a solid waste management plan will be developed for the Master Plan for Alternatives 1 and 2 prior to its implementation.

2. Medical Facilities

a. Existing Conditions

The only major medical facility on the Island is Maui Memorial Medical Center, located approximately 16 miles from Olowalu, midway between Wailuku and Kahului. The 234213-bed facility provides general, acute, and emergency care services (Maui Memorial Medical Center, 2014). A West Maui Hospital is proposed near ~~the Lāhainā Civic Center complex at~~ Ka'anapali.

Regular hours are offered by private medical practices in Lāhainā, which include the Maui Medical Group, Lāhainā Physicians, West Maui Healthcare Center, and Kaiser Permanente Lāhainā Clinic.

b. Potential Impacts and Mitigation Measures

Demand for medical services will increase over time, as population growth occurs. The proposed Master Plan for Alternatives 1 and 2 will help to accommodate a portion of the island's growth over the next 10 years. It is anticipated that growth in medical facilities and service provision will occur in a similar incremental fashion to meet the medical service needs of the island's residents and visitors. Support services which may be implemented as part of the Master Plan for Alternatives 1 and 2 would include medical, social service office space, senior care, urgent care, and "age in place" housing units. As the Master Plan for Alternatives 1 and 2 proceeds through the development process, ongoing dialogue with key medical service providers will continue.

As a major regional facility, community hospitals are not constructed in every community. As stated previously, the island of Maui is served by the Maui Memorial Medical Center located in Central Maui which will continue to serve West Maui, including Olowalu. However, a privately owned and operated community hospital and medical center is planned in Kā'anapali in the Kā'anapali 2020 project by Newport Hospital Corporation. Located approximately eight (8) miles from Olowalu Town, this facility is intended to serve the West Maui region, including Olowalu Town. The planned community hospital and medical center in Kā'anapali will make it more convenient for West Maui residents who currently need to travel to Central Maui for hospital care, eliminate potential medical problems when the highway to Central Maui is closed, as well as relieve population growth induced impacts on Maui Memorial Medical Center. The West Maui Hospital and Medical Center is targeted to open in 2017 (West Maui Hospital and Medical Center, 2015).

~~As noted previously, the Master Plan will provide lands for a fire department and emergency services which can provide additional medical and first responder services to the West Maui region, especially the area Lāhainā side~~

of the tunnel. These services currently are provided by the Lāhainā Fire Station:

The Master Plan for Alternatives 1 and 2 is not anticipated to adversely impact medical services.

3. Police and Fire Protection and Emergency Services

a. Existing Conditions

The Master Plan area is for Alternatives 1 and 2 is within the Lāhainā Police Station service area, which services all of the Lāhainā district. The Lāhainā Station is located in the Lāhainā Civic Center complex at Wahikuli, approximately 7.5 miles from the Master Plan area.

Fire prevention, suppression and protection services for the Lāhainā District are provided by the Lāhainā Fire Station, also located in the Lāhainā Civic Center and the Napili Fire Station, located in Napili. The Lāhainā Fire Station includes an engine and a ladder company. The Napili Fire Station consists of an engine company. Ambulance service is provided from the Napili Fire Station.

Information received from the State Civil Defense agency confirms that there is an existing civil defense siren located on the makai side of Honoapiʻilani Highway near Camp Olowalu.

b. Potential Impacts and Mitigation Measures

The Maui Police Department commented that OTMP at full build-out will require an additional patrol beat. A new patrol beat will require six (6) police officers to cover a 24-hour period over a seven-day work week and would operate out of the Lāhainā Police Station. The new police beat is estimated to cost \$360,000.00 annually for salaries and benefits and \$51,000.00 for a new police vehicle which is replaced every four (4) years. A new Police Station in OTMP is not required at this time. If deemed necessary in the future, a police substation can be accommodated in Olowalu Town (Hudson, 2012).

The Master Plan for Alternatives 1 and 2 includes future areas to accommodate facilities that may be necessary for police and fire protection and emergency service. Although the Lāhainā Fire Station is located just 7.5 miles away from the Master Plan area for Alternatives 1 and 2, the Maui Fire Department has indicated that 1,500 new homes would impact emergency services. The Fire Department indicated that a future facility for emergency services would help to mitigate the impact and compliment protection provided on the north (Lāhainā) side of the Honoapiʻilani Highway tunnel. The Master Plan for Alternatives 1 and 2 includes areas along the relocated and widened Honoapiʻilani Highway for future emergency facilities.

The Department of Fire and Public Safety (Fire) supports the establishment of the new fire station in OTMP. Discussion with Fire indicated that a new fire station will require a total of 15 personnel to cover three (3) shifts with five (5) personnel each. A new fire station will require a fully equipped fire engine which is estimated to cost approximately \$1 million. To operate the new fire station will cost approximately \$1.25 million annually. It is estimated that a new fire station will cost \$11 million to construct (Haake, 2012).

The West Maui area is susceptible to wildfires and the location of a new fire station in Olowalu will improve the Fire's Department's response time to such fires in the Pali to Lāhainā Town area. Through consultation with Fire, the department has indicated that although the alternatives should diminish the likelihood of such fires, the project's design should include measures that may address impacts to the project from wildfires which originate in surrounding outside areas. The department provided the example of designing greenways at the outer edge of the project that offer a defensible space against wildfires. It is noted that a significant area of the alternatives are envisioned for parks, greenways and open space.

The applicantApplicants will continue to dialogue with the police and fire departments to ensure the location and adequate area for future facilities within the Master Plan for Alternatives 1 and 2 are accommodated.

The existing siren will provide coverage of the central area of the OTMP. Additional omni-directional 121 db(c) sirens will be required to complete coverage of the proposed development for Alternatives 1 and 2. The Applicants will coordinate with the State Civil Defense Agency, the placement

of the additional sirens and the timing when installation of the sirens are warranted.

4. Educational Facilities

a. Existing Conditions

The West Maui region is served by four (4) public schools (Lāhaināluna High School, Lāhainā Intermediate School, Princess Nahi`ena`ena Elementary School, and Kamehameha III Elementary School) operated by the State of Hawai`i, Department of Education (DOE) and two (2) smaller private schools (Sacred Hearts School and Maui Preparatory Academy). All four (4) of the public schools are located within Lāhainā town and three (3) of those schools are located along Lāhaināluna Road, mauka of Honoapi`ilani Highway. The enrollments in the four (4) schools have grown significantly in concert with the growth of residential development in the West Maui area. See **Table 1931**.

Table 1931. Actual and Projected Enrollments at Department of Education Schools in West Maui

School	Actual Enrollment			Rated Capacity	Projected Enrollment
	SY-09-10	SY-10-11	SY-11-12		SY-15-16
Lāhaināluna High School	969	1027	1057	969	1081
Lāhainā Intermediate	693	653	651	571	672
Kamehameha III Elementary	713	733	760	646	788
Princess Nahi`ena`ena Elementary	610	607	643	612	675
Source: Department of Education, 2011.					

	Actual Enrollment *SY 2014-15	**Projected Enrollment (SY 2015-16)
Lāhaināluna High School	1,014	1,081
Lāhainā Intermediate	635	672
Kamehameha III Elementary	773	788
Princess Nahi'ena'ena Elementary	724	675
Source: *Department of Education School Enrollment, 2014. **Analysis of the West Maui School Impact District, 2010.		

School bus transportation is currently provided to Olowalu residents to Princess Nahi'ena'ena Elementary, Lāhaina Intermediate and Lāhaināluna High School. There is one (1) route from Olowalu Town which uses a 42-passenger bus (Joseph, 2012). University of Hawai'i Maui College (UH-Maui), which is located in Kahului, is a branch of the University of Hawai'i system. In addition, there is a UH-Maui Lāhainā Education Center that opened in West Maui in Fall 2007. UH-Maui is the primary higher education institution serving Maui.

The OCR currently provides educational experiences relating to its archaeological and cultural heritage to various groups, especially school children.

b. Potential Impacts and Mitigation Measures

Initially, until a new educational facility is constructed in the Master Plan for Alternatives 1 and 2, students would utilize the available school bus service to Lāhainā Town. If the student enrollment increases beyond the existing 42-passenger bus, the bus can be increased to a 72-passenger bus or separate routes established to the different schools (Joseph, 2012). Ongoing dialogue with the DOE to assess the impact of the proposed Master Plan for Alternatives 1 and 2 upon regional educational facilities will continue throughout the land entitlement process and implementation of the project. Based on the DOE's ~~student generation rates~~ formula to determine impact fees for the West Maui Impact District, the proposed project's 600 single-family units and 900 multi-family units are anticipated to generate 462 new elementary, middle, and high school students. See **Table 2032**.

residents, nonprofit groups, government agencies and legislators, a variety of suggestions were received regarding the type of school that should be established in Olowalu. ~~It has~~The suggestions included a DOE-operated school, charter school and private school ranging from an elementary, middle, and high school, as well as a combined elementary/middle school.

On multiple occasions it has been suggested that the future educational or learning facility within the Master Plan for Alternatives 1 and 2 could potentially incorporate lessons learned within the OCR as core components of its curriculum. As the Master Plan for Alternatives 1 and 2 progresses through the entitlement process, refinement of the scope of the educational or learning facility will be ~~developed~~undertaken with the community and the DOE.

5. Recreational Facilities

a. Existing Conditions

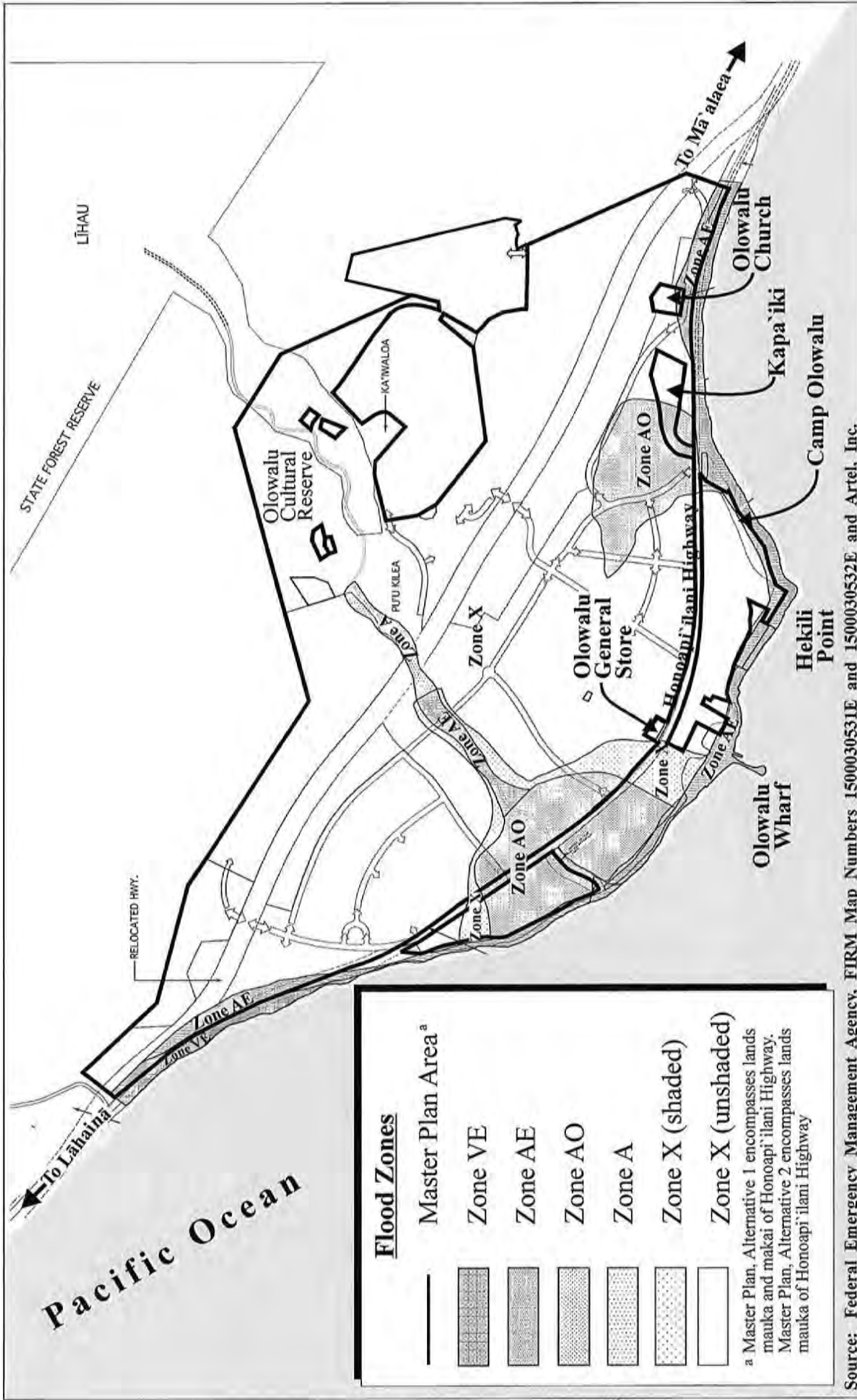
West Maui is served by numerous recreational facilities offering diverse opportunities for the region's residents. There are seventeen (17) County parks and three (3) State beach parks in West Maui. Approximately one-third of the County parks are situated along the shoreline.

In addition, Kā'anapali and Kapalua Resorts operate world-class golf courses which are available for public use.

Public access is available to the Olowalu shoreline, which offers opportunities for surfing, swimming, fishing, snorkeling, and diving. However, within the Olowalu vicinity, there are no improved parking areas and no park facilities, such as restrooms, showers, or picnic tables.

b. Potential Impacts and Mitigation Measures

Increased demand for recreational resources, including inland, coastal and ocean recreational resources, will be mitigated through the provision of parks and recreational-related improvements throughout the Master Plan for Alternatives 1 and 2. Such parks and recreational-related improvements, while located within the Master Plan area for the respective alternatives, will be open to and enjoyed by the public. The Master Plan for Alternatives 1 and



Flood Zones

Master Plan Area^a

Zone VE

Zone AE

Zone AO

Zone A

Zone X (shaded)

Zone X (unshaded)

^a Master Plan, Alternative 1 encompasses lands mauka and makai of Honoapiʻilani Highway. Master Plan, Alternative 2 encompasses lands mauka of Honoapiʻilani Highway

Source: Federal Emergency Management Agency, FIRM Map Numbers 1500030531E and 1500030532E and Artel, Inc.

Figure 1315 Proposed Olowalu Town Master Plan
Flood Insurance Rate Map

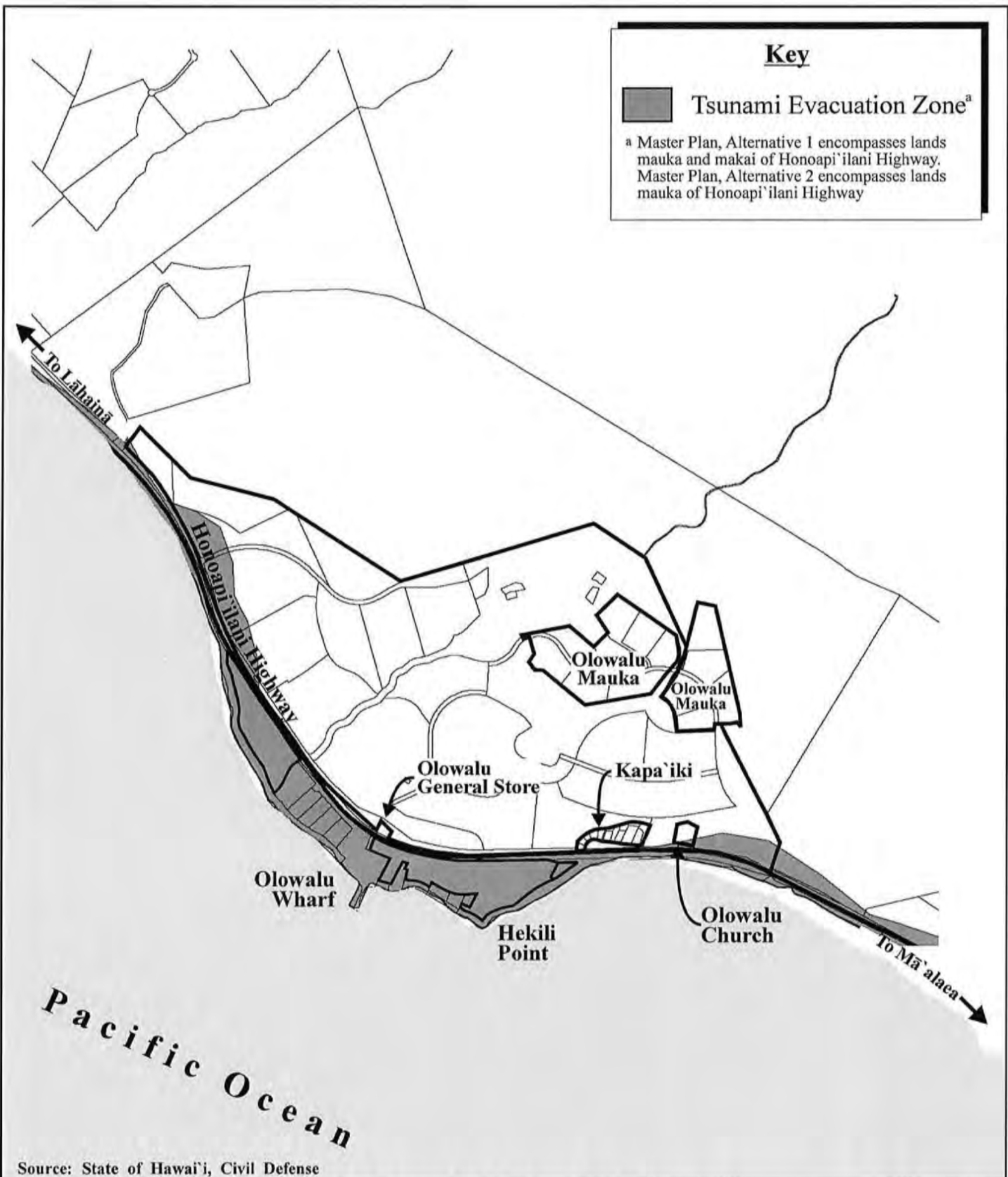


NOT TO SCALE



Prepared for: Olowalu Town, LLC and Olowalu Ekolū, LLC

Olowalu Town Master Plan Final EIS/FIRM



Source: State of Hawaiʻi, Civil Defense


Figure 18

Proposed Olowalu Town Master Plan Tsunami Evacuation Map

NOT TO SCALE



EXHIBIT 15

 MUNEKIYO HIRAGA

Prepared for: Olowalu Town, LLC and Olowalu Ekolu, LLC

Olowalu Town\MasterPI\Final EIS\TsunamiEvacuation

Management Priority #11 National Ocean Policy and Pacific Regional Ocean Initiatives

- Goal A:** Contribute to the Pacific Regional Priorities for Pacific Regional Ocean Partnership, which include, but are not limited to, climate change adaptation and the support of Coastal and Marine Spatial Planning.
- Goal B:** Formalize Hawai'i Sub-Regional Ocean Partnership using existing partnerships and focus on ORMP implementation.
- Goal C:** Through the Regional Planning Body, establish a coastal and marine spatial plan to be used throughout the Pacific Region.

Comment: To the extent practicable and appropriate, the Applicants will support partnerships and collaboration which advance coastal and marine planning initiatives.

D.F. MAUI COUNTY GENERAL PLAN

As indicated by the Maui County Charter, the purpose of the General Plan shall be:

...indicate desired population and physical development patterns for each island and region within the County; shall address the unique problems and needs of each island and region; shall explain the opportunities and the social, economic, and environmental consequences related to potential developments; and shall set forth the desired sequence, patterns, and characteristics of future developments. The General Plan shall identify objectives to be achieved, and priorities, policies, and implementing actions to be pursued with respect to population density, land use maps, land use regulations, transportation systems, public and community facility locations, water and sewage systems, visitor destinations, urban design, and other matters related to development.

Chapter 2.80B of the Maui County Code (MCC), relating to the General Plan and Community Plans, implements the foregoing Charter provision through enabling legislation which calls for a Countywide Policy Plan and a MIP. The Countywide Policy Plan was adopted as Ordinance No. 3732 on March 24, 2010. ~~The MIP is currently in the process of review and formulation by the Maui County Council.~~

With regard to the Countywide Policy Plan, Section 2.80B.030 of the MCC states the following.

The countywide policy plan shall provide broad policies and objectives which portray the desired direction of the County's future. The countywide policy plan shall include:

1. *A vision for the County;*
2. *A statement of core themes or principles for the County; and*
3. *A list of countywide objectives and policies for population, land use, the environment, the economy, and housing.*

Core principles set forth in the Countywide Policy Plan are listed as follows:

1. Excellence in the stewardship of the natural environment and cultural resources;
2. Compassion for and understanding of others;
3. Respect for diversity;
4. Engagement and empowerment of Maui County residents;
5. Honor for all cultural traditions and histories;
6. Consideration of the contributions of past generations as well as the needs of future generations;
7. Commitment to self-sufficiency;
8. Wisdom and balance in decision making;
9. Thoughtful, island-appropriate innovation; and
10. Nurturance of the health and well-being of our families and our communities.

Congruent with these core principles, the Countywide Policy Plan identifies goals objectives, policies and implementing actions for pertinent functional planning categories, which are identified as follows:

1. Natural environment
2. Local cultures and traditions
3. Education
4. Social and healthcare services
5. Housing opportunities for residents
6. Local economy
7. Parks and public facilities
8. Transportation options
9. Physical infrastructure
10. Sustainable land use and growth management
11. Good governance

With respect to the Master Plan for Alternatives 1 and 2, the following goals, objectives, policies and implementing actions are illustrative of the project's compliance with the Countywide Policy Plan.

GOALS, OBJECTIVES AND POLICIES

Protect the Natural Environment

Goal: Maui County's natural environment and distinctive open spaces will be preserved, managed, and cared for in perpetuity.

Objective: Improve the opportunity to experience the natural beauty and native biodiversity of the islands for present and future generations.

Policies: Perpetuate native Hawaiian biodiversity by preventing the introduction of invasive species, containing or eliminating existing noxious pests, and protecting critical habitat areas.

Preserve and reestablish indigenous and endemic species' habitats and their connectivity.

Restore and protect forests, wetlands, watersheds, and stream flows, and guard against wildfires, flooding, and erosion.

Protect baseline stream flows for perennial streams, and support policies that ensure adequate stream flow to support native Hawaiian aquatic species, traditional kalo cultivation, and self-sustaining ahupua'a.

Protect undeveloped beaches, dunes, and coastal ecosystems, and restore natural shoreline processes.

Protect the natural state and integrity of unique terrain, valued natural environments, and geological features.

Preserve and provide ongoing care for important scenic vistas, view planes, landscapes, and open-space resources.

Expand coordination with the State and nonprofit agencies and their volunteers to reduce invasive species, replant indigenous species, and identify critical habitat.

Comment: The Applicants recognize the importance of the environment, history and culture of Olowalu. This recognition resulted in following the ahupua'a concept in the planning of the Master Plan for Alternatives 1 and 2. In following this concept, a significant element of the Master Plan for Alternatives 1 and 2 is Olowalu Stream and the OCR which provides the mauka to makai orientation of the ahupua'a. The Applicants are working actively with the OCR to preserve the historic and cultural sites and to remove invasive species and re-establish the *lo'i* and native species within the cultural reserve.

Objective: Improve the quality of environmentally sensitive, locally valued natural resources and native ecology of each island.

Policies: Protect and restore nearshore reef environments and water quality.

Protect marine resources and valued wildlife.

Improve the connection between urban environments and the natural landscape and incorporate natural features of the land into urban design.

Utilize land-conservation tools to ensure the permanence of valued open spaces.

Mitigate the negative effects of upland uses on coastal wetlands, marine life, and coral reefs.

Strengthen coastal-zone management, re-naturalization of shorelines, where possible, and filtration or treatment of urban and agricultural runoff.

Restore watersheds and aquifer-recharge areas to healthy and productive status and increase public knowledge about the importance of watershed stewardship, water conservation, and groundwater protection.

Comment: To minimize or mitigate impacts on the environment, especially the nearshore reef environment, the Master Plan for Alternatives 1 and 2 will utilize technology that eliminates the use of injection wells and development of a drainage system incorporating detention and retention basins and other measures, such as Low Impact Development (LID) to prevent sediments from entering the ocean. The Applicants propose to continue to work with the OCR in their efforts to restore watershed areas in Olowalu Valley and restore the stream flow within Olowalu Stream.

Alternative 1 includes approximately 223 acres and Alternative 2 includes approximately 200 acres for drainage, parks and open space. Alternative 1 includes proposed development of shoreline recreation and public access areas makai of Honoapi'ilani Highway and maintaining the existing 150 ft. shoreline setback. Alternative 2 does not include the makai lands. The existing public access and recreation areas, as well as, the existing 150 ft. shoreline setback will be maintained.

Objective: Improve the stewardship of the natural environment.

Policies: Preserve and protect natural resources with significant scenic, economic, cultural, environmental, or recreational value.

Improve communication, coordination, and collaboration among government agencies, nonprofit organizations, communities, individuals, and land owners that work for the protection of the natural environment.

Evaluate development to assess potential short-term and long-term impacts on land, air, aquatic, and marine environments.

Improve efforts to mitigate and plan for the impact of natural disasters, human-influenced emergencies, and global warming.

Regulate access to sensitive ecological sites and landscapes.

Policy: Provide public access to beaches and shorelines for recreational and cultural purposes where appropriate.

Comment: The planning of the Master Plan involved a community based planning process, “Olowalu Talk Story”, involving more than 1,350 participants. Key values expressed by the participants were the need to protect the environment, preserve culture, provide affordable housing, improve infrastructure, strengthen the island’s economy and preserve and enhance shoreline access. The planning of the Master Plan for Alternatives 1 and 2 involved numerous studies analyzing the existing environment and identifying potential impacts and mitigation measures to ensure these values are reflected in the Master Plan.

The proposed project will preserve and enhance public access to shoreline resources. In Alternative 1, the existing 150-foot shoreline setback established through SMA Permit No. SM1 990021, enhanced parks, public access, and open space on the makai side of Honoapiʻilani Highway will create a continuous shoreline access from the Lāhainā side to Māʻalaea side of Olowalu. Alternative 2 does not involve the makai lands. The existing 150-foot shoreline setback, public access and recreational uses will be maintained. The Master Plan for Alternatives 1 and 2 also includes the 74-acre OCR which protects archaeological and cultural resources in Olowalu.

Objective: Educate residents and visitors about responsible stewardship practices and the interconnectedness of the natural environment and people.

Policies: Expand education about native flora, fauna, and ecosystems.

Comment: The Applicants will continue to support the OCR education programs for residents and visitors. The stewardship practices within the cultural reserve and the concept of interconnectedness of the natural environment and people as traditionally practiced by Hawaiians in the ahupua`a is of particular importance in the education process.

Preserve Local Cultures and Tradition

Goal: Maui County will foster a spirit of pono and protect, perpetuate, and reinvigorate its residents' multi-cultural values and traditions to ensure that current and future generations will enjoy the benefits of their rich island heritage.

Objective: Perpetuate the Hawaiian culture as a vital force in the lives of residents.

Policies: Protect and preserve access to mountain, ocean, and island resources for traditional Hawaiian cultural practices.

Prohibit inappropriate development of cultural lands and sites that are important for traditional Hawaiian cultural practices, and establish mandates for the special protection of these lands in perpetuity.

Promote the use of ahupua`a and moku management practices.

Recognize and preserve the unique natural and cultural characteristics of each ahupua`a or district.

Encourage schools to promote broader incorporation of Hawaiian and other local cultures history and values lessons into curriculum.

Ensure the protection of Native Hawaiian rights.

Promote, encourage, and require the correct use of traditional place names, particularly in government documents, signage, and the tourism industry.

Objective: Emphasize respect for our island lifestyle and our unique local cultures, family, and natural environment.

Policy: Recognize the interconnectedness between the natural environment and the cultural heritage of the islands.

Objective: Preserve for present and future generations the opportunity to know and experience the arts, culture, and history of Maui County.

Policies: Foster teaching opportunities for cultural practitioners to share their knowledge and skills.

Support the development of cultural centers.

Support programs and activities that record the oral and pictorial history of residents.

Support the development of repositories for culture, history, genealogy, oral history, film, and interactive learning.

Objective: Preserve and restore significant historic architecture, structures, cultural sites, cultural districts, and cultural landscapes.

Policies: Protect and preserve lands that are culturally or historically significant.

Perpetuate the authentic character and historic integrity of rural communities and small towns.

Protect summits, slopes, and ridgelines from inappropriate development.

Provide opportunities for public involvement with restoration and enhancement of all types of cultural resources.

Foster partnerships to identify and preserve or revitalize historic and cultural sites.

Comment: The 74-acre OCR was established in 20001999 to preserve and protect the historical, cultural, and spiritual resources within the Olowalu ahupua`a. The OCR is an integral part of the Master Plan for Alternatives 1 and 2, respecting the natural environment and its historic and cultural heritage. The Master Plan isfor Alternatives 1 and 2 is modeled after the ahupua`a system of land use recognizing the importance of Olowalu Stream and the connection between the ocean and mountain environment, as well as the rich cultural heritage of the area. The Applicants will continue to support the efforts of the OCR to document and preserve the culture and history of Hawaiians as well as efforts to practice sustainability within the context of the ahupua`a. Towards this end, the Applicants have initiated research to document the traditional place names of Olowalu to be incorporated into the OTMP in its street

names and identification of public facilities. It is envisioned that the future educational facilities within the Master Plan for Alternatives 1 and 2 will incorporate lessons learned within the OCR as core components of its curriculum.

~~The Master Plan~~Both Alternatives 1 and 2 seeks to establish a thriving village community at Olowalu as a sustainable, integrated living and working village similar to the former plantation town. The project includes rural designated lands that are envisioned to be a transitional zone between the existing agricultural lands and future town centers. To minimize and mitigate impacts to historic Kapa'iki Village from the newer portion of the Master Plan for Alternatives 1 and 2, parks and open space areas are proposed adjacent to portions of the village. The development of the Master Plan for Alternatives 1 and 2 will not intrude into the historically and culturally sensitive areas, such as the historic Olowalu Church and 'Awalau Cemetery.

Improve Education

Goal: Residents will have access to lifelong formal and informal educational options enabling them to realize their ambitions.

Objective: Provide nurturing learning environments that build skills for the 21st century.

Policies: Encourage collaborative partnerships to improve conditions of learning environments.

Promote development of neighborhood schools and educational centers.

Integrate schools, community parks, and playgrounds, and expand each community's use of these facilities.

Design school and park facilities in proximity to residential areas.

Encourage alternative learning and educational opportunities.

Implementing Action: Develop safe walking and bicycling programs for school children.

Objective: Provide all residents with educational opportunities that can help them better understand themselves and their surroundings and allow them to realize their ambitions.

Policies: Promote the teaching of traditional practices, including aquaculture; subsistence agriculture; Pacific Island, Asian, and other forms of alternative health practices; and indigenous Hawaiian architecture.

Integrate cultural and environmental values in education, including self sufficiency and sustainability.

Foster a partnership and ongoing dialogue between business organizations, formal educational institutions, and vocational training centers to tailor learning and mentoring programs to County needs.

Objective: Maximize community-based educational opportunities.

Policies: Support the development of a wide range of informal educational and cultural programs for all residents.

Attract learning institutions and specialty schools to diversify and enhance educational opportunities.

Support community facilities such as museums, libraries, nature centers, and open spaces that provide interactive-learning opportunities for all ages.

Comment: As previously mentioned, the Master Plan for Alternatives 1 and 2 includes the OCR and is envisioned that the future educational facilities within the Master Plan areas will incorporate lessons learned within the OCR as core components of its curriculum.

Expand Housing Opportunities for Residents

Goal: Quality, island-appropriate housing will be available to all residents.

Objective: Reduce the affordable housing deficit for residents.

Policies: Ensure that an adequate and permanent supply of affordable housing, both new and existing units, be made available for purchase or rental to our resident and/or workforce population, with special emphasis on providing housing for low- to moderate-income families, and ensure that all affordable housing remains affordable in perpetuity.

Seek innovative ways to lower housing costs without compromising the quality of our island lifestyle.

Provide for a range of senior-citizen and special needs housing choices on each island that affordably facilitates a continuum of care and services.

Develop neighborhoods with a mixture of accessible and integrated community facilities and services.

Support the opportunity to age in place by providing accessible and appropriately designed residential units.

Objective: Increase the mix of housing types in towns and neighborhoods to promote sustainable land use planning, expand consumer choice, and protect the County's rural and small-town character.

Policies: Seek innovative ways to develop ohana cottages and accessory-dwelling units as affordable housing.

Design neighborhoods to foster interaction among neighbors.

Encourage a mix of social, economic, and age groups within neighborhoods.

Develop workforce housing in proximity to job centers and transit facilities.

Objective: Increase and maintain the affordable housing inventory.

Policy: Recognize housing as a basic human need and work to fulfill that need.

Comment: The proposed Master Plan for Alternatives 1 and 2 will provide for a mix of residential housing types for a variety of income groups. ~~Half of the proposed 1,500 units will be reserved for workforce housing serving households earning between 80 percent and 160 percent of median income.~~ Affordable housing in accordance with Chapter 2.96, MCC will be provided. Applicants will enter into an affordable housing agreement with the Department of Housing and Human Concerns (DHHC) at the appropriate time. The residential units will be developed in the context of a comprehensive master plan that provides for a mix of commercial, public/quasi-public, and residential facilities, allowing residents the opportunity to live near job opportunities. ~~In addition to the jobs, the Master Plan~~ Both Alternatives 1 and 2 will also provide workforce housing opportunities in closer proximity to

resort- and tourism-related jobs in Lāhainā, Ka'anapali, and Kapalua. Currently, the majority of workforce housing on the island is located in Central Maui and many people commute from Wailuku and Kahului to jobs in West Maui.

The Countywide Policy Plan also includes the following housing policies that set forth policy priorities which the Master Plan may not directly address:

- Promote infill housing in urban areas at scales that capitalize on existing infrastructure, lower development costs, and are consistent with existing or desired patterns of development.
- Minimize the intrusion of housing on prime, productive, and potentially productive agricultural lands and regionally valuable agricultural lands.

Comment: Although the Master Plan for Alternatives 1 and 2 does not promote infill housing in an urban area, it is located in an area that has been traditionally used for housing by plantation workers. As stated previously, implementation of the Master Plan will be undertaken concurrent with the development of infrastructure and public services and facilities. The Master Plan for Alternatives 1 and 2 will promote housing in an area historically used for housing.

Portions of the Master Plan for Alternatives 1 and 2 is located on prime and potentially productive agricultural lands, however, since the demise of the sugar plantation in 1999, much of the land has remained vacant. Marginal use of the land has been by the hydroponic tomato farm which are not dependent on prime soil characteristics and the tree farms makai of Honoapi'ilani Highway. It is anticipated that agriculture in Hawai'i will become less dependent on prime soil characteristics and innovative practices such as hydroponics will increase. It is noted that 14 agricultural lots are proposed along Olowalu Stream to encourage the future owners to practice traditional Hawaiian agriculture in cooperation with the OCR.

In general, the Countywide Policy Plan seeks to be as comprehensive as possible in guiding decisions based on a diverse set of policy directions addressing various functional categories. It is recognized that the comprehensiveness of the policy coverage does result in competing priorities among policy statements. The assessment of consistency with this general planning document has been conducted in the context of the overall Master Plan for Alternatives 1 and 2 and the larger body of policy

statements set forth by the Countywide Policy Plan, including policies to which the proposed action do not directly address.

Strengthen the Local Economy

Goal: Maui County's economy will be diverse, sustainable, and supportive of community values.

Objective: Promote an economic climate that will encourage diversification of the County's economic base and a sustainable rate of economic growth.

Policies: Support economic decisions that create long-term benefits.

Support home-based businesses that are appropriate for and in character with the community.

Encourage businesses that promote the health and well-being of the residents, produce value-added products, and support community values.

Support and encourage traditional host-culture businesses and indigenous agricultural practices.

Support public and private entities that assist entrepreneurs in establishing locally operated businesses.

Objective: Diversify and expand sustainable forms of agriculture and aquaculture.

Policies: Encourage healthy and organic farm practices that contribute to land health and regeneration.

Support cooperatives and other types of nontraditional and communal farming efforts.

Comment: The Master Plan for Alternatives 1 and 2 will generate positive economic impacts during the construction period, as well as at full build-out of the project. According to the Economic and Fiscal Impact study prepared for the project, total construction expenditures are expected to total approximately \$465.6 million and. The OTMP is expected to create an average of 377 direct and indirect jobs on Maui annually over the 10-year development period. Upon completion, the Master Plan for Alternatives 1 and 2 could result in approximately 1,000 jobs in the commercial and industrial sectors of the project. Employment attributed to the Master

Plan is for Alternatives 1 and 2 is expected to total approximately 4,770 jobs over the term of the development.

The Countywide Policy Plan also includes the following Economic Policy relating to the use of agricultural lands:

- Prioritize the use of agricultural land to feed the local population and promote the use of agricultural lands for sustainable and diversified agricultural activities.

Comment: Both Alternatives 1 and 2 include 14 agricultural lots along Olowalu Stream to encourage the future owners to practice traditional Hawaiian agriculture in cooperation with the OCR and promote sustainable and diversified agricultural activities.

Improve Parks and Public Facilities

Goal: A full range of island-appropriate public facilities and recreational opportunities will be provided to improve the quality of life for residents and visitors.

Objective: Expand access to recreational opportunities and community facilities to meet the present and future needs of residents of all ages and physical abilities.

Policies: Protect, enhance, and expand access to public shoreline and mountain resources.

Expand and enhance the network of parks, multi-use paths, and bikeways.

Assist communities in developing recreational facilities that promote physical fitness.

Promote the development and enhancement of community centers, civic spaces, and gathering places throughout our communities.

Expand affordable access to recreational opportunities that support the local lifestyle.

Objective: Improve the quality and adequacy of community facilities.

Policies: Provide and maintain community facilities that are appropriately designed to reflect the traditions and customs of local cultures.

Maintain, enhance, expand, and provide new active and passive recreational facilities in ways that preserve the natural beauty of their locations.

Comment: The proposed project includes provisions for active and passive parks, as well as open space areas. Approximately 223 acres of the Master Plan in Alternative 1 and approximately 200 acres in Alternative 2 have been designated for drainage, park and open-space.

Diversify Transportation Options

Goal: Maui County will have an efficient, economical, and environmentally sensitive means of moving people and goods.

Objective: Provide an effective, affordable, and convenient ground-transportation system that is environmentally sustainable.

Policies: Plan for the efficient relocation of roadways for the public benefit.

Support the use of alternative roadway designs, such as traffic-calming techniques and modern roundabouts.

Increase route and mode options in the ground-transportation network.

Ensure that roadway systems are safe, efficient, and maintained in good condition.

Reserve roadway corridors that have historic, scenic, or unique physical attributes that enhance the character and scenic resources of communities.

Design new roads and roadway improvements to retain and enhance the existing character and scenic resources of the communities through which they pass.

Promote a variety of affordable and convenient transportation services that meet countywide and community needs and expand ridership of transit systems.

Collaborate with transit agencies, government agencies, employers, and operators to provide planning strategies that reduce peak-hour traffic.

Develop and expand an attractive, island-appropriate, and efficient public-transportation system.

Objective: Reduce the reliance on the automobile and fossil fuels by encouraging walking, bicycling, and other energy-efficient and safe alternative modes of transportation.

Policies: Make walking and bicycling transportation safe and easy between and within communities.

Require development to be designed with the pedestrian in mind.

Support the reestablishment of traditional trails between communities, to the ocean, and through the mountains for public use.

Objective: Improve and expand the planning and management of transportation systems.

Policies: Encourage progressive community design and development that will reduce transportation trips.

Support the revision of roadway-design criteria and standards so that roads are compatible with surrounding neighborhoods and the character of rural areas.

Plan for multi-modal transportation and utility corridors on each island.

Utilize transportation-demand management as an integral part of transportation planning.

Accommodate the planting of street trees and other appropriate landscaping in all public rights-of-way.

Comment: The Master Plan is for Alternatives 1 and 2 is designed to be a pedestrian-friendly community which will allow residents to live within walking distance of corner stores, schools, parks, employment opportunities, gathering centers, beaches/shoreline, and other social and civic resources, reducing reliance on

automobiles. Alternatives 1 and 2 encourage multi-modal transportation such as bicycling. The realigned Honoapiʻilani Highway corridor will be wide enough to accommodate future alternative transportation modes.

The project will maximize circulation and connectivity within the development through a “gridded” network of pedestrian friendly roadways. Smart Growth principles will be applied in establishing roadway standards and internal streets, parkways, alleys, and lanes will be designed to accommodate a series of interconnected greenways/bikeways for walking or biking. As the project progresses, a transportation demand management plan will be developed for the project to further reduce the demand for automobiles.

Improve Physical Infrastructure

Goal: Maui County’s physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective: Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water.

Policies: Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents.

Develop and fund improved water-delivery systems.

Ensure a reliable and affordable supply of water for productive agricultural uses.

Promote the reclamation of gray water, and enable the use of reclaimed, gray, and brackish water for activities that do not require potable drinking water.

Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.

Explore and promote alternative water-source-development methods.

Seek reliable long-term sources of water to serve developments that achieve consistency with the appropriate Community Plans.

Objective: Improve waste-disposal practices and systems to be efficient, safe, and as environmentally sound as possible.

Policy: Support innovative and alternative practices in recycling solid waste and wastewater and disposing of hazardous waste.

Objective: Significantly increase the use of renewable and green technologies to promote energy efficiency and energy self-sufficiency.

Policies: Promote the use of locally renewable energy sources, and reward energy efficiency.

Encourage small-scale energy generation that utilizes wind, sun, water, biowaste, and other renewable sources of energy.

Support green building practices such as the construction of buildings that aim to minimize carbon dioxide production, produce renewable energy, and recycle water.

Objective: Direct growth in a way that makes efficient use of existing infrastructure and to areas where there is available infrastructure capacity.

Policies: Capitalize on existing infrastructure capacity as a priority over infrastructure expansion.

Planning for new towns should only be considered if a region's growth is too large to be directed into infill and adjacent growth areas.

Promote land use patterns that can be provided with infrastructure and public facilities in a cost-effective manner.

Objective: Improve the planning and management of infrastructure systems.

Policies: Ensure that infrastructure is built concurrent with or prior to development.

Require new developments to contribute their pro rata share of local and regional infrastructure costs.

Discourage the development of critical infrastructure systems within hazard zones and the tsunami-inundation zone to the extent practical.

Ensure that infrastructure is built concurrent with or prior to development.

Ensure that basic infrastructure needs can be met during a disaster.

Locate public facilities and emergency services in appropriate locations that support the health, safety, and welfare of each community and that minimizes delivery inefficiencies.

Comment: Although one of the objectives of the Countywide Policy Plan is to direct growth to areas with available infrastructure capacity, with this regard into the West Maui region, there are limited available infill areas to accommodate growth. The MIP identifies the Kahoma Village and Kahoma Residential projects as infill. Both projects are in the process of finalizing permitting requirements. Accommodation of growth in West Maui will likely occur by extending into areas surrounding the existing urban areas such as the Pulelehua project Kā'anapali 2020 or the creation of new towns such as the proposed Master Plan for Alternatives 1 and 2, both of which will require the expansion of infrastructure. The Master Plan Both Alternatives 1 and 2 proposes to establish a new sustainable mixed-use community in an area of the once thriving plantation town of Olowalu.

The Olowalu community will be developed concurrently with appropriate infrastructure in phases spread out over a period of approximately 10 years. To ensure development sustainability, the Master Plan for Alternatives 1 and 2 calls for the use of state-of-the art engineering and design principles for water, wastewater, drainage, and energy systems. Potable Drinking water will be provided through an expansion of an existing private water system to meet the Master Plan's. It is estimated with implementation of proposed conservation and sustainable measures average daily water demand will be approximately 672,300 gpd average daily demand. Based on Department of Water Supply standards, the estimated average daily water demand is 951,000 gpd for the 1,500 residential units and existing users. The anticipated water demand is below the 2.0 mgd sustainable yield of the Olowalu Aquifer. Wastewater treatment and disposal will be provided via a small privately owned and operated treatment plant which will yield R-1 quality water to be used to meet irrigation demands for the community. A significant infrastructure component of the Master Plan is the proposed relocation of Honoapi'ilani Highway along a mauka alignment to provide a route which is consistent with the County of Maui's proposed Pali to Puamana Master Plan. The project is also coordinating the mauka alignment with the proposed Honoapi'ilani Highway Realignment/Widening from Mā'alaea to Launiupoku with the HDOT. The mauka realignment of Honoapi'ilani Highway will

~~facilitate the State's and County's vision to move the highway inland, away from its existing, more environmentally sensitive coastal alignment.~~

A significant infrastructure component of the Master Plan for Alternatives 1 and 2 is the corridor for the proposed relocation of Honoapiʻilani Highway along a mauka alignment. The proposed alignment meets the purpose of the County of Maui's proposed Pali to Puamana Parkway Master Plan. Alternative 1 will also "preserve open space along the coastline of West Maui" (Pali to Puamana FEIS) by including significant makai parks and open space areas while Alternative 2 maintains the existing conditions. The mauka realignment of Honoapiʻilani Highway will facilitate the State's and County's vision to move the highway inland away from its existing more environmentally sensitive coastal alignment. The Applicants will continue to participate in the HDOT and County of Maui efforts to implement the proposed realignment and widening of Honoapiʻilani Highway.

According to the Assessment of Economic and Fiscal Impacts, it is estimated that the infrastructure improvements will be \$50.0 million for the internal roadways and utilities, \$15 million for the wastewater treatment facility and R-1 transmission lines, \$18 million for the new highway and bridge crossing over Olowalu Stream, \$5 million for parks improvements, and \$5 million for a small-scale renewable energy system. The total estimated construction expenditures for infrastructure and vertical construction for the Master Plan is estimated as \$465.6 million. Refer to **Appendix "EM"**.

As refinements to the Master Plan for Alternatives 1 and 2 is made, consideration will be given to discourage the development of critical infrastructure systems within hazard zones such as the tsunami-inundation zone to the extent practicable. Public facilities and emergency services will be sited in appropriate locations in support of the health, safety, and welfare of the Olowalu community. The project will be designed in compliance with flood hazard area development regulations and appropriate mitigation measures will be utilized to ensure that basic infrastructure needs can be met during disasters. ~~Public~~As appropriate, public facilities within the Master Plan for Alternatives 1 and 2 will be developed to meet public shelter specifications during disasters.

Promote Sustainable Land Use and Growth Management

Goal: Community character, lifestyles, economies, and natural assets will be preserved by managing growth and using land in a sustainable manner.

Objective: Improve land use management and implement a directed-growth strategy.

Policies: Establish, map, and enforce urban- and rural-growth limits.

Direct urban and rural growth to designated areas.

Encourage redevelopment and infill in existing communities on lands intended for urban use to protect productive farm land and open-space resources.

Discourage new entitlements for residential, resort, or commercial development along the shoreline.

Restrict development in areas that are prone to natural hazards, disasters, or sea-level rise.

Direct new development in and around communities with existing infrastructure and service capacity, and protect natural, scenic, shoreline, and cultural resources.

Establish and maintain permanent open space between communities to protect each community's identity.

Preserve the public's rights of access to and continuous lateral access along all shorelines.

Enable existing and future communities to be self-sufficient through sustainable land use planning and management practices.

Protect summits, slopes, and ridgelines from inappropriate development.

Comment: The Countywide Policy Plan encourages a directed growth strategy in the MIP. The MIP designated Olowalu as an appropriate location for future growth. The MIP included the Master Plan area in the UGB and RGB of the directed growth map. While the UGB and RGB areas are located mauka of Honoapiʻilani Highway, makai lands may be considered during the update or amendment to the West Maui

Community Plan. As such, the Master Plan for Alternatives 1 and 2 has been deemed an appropriate area for future growth. The Applicants seek to establish a sustainable community at the former plantation town of Olowalu. The Master Plan for Alternative 1 and 2 are guided by values and principles of sustainability balancing the needs of Maui's growing population while maintaining and respecting cultural, historical, and natural resources.

Alternative 1 proposes some residential development makai of Honoapi'ilani Highway, while Alternative 2 does not include the makai lands. In Alternative 1, a major portion of the makai area is to be used for public parks and open space. At a minimum, development in Alternative 1 will be at least 150 feet away from the shoreline to accommodate for shoreline erosion and sea-level rise. The major portion of the town centers and residential developments are located mauka of the Highway. To maintain the small town character of Olowalu, the Master Plan for Alternatives 1 and 2 are separated into two (2) sections by Olowalu Stream and the OCR.

The Master Plan for Alternative 1 will maintain continuous public lateral access along the shoreline while Alternative 2 will maintain the existing public access. The approximate 223 acres in Alternative 1 and approximate 200 acres in Alternative 2 of drainage, open space and park lands will provide opportunity for recreational uses. Olowalu Stream and the OCR provide continuous mauka to makai access from the mountains to the ocean. In addition, the summits, slopes and ridgelines located mainly on the outskirts of Olowalu and within Olowalu Valley are not identified for development.

Objective: Improve planning for and management of agricultural lands and rural areas.

Policies: Protect prime, productive, and potentially productive agricultural lands to maintain the islands' agricultural and rural identities and economies.

Provide opportunities and incentives for self-sufficient and subsistence homesteads and farms.

Comment: Portions of the Master Plan for Alternatives 1 and 2 are located on prime agricultural lands. Since the termination of sugar cultivation in 1999, there has been limited use of portions of the former sugarcane land. It is anticipated that agriculture in Hawai'i will become less dependent on prime soil characteristics and innovative practices such as hydroponics will increase. As previously noted,

agricultural lots are proposed along Olowalu Stream to encourage future owners to practice traditional Hawaiian agriculture in cooperation with the OCR.

Objective: Design all developments to be in harmony with the environment and to protect each community's sense of place.

Policies: Support and provide incentives for green building practices.

Protect and enhance the unique architectural and landscape characteristics of each Community Plan Area, small town, and neighborhood.

Ensure that adequate recreational areas, open spaces, and public-gathering places are provided and maintained in all urban centers and neighborhoods.

Ensure business districts are distinctive, attractive, and pedestrian-friendly destinations.

Use trees and other forms of landscaping along rights-of-way and within parking lots to provide shade, beauty, urban-heat reduction, and separation of pedestrians from automobile traffic in accordance with community desires.

Where appropriate, integrate public-transit, equestrian, pedestrian, and bicycle facilities, and public rights-of-way as design elements in new and existing communities.

Ensure better connectivity and linkages between land uses.

Adequately buffer and mitigate noise and air pollution in mixed-use areas to maintain residential quality of life.

Protect rural communities and traditional small towns by regulating the footprint, locations, site planning, and design of structures.

Facilitate safe pedestrian access, and create linkages between destinations and within parking areas.

Comment: The Master Plan for Alternatives 1 and 2 will implement the principles of sustainability through LEED. It will incorporate innovative, efficient, and sustainable technologies to minimize adverse impacts to the environment. It is

envisioned as a pedestrian-friendly mixed use community developed concurrent with infrastructure and public services and facilities.

The character of Olowalu will be incorporated into the architecture and landscaping for the Master Plan for Alternatives 1 and 2 to ensure the expansion is a cohesive part of the original community. Siting of the commercial center incorporates Olowalu General Store to ensure the continued economic viability of the Store. Parks and open space areas are adjacent to Kapai'ki Village maintaining its unique identity while the higher density town center is located further north.

As a sustainable community, a network of streets, pedestrian paths, bikeways, and bus stops are proposed to encourage alternative modes of transportation to reduce dependency on the automobile. The Master Plan for Alternatives 1 and 2 has been formulated to ensure that within a 10 minute walk residents are able to obtain goods and services as well as get to places of employment.

Objective: Improve and increase efficiency in land use planning and management.

Policies: Assess the cumulative impact of developments on natural ecosystems, natural resources, wildlife habitat, and surrounding uses.

Ensure that new development projects requiring discretionary permits demonstrate a community need, show consistency with the General Plan, and provide an analysis of impacts.

Promote creative subdivision designs that implement: best practices in land development, sustainable management of natural and physical resources, increased pedestrian and bicycle functionality and safety, and the principles of livable communities.

Comment: ~~There are limited urban infill opportunities to meet the demands of West Maui's growing population. As such, the applicant seeks to establish a sustainable community at the former plantation town of Olowalu. The Master Plan is guided by values and principles of sustainability by balancing the needs of Maui's growing population while also maintaining and respecting cultural, historical, and natural resources. The Master Plan will be a pedestrian-friendly mixed use community. Infrastructure improvements will be constructed concurrently with the~~

~~project and will incorporate innovative, efficient, and sustainable technologies to minimize adverse impacts to the environment.~~

~~The Master Plan will preserve important open space and cultural resources. Approximately 223 acres of parks and open space will be provided. In addition, no development will occur within 150 feet of the shoreline.~~

The development of ~~the Master Plan~~ both Alternatives 1 and 2 embodies the core principles advocated by the Countywide Policy Plan. Importantly, since 2005, the Maui community, especially the Olowalu community, has been involved in the project's planning process. Respecting its natural environment and cultural heritage, ~~the Master Plan is~~ both Alternatives 1 and 2 are modeled after the Hawaiian ahupua'a system of land use recognizing the importance of Olowalu Stream and the connection between the ocean and mountain environments, as well as the rich cultural heritage of the area. ~~The Master Plan~~ Both Alternatives 1 and 2 incorporates the principles of sustainability, cultural preservation and economic diversity to create neighborhoods sensitive to its environment and cultural heritage.

~~The Master Plan~~ Both Alternatives 1 and 2 proposes to establish an economic base consisting of agriculture, community needs, and support services and new entrepreneurialism to support the community's sustainability goals. The Master Plan ~~is~~ for Alternatives 1 and 2 is envisioned to disperse population growth into a distinct community from Lāhainā Town separated by agricultural open space and topographic boundaries. The Master Plan alternatives includes retaining approximately 28 acres of agricultural lands in Olowalu as 14 agricultural homesteads ~~and, as part of~~ well as expand the OCR in order to perpetuate native Hawaiian agricultural practices.

In summary, ~~the Master Plan is~~ both Alternatives 1 and 2 are consistent with the themes and principles of the Countywide Policy Plan.

Maui Island Plan

~~The second component of the Maui County General Plan 2030 is the MIP. The MIP will set forth an islandwide land use strategy for Maui and encompasses a managed and directed growth plan which includes the delineation of urban and rural growth boundaries. The MIP has undergone review by the GPAC and the MPC and is currently under review by the Maui County Council. Both the GPAC and MPC recommended the inclusion of the Master Plan in the MIP. The Planning Director's transmittal of the MIP to the Maui County Council on~~