



EXECUTIVE CHAMBERS

HONOLULU

LINDA LINGLE  
GOVERNOR

December 11, 2008

TO: Karen Seddon, Executive Director  
Hawaii Housing Finance and Development Corporation

SUBJECT: Acceptance of the Final Environmental Impact Statement of the Keahuolu  
Affordable Housing Project

With this memorandum, I accept the Final Environmental Statement for the Keahuolu Affordable Housing Project as satisfactory fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes. The economic, social and environmental impacts, which will likely occur should this project be built, are adequately described in the statement. The analysis, together with the comments made by reviewers, provides useful information to policymakers and the public.

My acceptance of the statement is an affirmation of the adequacy of that statement under the applicable laws.

I find that the mitigation measures proposed in the environmental impact statement will minimize the negative impacts of the project. Therefore, I direct the Hawaii Housing Finance and Development Corporation and/or its agents to perform these, or alternative and at least equally effective, mitigation measures at the discretion of the permitting agencies. The mitigation measures identified in the environmental impact statement are listed in the attached document.



---

LINDA LINGLE

Attachment

c: Katherine Puana Kealoha, Office of Environmental Quality Control

ATTACHMENT TO ACCEPTANCE MEMORANDUM  
FROM GOVERNOR LINDA LINGLE  
TO KAREN SEDDON, EXECUTIVE DIRECTOR, HHFDC  
MITIGATION MEASURES  
FINAL ENVIRONMENTAL IMPACT STATEMENT  
KEAHUOLU AFFORDABLE HOUSING PROJECT

The Keahuolu Affordable Housing Project is planned as a response to the regional needs for housing and the desire to reduce congestion on regional highways due to residents traveling long distances between home and work.

The following list of mitigative measures identified in the Final Environmental Impact Statement will minimize the negative impacts of the project. If the project is implemented, the Hawaii Housing Finance and Development Corporation (HHFDC) and/or its agents should perform these or alternative and at least equally effective mitigation measures at the discretion of the permitting agencies.

#### GEOLOGY AND TOPOGRAPHY

A grading permit, a National Pollution Discharge Elimination System (NPDES) permit, and other necessary permits would be required prior to construction. An Underground Injection Control (UIC) permit would be required for any dry wells constructed. The contractor would be required to comply with erosion and sedimentation rules and regulations. Runoff flow rates and volume would not increase from the site to comply with the County of Hawaii's Storm Drainage Standard. Storm drainage filtration devices would be installed to mitigate pollutants from entering the groundwater.

#### GROUNDWATER, HYDROLOGY, SURFACE WATER, AND DRAINAGE

The project would be required to comply with the NPDES permit requirements, County Erosion and Sedimentation Control and County Storm Drainage Standards. Storm drain filtration devices and other measures would be employed to reduce potential impacts to groundwater. Runoff volumes and rates would not increase.

#### NATURAL HAZARDS - EARTHQUAKES

Construction of the improvements would be required to comply with the Uniform Building Code's (UBC) standards for Zone 4.

#### ARCHAEOLOGICAL AND HISTORIC RESOURCES

Archaeological sites and cultural resources determined to be significant under State criteria would be preserved. Data recovery plans, site preservation plans and burial treatment plans would be prepared as required.

A monitoring plan would be prepared and submitted to the Department of Land and Natural Resources (DLNR) State Historic Preservation Division (SHPD) prior to groundbreaking on the proposed reservoir site on Department of Hawaiian Home Lands.

## ROADWAYS AND TRAFFIC

To address the impacts upon the regional traffic system, the following series of mitigation measures would be followed.

- Intersection 3: Kamakaeha Avenue & Palani Road (SR 190) – Install a traffic signal with the existing lane configuration.
- Intersection 4: Henry Street & Palani Road (SR 190) – Widen the makai-bound approach to provide two left-turn lanes, one through lane, and one shared through/right-turn lane; widen the northbound approach to provide one left-turn lane, one through lane, and one shared through/right-turn lane; and construct the southbound approach with one left-turn lane, one through lane, and one shared through/right-turn lane.
- Intersection 5: Palani Road (SR 190) & Minor Site Access Road – Add a makai-bound deceleration lane into the project site and a makai-bound acceleration lane out from the project, separated by a raised island to channelize traffic. A second makai-bound lane would be added to receive traffic exiting the project site.
- Intersection 7: Ane Keohokalole Highway & Major Site Access Road – Install a traffic signal.
- Intersection 8: Kealaka'a Street/Pahilihoho Street & Palani Road (SR 190) – Widen Palani Road to provide one left-turn lane, one through lane, and one shared through/right-turn lane on the southbound approach and two left-turn lanes and one shared through/right-turn lane on the northbound approach. Widen the southbound departure to two lanes, which would merge into a single lane downstream of the intersection.
- Intersection 10: Uluaoa Street & Palani Road (SR 190) – Install a traffic signal within the existing lane configuration.
- Intersection 12: Kealakehe Parkway & Ane Keohokalole Highway – Install a traffic signal within the existing lane configuration.

## NOISE

Measures to minimize noise impacts may include limiting work to daytime hours, reducing truck/equipment idling when not in use, using manually adjustable or self-adjusting backup alarms, and fitting generators and equipment with manufacturer-approved exhaust mufflers. Noise from construction activity will be short-term and will be required to comply with Department of Health (DOH) noise regulations.

To buffer the project from the Ane Keohokalole Highway, the conceptual plans for the project provide for commercial uses along the highway and a wide landscaped greenway between the highway and the project site.

Residential and commercial uses within the Keahuolu project site would be required to conform to DOH rules and regulations for noise, which state maximum allowable noise limits at property lines.

## AIR QUALITY

A dust control program would be developed and followed to control dust from construction activities. Fugitive dust emissions can be controlled to a large extent by watering active work areas, using wind screens, keeping adjacent paved roads clean, and covering open-bodied trucks. Other measures include limiting the area to be disturbed at any given time, mulching or chemically stabilizing inactive areas, or paving and landscaping areas early in the construction schedule.

## INFRASTRUCTURE AND UTILITIES

Off-Site Roadway System. Landowners with frontage to Ane Keohokalole Highway would be expected to share in the cost of constructing the highway. The project would be responsible for satisfying its allocated share of the cost of the improvements including one lane in each direction plus a middle turn lane with drainage but excluding other utilities. A right-in/right-out intersection is proposed along Palani Road. To minimize impacts on traffic along Palani Road, the intersection would include deceleration and acceleration lanes and a raised median to prevent vehicles from attempting to make left turn movements.

Drainage System. The contractor would be required to comply with Chapter 10 – Erosion and Sedimentation Control – of the County Code, the Department of Public Works Storm Drainage Standard, and the NPDES permit requirements, including the Best Management Practices (BMP) plan to contain and control site erosion and to prevent the discharge of sediment from the site. After completion of the project construction, ground surfaces would be stabilized with landscape and hardscape.

The developer would comply with the County's Storm Drainage Standard, runoff flow rates and volume would not be increased from the site. The runoff would be collected and discharged to on-site seepage areas, seepage wells, and drywells for percolation into the ground. Recommended drainage systems would also include storm drain filtration devices to mitigate potential pollutants. Filtration devices may include vegetated swales, bioretention areas, sand, or organic filtering systems or commercially available proprietary products such as catch basin inserts and hydrodynamic devices. The method of filtration would be determined based on available technology and integrated with the system design.

The developer would provide educational materials and programs to residents regarding how they can control and prevent non-point source pollution, including but not limited to, vehicular maintenance and proper disposal of vehicle fluids, the impacts of washing cars on the street, potential impacts of fertilizer and pesticides on the environment, and alternatives to fertilizers

and pesticides. The developer would also establish community association covenants to include landscape management and vehicle maintenance controls. Landscape management controls would include the use of fertilizers, pesticides and herbicides, a listing of approved fertilizers, pesticides and herbicides, and a listing of preferred landscape plant species including native plant species and those thought to have a low risk of becoming invasive. Vehicle maintenance controls would include vehicle washing and maintenance. The developer would also provide the County Department of Parks and the State Department of Education information on the landscape management controls and vehicle maintenance controls to be used within the Keahuolu site.

Water System. The developer would be required to comply with the NPDES permit requirements, including the BMP plan, and Chapter 10 – Erosion and Sedimentation Control – of the County Code during construction, and prevent the discharge of sediment from the site. The project would be designed to comply with the County’s Storm Drainage Standard such that runoff volumes and rates would not increase as a result of site development.

The NPDES permit requirements, including the BMP plan, would require the contactor to manage materials to prevent discharge of pollutants to the ground. During and after development, landscape management practices and community association covenants would be applied in public and private areas to minimize the use of fertilizers, pesticides and herbicides that could potentially enter the groundwater.

Water supply infrastructure, including source wells, storage reservoirs, and distribution lines, would be constructed as required and approved by the County Department of Water Supply. Short-term localized water system shut-downs and road closures may be required as the new water infrastructure is connected to the existing water system.

The developer would implement water conservation measures including installing low flow toilets and showerheads waterless urinals in public restrooms, plant drought tolerant native landscaping and providing residents with information on the importance of water conservation.

To reduce the amount of pollutants from entering the groundwater, the developer would provide educational materials and programs to residents, establish community association covenants and implement BMPs. Educational materials and programs, and community association covenants would include, but not be limited to, landscape management and vehicular maintenance controls. BMPs would include vegetative swales, bioretention areas, storm drain filtration devices, ground stabilization with landscape and hardscape, educational warning signs on the drainage systems, and coordinating environmental educational programs for project area residents with the DOH Clean Water Branch.

Wastewater System. Construction activities would be required to conform to the applicable environmental requirements for storm water protection and mitigation of potential noise and dust

impacts. County fees associated with permission to connect would be applied by the County to upgrade the existing treatment and disposal facilities on an as-needed basis.

Solid Waste. Emphasis for the management of solid wastes generated by the Keahuolu project would be placed on waste diversion and recycling. Solid wastes would be managed in conformance with the applicable DOH and County requirements. The developer would provide educational materials and information on recycling programs to residents to minimize and divert wastes.

Electrical Service. An additional Hawaii Electric Light Company (HELCo) substation would be required to accommodate anticipated loads from the Keahuolu project coupled with the partial buildout of the Villages of La'i'opua and the Queen Liliuokalani Trust's ongoing Makalapua development. The preferred location for the new substation is in the Keahuolu project in the vicinity of the County reservoir near the Palani Road/Ane Keohokalole Highway intersection.

#### PUBLIC FACILITIES

Civil Defense. The developer would be required to install one outdoor warning siren at a central location within the development.

Education. An elementary school would be located on-site to relieve crowding at Kealakehe Elementary.

Recreation. The project would include approximately 25 acres of park and open space for use by residents, in accordance with County Parks Department requirements.