STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawai'i 96813

June 24, 2016

Chairperson and Board Members
Board of Land and Natural Resources
State of Hawai'i
Honolulu, Hawai'i

SUBJECT: REQUEST APPROVAL OF THE FINAL ENVIRONMENTAL ASSESSMENT FOR MAKIKI BASEYARD IMPROVEMENTS PROJECT ON THE ISLAND OF OAHU AND ISSUANCE OF A FINDING OF NO SIGNIFICANT IMPACT

BACKGROUND:

The Division of Forestry and Wildlife (DOFAW) is proposing to improve its existing Makiki Baseyard facility to better support island-wide operations. The facility is located in Makiki Valley on the Island of O'ahu, and the proposed action is referred to as the "Makiki Baseyard Improvements Project." Compliance with the State's environmental review regulations (Chapter 343, HRS) is required because the project uses State funds and lands, and is located within the State Conservation District. A Final Environmental Assessment (Final EA), dated May 2016, was prepared based upon a previously published Draft EA and review of comments received. Based upon this Final EA, a Finding of No Significant Impact (FONSI) is warranted for this project.

DOFAW's baseyard site is situated within a larger 346-acre property owned by the State, and identified by Tax Map Key (TMK) No. (1) 2-5-019: 008. Vehicular access to the DOFAW baseyard is provided through a paved access road about 0.27 miles *mauka* of the access road's intersection with Makiki Heights Drive. The lower area of this State property from Makiki Heights Drive up to DOFAW's facility is under the jurisdiction of the Division of State Parks, and is used for the Makiki Valley State Recreational Area. The Hawai'i Nature Center (HNC) is also located below (*makai*) the baseyard site.

PROJECT DESCRIPTION:

The growth of the Makiki Baseyard over time has been organic in nature and reactionary to meet the growing programmatic and functional needs of DOFAW's programs. Over time, this has resulted in the addition of temporary office and storage structures. Therefore, a master plan prepared for this baseyard is intended to be a guide for DOFAW to implement future facility

improvements that will support their agency mission, the public interest, and sustain and enhance their operations on the Island of O'ahu.

The conceptual master plan shown on Exhibit 1 generally involves: 1) construction, expansion, and renovation of DOFAW facilities; 2) installation of roadway and parking improvements; and 3) other site improvements to address wastewater, drainage, and landscaping needs. Project improvements are planned to occur within a 3.05-acre area located within the larger 346-acre parcel. Implementation of this master plan would facilitate improved operational efficiency in a manner that is sensitive to the environment, and allows for programming of future budget requests for phased implementation.

The master plan layout generally limits development to previously disturbed areas within the baseyard site and minimizes alterations of existing topography. Connectivity between buildings and functional circulation is an important theme incorporated into the master plan layout. Building design themes and architectural style are important elements considered to create a cohesive, campus-like setting that enhances the working environment. Sustainability attributes incorporated into the design of facilities and site development would include: 1) utilization of rainwater catchment systems; 2) Low Impact Development (LID) stormwater strategies (bioswales, rain gardens, bioretention areas); 3) solar energy technology; 4) natural lighting of interior spaces, and 5) energy efficient lighting and equipment selections.

Six main buildings (including the existing Administration Building) are included as part of the master plan. The project would eliminate temporary structures and renovate or demolish select existing structures. The floor area of existing facilities is 13,500 square feet (does not include nursery greenhouse structures), and this will increase to 31,200 square feet under the master plan. Both covered and uncovered parking areas would be provided for staff vehicles and equipment.

Existing wastewater generated from DOFAW facilities are treated using a "Green Machine" wastewater treatment system (above-grade constructed wetland treatment system) operated by the HNC. An existing septic system serving DOFAW's baseyard will continue to be utilized as the primary method of wastewater treatment for master plan facilities. Treated effluent will then flow to a new subsurface constructed wetland system for secondary treatment in an area presently used as subsurface irrigation fields for the Green Machine.

The access road running through the project site would be improved and provide a vehicle turnaround at the *mauka* end of the baseyard. Existing utility poles would be relocated and an existing Hawaiian Electric Company (HECO) easement running through the site would be realigned. An unused City Board of Water Supply chlorinator building will be demolished, and an easement for new waterline improvements established. Landscaping improvements are also planned to incorporate more native vegetation on the site, and these native plants could also serve as a living onsite repository for native plants and seeds as part of DOFAW's operations.

The Master Plan for DOFAW's Makiki Baseyard will serve as a guide for future site development. All improvements would be implemented subject to available funding from the State Legislature. The first phase of improvements is planned to occur in early 2017.

SUMMARY OF AFFECTS ON ENVIRONMENT:

The Final EA evaluated the probable direct, indirect, and cumulative impacts of the proposed project on relevant environmental resources. The improvements planned under the master plan would not result in significant impacts to the following resources: topography, soils, natural hazards, hydrological resources, surface waters and water quality, air quality, noise, visual resources, social and economic factors, land use compatibility, infrastructure facilities and utilities, and public facilities.

An endangered *Hibiscus clayi* specimen located near the existing administration building would remain undisturbed because no improvements are planned near it. A *Pritchardia (loulu)* specimen was observed downslope of an existing building. It is not known whether this species in the *loulu* genus may be endangered, but this specimen would also not be affected by proposed improvements. Appropriate measures will be taken to protect the *Hibiscus Clayi* and *Pritchardia (loulu)* specimens from harm due to increased staff on the site. Landscaping improvements using native species are planned and would have a positive effect on botanical resources.

The endemic White-tailed Tropicbird and other Hawaiian seabirds (Wedge-tailed Shearwater, Newell's Shearwater, the endangered Hawaiian Petrel, and Band-rumped Storm-Petrel) that could be present within the project area should not be significantly impacted by the project. No nighttime construction activity is planned, and outdoor lighting, such as streetlights or building lights, will be designed to be shielded to the maximum extent possible, and use the lowest wattage bulbs possible. Hawaiian hoary bats that could be present on a seasonal basis given the site's existing vegetation should not be impacted by construction activities. If disturbance of trees 15-feet or taller is required during the pupping season (June to September), trees would first be inspected by a knowledgeable person to ensure that bats are not present.

The results of the literature review and field inspection study conducted for this project determined that there are no known existing historic properties identified within the project site. There are several structures within the project site that are associated with prior use of the area as a nursery for the Territory of Hawai'i and more recently as part of DOFAW operations, including many retaining and terraced walls. Existing retaining walls identified on the site were determined to not be historic properties because they were constructed and maintained as part of the modern DOFAW baseyard development. These walls were documented in a previous archaeological study (Yent and Carpenter 1994), and results from the current field inspection were consistent with that prior documentation.

However, consultation with SHPD during an onsite meeting identified the possibility that existing retaining and terraced walls within the plant nursery area may meet historic criteria. The baseyard site could also be considered a historic site with these nursery walls being contributing features to its historic use as a nursery and for reforestation efforts. Two existing buildings and the BWS chlorination station should also be more thoroughly evaluated as part of an architectural inventory survey. However, these buildings will need to be replaced because they do not meet DOFAW's future functional and operational needs, and they cannot be incorporated into the design of a larger and more modern building needed. Similarly, the unused chlorination station would need to be removed.

Consequently, an archaeological inventory survey covering the entire baseyard site may be appropriate to better document and evaluate all site features. If certain retaining and terraced walls did meet historic property criteria, mitigative measures could be incorporated into design plans to: 1) document these sites (e.g. Historic American Engineering Record) before demolishing them; or 2) integrate these features into development plans, if feasible, through some type of preservation (e.g. burying or building over). If one or more of the buildings do meet historic property criteria, mitigative measures could be conducted to document these buildings (e.g. Historic American Building Survey) before demolishing them.

The project site is located within portions of four LCAs, which indicates the potential to discover pre- and/or early post-Contact land uses due to ground disturbing activities. Therefore, an archaeological monitoring program would be developed to address impacts that ground-disturbing activities may have on subsurface historic resources that may be present. Therefore, consultation with the SHPD would continue throughout the design phases of the master plan's implementation to determine necessary mitigative measures, as applicable. As a result, the project should not have an adverse effect on historic properties because mitigative measures can be implemented.

FINDINGS AND REASONS SUPPORTING ANTICIPATED DETERMINATION:

A FONSI determination is warranted for the Makiki Baseyard Improvements Project based upon assessment results and information provided in the Final EA. The results of the assessment conducted have determined that the proposed project should not have a significant impact on the surrounding environment. Evaluation of the project effects also included review of comments received on the Draft EA from agencies and the public.

The findings supporting this determination are based upon discussion of the project's effect on the environment in relation to the 13 Significance Criteria prescribed under the State Department of Health's Administrative Rules Title 11, Chapter 200.

1. *Involve an irrevocable commitment to loss or destruction of any natural or cultural resource;*

   The project consists of facility and infrastructure improvements within DOFAW's Makiki Baseyard area that are needed to accommodate growth in future organization operations. These improvements would not result in irrevocable commitment to loss or destruction of natural or cultural resources. Project impacts are primarily related to short-term construction related impacts and various BMPs will be taken to ensure adverse impacts are mitigated.

2. *Curtails the range of beneficial uses of the environment;*

   The project would not curtail the range of beneficial uses associated with this baseyard site. Master Plan improvements would make DOFAW's use of the site more efficient and effective for staff activities to better support agency mission and operations. LID and other sustainability measures incorporated in the facility's structural design and site

improvements would improve drainage conditions, energy use, etc. Landscaping improvements using native plants would further improve the site's environment and allow resources to serve as a living onsite repository for native plants and seeds as part of DOFAW's operations. BMPs would be implemented to minimize and mitigate short-term constructed-related effects on the environment.

3. *Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;*

   The improvements should not conflict with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS. A discussion of the project's consistency with applicable guidelines was provided in the Final EA.

4. *Substantially affects the economic welfare, social welfare and cultural practices of the community or state;*

   The project will provide minor short-term economic benefits in the form of construction jobs, income, and additional tax revenue to the State. This project should have minimal or no effect on the current or future levels of City tax revenues because it is a State-owned property not generating City tax revenues. Master Plan improvements would not negatively impact the social welfare of the area because no new dwelling units are associated with the project, and baseyard improvements would not significantly change the overall character of Makiki Valley. This project is not expected to significantly affect native Hawaiian or other traditional cultural practices occurring in the vicinity or in Makiki Valley. There are no known native Hawaiian or traditional cultural practices currently occurring on-site.

5. *Substantially affects public health;*

   The project would not substantially affect public health. Minimal impacts on public health, such as air quality and noise, would occur from short-term construction activities. Short-term construction-related effects would be mitigated by complying with pertinent State or City regulations and conditions of ministerial permits obtained. BMPs will also be implemented as part of construction activities to mitigate public health impacts.

6. *Involves substantial secondary impacts, such as population changes or effects on public facilities;*

   The project should not have any substantial secondary impacts on area demographic characteristics, infrastructure facilities, and public facilities. Improvements do not involve adding residential housing or visitor accommodation units that may generate population changes and increase demands on public facilities. The project would not contribute to in-migration of residents to the island.

7. *Involves a substantial degradation of environmental quality;*

The project would not contribute to a substantial degradation to the quality of the surrounding environment. Proposed improvements would support improved stormwater control and usage of alternative water and energy sources. These changes would result in a beneficial effect on the overall environmental quality of the Makiki watershed and the Makiki-Tantalus area. Appropriate mitigative measures will be implemented to address short-term construction-related impacts on the environment in coordination with appropriate government agencies. This includes implementing BMPs during construction to minimize erosion and other short-term impacts in compliance with ministerial permits and conditions.

8. *Individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;*

This project would not have significant cumulative effects on the environment as discussed in the Final EA, nor does it commit to larger actions.

9. *Substantially affect a rare, threatened, or endangered species, or its habitat;*

The project would not have an adverse effect on endangered, threatened, or rare species or resources present on the property. Two threatened or endangered trees existing on-site would not be impacted by Master Plan improvements. Rare, threatened, or endangered mammalian species or endangered birds that may be present on-site would not be adversely impacted by short-term construction activities, and streetlights or building lights will be designed to be shielded to the maximum extent possible.

10. *Detrimentally affect air or water quality or ambient noise levels;*

The project will not have detrimental, significant impacts on air, water quality, or ambient noise levels. Impacts associated with these factors would be limited to short-term construction activities and will be mitigated by applicable BMPs implemented. Construction activities would also be subject to applicable State and City regulations and permit conditions

11. *Affect or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;*

Project facilities will not be constructed within the flood plain. These facilities are not located within a tsunami evacuation zone, near the shoreline, or in a geologically hazardous area. The project is not located in an erosion-prone area. The project site is not located near or within coastal waters or an estuary. The project is located upslope from freshwater stream resources and drainage improvements will better manage and improve surface water runoff from the site.

12. *Substantially affect scenic vistas and view planes identified in county or state plans or studies;*

The project site occupies a small, secluded area within a City designated mauka-makai view corridor of the Ko'olau Mountains. The project site is currently not visible in this view corridor given its secluded location. The project site is not anticipated to substantially impact this view corridor at buildout.

13. *Require substantial energy consumption*

The project will not require substantial energy consumption or result in increased demands on the capacity of supporting electrical facilities. Energy demand is predicted to increase due to facility construction, but will not require upgrading of onsite or nearby electrical infrastructure. The project proposes implementation of a photovoltaic system that will offset a portion of anticipated increases in energy demand.

RECOMMENDATIONS:

That the Board:

1. Accept the Final Environmental Assessment for the proposed DOFAW Makiki Baseyard Improvements Project.

2. Based on the review of the Final Environmental Assessment and the comments received during the 30-day comment period to the Draft Environmental Assessment in addition to our responses, find that the project will not have a significant effect on the environmental and cultural resources of the area, and approve the issuance of a Finding of No Significant Impact, or FONSI, for the proposed project.

3. Authorize the Chairperson to publish a FONSI for the proposed project in the Office of Environmental Quality Control's *The Environmental Notice*. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Requested by:

DAVID G. SMITH, Administrator
Division of Forestry and Wildlife

Approved For Submittal:

SUZANNE D. CASE., Chairperson

Source: Mason Architects

DOFAW Makiki Baseyard Improvements Project

Exhibit 1 – Conceptual Master Plan

Honolulu, Hawai'i

0 40 Feet

HHF PLANNERS
planners for people