MEMORANDUM

To: Gary Gill, Director
   Office of Environmental Quality Control

From: Dean Y. Uchida, Administrator
   Land Division, Department of Land and Natural Resources

Subject: Final Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) for Steele Residence, Nuuanu, Honolulu, Oahu, TMK parcel: (1)2-3-31:12

The Department of Land and Natural Resources has reviewed the comments received during the 30-day public comment period that began on June 23, 1998 for the subject project. We have determined that this project will not have significant environmental effects, and have therefore issued a FONSI. Please publish this notice in the September 23, 1998 OEQC Environmental Notice.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the Final EA for the project. The summary for this project has not changed from that noted in Publication Form for the draft EA. Please contact Tom Eisen of our Land Division's Planning Branch at 987-0386 if you have any questions.

Enclosures

C: Julie Abcede
FINAL ENVIRONMENTAL ASSESSMENT

STEELE RESIDENCE
Nuuanu Valley, Honolulu, Oahu, Hawaii
Tax Map Key: 2-2-31:12

Prepared In Partial Fulfillment of the Requirements of the Conservation District Use Permit

Prepared for
Mr. and Mrs. Richard Dwayne Steele
2529A Pali Highway
Honolulu, Hawaii 96817

Prepared by
Philip K. White & Associates Architects Ltd.
851 Pohukaina Street Suite C-1
Honolulu, Hawaii 96813

September 1998
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Note: Revisions to the text of the Draft Environmental Assessment appear in bold italic type. Deleted text are shown in brackets.
SUMMARY INFORMATION

Project: Steele Single Family Residence
Applicant: Mr. and Mrs. Richard D. Steele
2529A Pali Highway
Honolulu, HI 96817
544-8362 (Mr. Steele's downtown office)

Approving Agency: Office of Conservation and Environmental Affairs, Department of Land and Natural Resources

Land Area: 4.84 Acres, Lot B
Area of Proposed Use: 24,920 Square Feet or 0.57 acre
Land Owner: Mr. and Mrs. Richard D. Steele

Conservation District Subzone: General
County General Plan Designation: Preservation
Zoning: P-1, R-10

Special Management Area: Not Within SMA

Need for Assessment: Conditional Use Permit in Preservation Area

Agencies and organizations consulted in making the environmental assessment:

Notice of the Draft Environmental Assessment for the Steele Residence was published in the Office of Environmental Quality Control Environmental Notice of June 23, 1998. Publication in the Environmental Notice initiated a 30-day public comment period which ended on July 23, 1998. An asterisk * identified agencies or organizations that submitted written comments to the Draft Environmental Assessment. Comment letters and responses can be found in Appendix A of the Final Environmental Assessment.

Federal:

Dept. of the Army, US Army Engineer District, Honolulu
State of Hawaii:

Office of Conservation and Environmental Affairs, Dept. of Land and Natural Resources

Commission on Water Resource Management, Dept. of Land and Natural Resources, State of Hawaii

*Division of Forestry and Wildlife, Dept. of Land and Natural Resources, State of Hawaii

*State Historic Preservation Division, Dept. of Land and Natural Resources, State of Hawaii

*Office of Planning, Dept. of Business, Economic Development & Tourism

*Office of Hawaiian Affairs, State of Hawaii

*Engineering Branch, Dept. of Land and Natural Resources, State of Hawaii

*Office of Environmental Control, State of Hawaii

*Na Ala Hele (Hawaii Trail and Access System)

City and County of Honolulu:

Dept. of Land Utilization, City and County of Honolulu

*Planning Dept., City and County of Honolulu

Others:

*Nuuanu/Punchbowl Neighborhood Board No. 12
SECTION 1

GENERAL DESCRIPTION OF THE ACTION'S TECHNICAL, ECONOMIC, SOCIAL, AND ENVIRONMENTAL CHARACTERISTICS:

A. Technical:

Construction of a one story residential dwelling with a two-car garage attached, site improvement work which includes a paved driveway and motor court, retaining walls, landscaping, grading, and connection to existing public utilities are also part of the proposed project.

The residence will cover [approximately] 4,341 square feet of building area, including 224 square feet of water features, which is less than the 5,000 square feet maximum permitted for a single family residence in the conservation district. The building will be used for single-family dwelling, it will have a living room, dining, kitchen, a library/study, three bedrooms and three and a half bathrooms, roofed lanais and breezeways and a laundry room.

The driveway and motor court will be paved with asphalt concrete. Retaining walls will be of moss rocks. [Lanscaping is shown in the Landscape Plan and described later in this application.] Landscape design will emphasize preservation and enhancement of the existing site features.

An existing bridge crossing the Nuuanu Stream, which has now been damaged, shall be removed and replaced. This bridge will provide access to the project site from Pali Highway. Existing abutments will be utilized to support the new bridge.

See Figures 1.1 through 1.5 for project graphic descriptions.

B. Economic:

The proposed project will play a role in stimulating employment in the construction industry of the county.

Project commencement date: November 1998
Project completion date: October 1999

C. Social:

The proposed project site is within an established single-family area. It adjoins other residential properties zoned R-10 and R-8 in Nuuanu on the west and north sides and also a residential area in Pacific Heights on the east side.
CORRECTION

THE PRECEDING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY
SEE FRAME(S) IMMEDIATELY FOLLOWING
Figure 1.5

BUILDING ELEVATIONS AND SECTIONS

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Available for the occupants family recreational use are the Puunui Playground and Nuuanu Valley park which are approximately half a mile from the project site. The Lanakila Playground located some almost two miles away can also be used for active recreational needs.

Public schools close to the project site are Nuuanu Elementary, Maemae Elementary, Kawanakoa Intermediate, and Roosevelt High School.

Population density will not be affected since the proposed house will be occupied by a small family with the wife, husband and two growing kids.

D. Environmental:

The attractive and healthy environment will be maintained. Maintenance of the site will include:

- The trimming to keep the trees in healthy condition as well as opening the upper story of the forest to allow air flow and sun penetration.
- Irrigation of the landscape during dry periods.
- Monitoring of insects and diseases on plants.
- Removal of debris from plants and the possible reuse of this material in the form of mulch.

The project will not generate air pollution, traffic congestion in the area nor will it raise the existing noise levels. There will also be no effects on the water quality in the area.
SECTION II

SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT, including suitable and adequate location and site maps:

A. Site:

The project area is located along the lower hillside of Nuuanu Valley adjacent to Nuuanu Stream. It is heavily vegetated with both introduced and native species of plants which are not considered rare or endangered.

Much of the forest floor is bare dirt due to the limited amount of sunlight. Rocks of different sizes are scattered throughout the site creating a very interesting and exciting landform with trees.

Access to the property is via the access and utility easement "d" from Pali Highway of the property Tax Map Key 2-2-31:11 also owned by Mr. and Mrs. Richard Steele.

See Figures 2.1 through 2.3 for Vicinity Map, Zoning Map and Parcel Plan.

B. Topography:

The project site area lies on the east side of Nuuanu Stream between the 215 and 250 foot elevations. The slope analysis of the property is based on actual field topography. The map indicates that only 2,700 square feet, or some 11 percent of the project site area, has a slope of over 40 percent, and the average slope is 24 percent.

See Figures 3.1 and 3.2 for Topographic Survey Map and Slope Analysis.

C. Soil Reconnaissance Survey:

The geotechnical engineering evaluation conducted by Geolabs Hawaii in January 1998 determined that the proposed residential development is feasible. The study reveals that the project site is generally underlain by a surficial layer of highly expansive "adobe" clays overlying stiff alluvial deposits and hard basalt rock formation at shallow depths. [It is recommended that:]

It is anticipated that the project site may be mantled with an upper slope wash deposit of expansive clays over alluvial deposits at greater depths. Weathered basalt formation is anticipated below the upper soil horizons.
Figure 2.1
VICINITY MAP
D. Slope Stability:

We understand that many homes located along the hillsides in the valleys on the eastern side of Oahu have experienced landslide movements. These homes are generally located on slopes underlain by highly plastic clay soils, which is a major component in the driving forces for slope failures. According to the "Soil Conservation Services Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii", the soils conditions at the project site are classified as a "Kaaea Series" clay soil, which raises concerns regarding the potential for landslide or slope instability.

First, it should be noted that the landslide problems experienced by the many homes in the valleys of Kaliouou, Aina Haina, Manoa, and Palolo, have occurred primarily in the "Lualualei Series" clay, which is different from the "Kaaea Series" clay as classified by the Soil Conservation Services for the subject site.

Secondly, it should be noted that the classifications presented in the Soil Conservation Services publication generally apply to the near-surface soils, which is on the order of about 3 to 5 feet thick. Geologic maps of the area indicate that the predominant soil deposit in the project area consists of "Older Alluvium", which is a stable soil deposit. An on-site exploration of the subsurface soil conditions conducted in 1989 by Geolabs Hawaii confirmed the information provided by the Soil Conservation Service survey and the geologic maps. The field exploration disclosed that the project site was generally underlain by a thin surface layer of clay, about 1 to 3 feet thick, over the more stable alluvial soils and dense basalt rock formation at shallow depths.

Based on the above findings and evaluation, it is the opinion of Geolabs Hawaii in their Geotechnical Engineering Evaluation Report dated January 15, 1998, that the project site is stable and does not have the landslide potential of other valley sites with thick deposits of highly plastic clay soils.

E. Drainage System:

Nuuanu Stream, as it flows through the parcel, drains 2,710 acres of Nuuanu Valley. The upper area is reserved as a watershed which includes the Board of Water Supply's Nuuanu Reservoir. The reservoir, a flood control project, stores water from heavy rains and releases it gradually to the Nuuanu Stream which passes through downtown and empties into Honolulu Harbor. The US Geological Survey's surface and ground water data collection revealed maximum discharge of 6,990 cfs recorded at the gage located on Nuuanu Stream near Old Pali Road for the years between 1913 and 1983.

Except for the Nuuanu Stream, there are no known hydrological hazardous areas located on or adjacent to the project site. According to the Federal Emergency Management Agency's Flood Insurance Rate Map, Panel 150001-0120-C-0135-G, dated September 4, 1987, the project site is
located in Zone X (areas determined to be outside of the 500-year flood plain). See Figure 4 for Flood Hazard Map.

F. Existing Utilities:

Water Service: 24-inch main in Pali Highway
Sewer Service: 16-inch main traverse through the western portion of the property
Electrical and Telephone: Pole line located in 20-foot wide private roadway which provides access to the property.
Cable TV Service: Overhead pole line located in existing access driveway

G. Existing Covenants, Easements, Restrictions:
Sanitary sewer easement across Lot 1-A-2-G, as shown on Map 20, Land Court Application 167.
Any and all existing rights to the State of Hawaii, and of any and all other persons in and to the Nuuanu Stream.

H. Archaeology:

Two inventory-level archaeological surveys were conducted for the project site. The first survey, conducted in 1992, was focused on a smaller, half-acre part of the project area and identified 23 surface features. The more recent survey in 1996 covered the entire area, relocating the features identified earlier and locating an additional 19 surface and subsurface features. These features include four terraces interpreted as dry land agricultural features, three slope retention terraces, two water control terraces, one clearing mound, one animal pen, three boundary walls, 16 varied features (terraces, enclosures, alignments, steps, a subsurface pavement, and artifact concentrations) that are interpreted as habitation-related, four possible burial features, one modern bridge, and seven features that are either natural or undetermined in function. These 42 total features are labeled as one site, State Site 50-80-14-2464 (Bishop Museum Site 50-4a-A5-18).

The four agricultural terraces may be from late pre-Contact period; charcoal from one of the terraces was radiocarbon dated to between the late seventeenth and eighteenth centuries. Excavation of one of the large slope retention terraces and one of the habitation terraces produced a very limited array of indigenous-type lithic flakes, which may also place the use of these features in the late pre-Contact period. Most of the features at the site, especially the habitation, possible burial, and boundary wall features in the east central area of the site, indicate post-Contact habitation and use from the late 1800s. These features represent incorporation of foreign, post-Contact building materials such as metal nails and window glass into a traditional pre-Contact style habitation, a situation that has been noted in other post-Contact-era archaeological sites in Nuuanu.
Figure 4

FLOOD HAZARD MAP

-18-
The four possible burial sites are in features 19, 26, 27 and 28 clustered in the northeast corner of TMK 2-2-31:12 in the proposed preservation buffer zone along with numerous habitation features.

I. Botanical:

A botanical survey of the site conducted in August 1996 by Evangeline Funk, Ph D, Botanical Consultants indicates that the wooded property supports a dense forest of introduced trees, Royal Palm and Ironwood being the emergent trees fifteen to twenty meters in height, and clumps of bamboo.

There are also layers of canopy type trees varying from 10 to 12 meters in height and largely composed of cinnamon, Blume, African tulip, octopus trees with some Java plum, rose apple and autograph trees.

The Hawaiian Bamboo is the only one that may be indigenous or may be a Polynesian introduction out of the thirty Five plant species found on the site. The rest are alien species.

There are no endangered species of plants known or present on the site.

J. Vertebrate/Fauna:

A fauna survey was conducted on December 6, 1997 and December 9, 1997 by Evangeline J. Funk, Ph. D.

Fauna observed in the project area include a variety of non-native species. A total of fourteen bird species were seen, some in large numbers including Japanese white-eyes, Old World Sparrows, Waxbills, Mannikins, and Parrot finches, Cardinals, Bulbuls, Pigeons and Doves, Starlings and Mynas. All except the golden plover, a migratory bird, are introduced.
SECTION III

IDENTIFICATION AND SUMMARY OF MAJOR IMPACTS AND MITIGATION MEASURES [ALTERNATIVES CONSIDERED, IF ANY):

The scope of the project was discussed with different technical consultants. Federal, State and County agencies were contacted for information relative to their areas of expertise. Time was spent in the field noting site conditions and conditions within the vicinity of the site. The sum total of consultations and field reconnaissance observations and investigations helped to identify existing conditions and features which could affect or be affected by the project.

There is no foreseeable major or long term social or environmental change or adverse impacts to be created on the subject property or its surrounding areas as a result of the proposed use.

1. The site is within the established single-family area and therefore will not impact the city's land use and general plan.

2. The proposed house will not be visible from public view along Pali Highway since it will be behind the existing trees that will remain as shown on the photographs of the site taken from the different vantage points in Figures 5.1 through 5.3.

3. The proposed bridge crossing will utilize the existing bridge abutments. One of the abutments will be restored to its original configuration. Any grading work and the construction of the bridge crossing is not anticipated to take place within the stream. The existing stream channel will not be altered in any way.

4. The wetland was originally delineated in November 1992. There is no discharge to the stream or adjacent wetland anticipated. A redelineation of the wetland, therefore, will not be required.

5. The site is not located within a flood hazard area.

6. Existing road, water, waste water, electrical and cable TV systems can accommodate the proposed use.

7. The actual building site of the project will not affect the known surface archaeological features and potential subsurface archaeological deposits of State Site 5-80-14-1464 that lie within the proposed buffer zone in the northeast corner of TMK 2-2-31:12 and the southeast corner of TMK 2-2-31:11.
Figure 5.1

VIEWS OF SITE FROM PALI HIGHWAY

-21-
Figure 5.2

VIEWS OF SITE FROM PALI HIGHWAY

- 22 -
Figure 5.3

VIEWS OF SITE FROM PALI HIGHWAY

- 23 -
8. Construction of the house will remove all or portions of the following surface features and any underlying subsurface deposits in other areas of TMK 2-2-31:12:

- Feature 1, a rock mound
- Feature 2, a rock-faced, soil-surfaced terrace
- Feature 4 and 5, natural rock terraces within a drainage
- Feature 6, a rock-faced, soil-surfaced terrace
- Feature 6.2, an enclosure
- Feature 16, a rock-faced, soil-surfaced terrace
- Feature 17, a twentieth-century concrete and metal bridge

The eight features noted above have been mapped, measured and described. In addition, excavations have been conducted on Features 2, 6 and 16. As noted in the "Proposed Mitigation Treatment" section of the 1997 draft inventory survey archaeological report, which is on file at the State Historic Preservation Division, these features are not considered likely to yield significant new information about the Site 2464, and no further archaeological work is recommended for these features.

9. There are no rare, threatened or endangered flora or fauna found on the site. It is not likely for the day-to-day activities of a single family to adversely affect the non-native birds that frequent the area.

10. The house will not be air conditioned and will not have any motorized equipment of any kind. No noise pollution is anticipated.

Short Term Impacts and Mitigation Measures:

Site work and construction of the house will probably be the most disruptive to the existing environment. These activities will entail grading the site to design elevations, grubbing vegetation, excavation for foundations and utility lines and construction of foundation system consisting of spread and/or continuous footings to support the house.

1. Site work will expose the soil thus creating opportunities for run-off and erosion during construction. Grading will be performed complying with the erosion control requirements of the City and County of Honolulu and approved grading plans.

2. Site work and construction will be sources of dust and noise. The Contractor will be required to maintain stringent dust controls. Given the size of the building area and the type and scale of the project, frequent water sprinkling will probably be the most effective dust control measure. The Contractor will also be responsible for general housekeeping of the site, keeping land areas and stream free of mud, sediment and construction litter and debris. Construction waste shall be reduced to a minimum.

3. Construction noise, though cannot be avoided, will be kept to a minimum. Considering the size of the project, it is not likely that construction will produce excessive noise and disrupt the neighbors. The trees around the project area that will be maintained and preserved will act as buffer to filter noise and absorb dust.
4. Vehicles used for construction may contribute to traffic on Pali Highway. Deliveries for construction materials will be scheduled during non-peak traffic hours to minimize impact on local traffic.

[PROPOSED MITIGATION MEASURES]

The following additional mitigation measures are proposed:

A. Soil:

The geotechnical engineering evaluation conducted by Geolabs Hawaii determined that the proposed residential development is feasible. The study reveals that the project site is generally underlain by a surficial layer of highly expansive “adobe” clays overlying stiff alluvial deposits and hard basalt rock formation at shallow depths. Based on the subsurface conditions anticipated at the project site, it is recommended that:

1. Shallow foundations consisting of spread and/or continuous footings be used to support the proposed new residence. [based on the subsurface conditions anticipated at the project site.]

2. The footing bottoms be embedded a minimum of 3 feet below the lowest adjacent finish grade in order to reduce the effects of the expansive clay soils due to moisture fluctuations. The concrete slab-on-grade required for the project be supported on at least 24 inches of non-expansive select granular fill materials to reduce the potential for distress to the slab resulting from swelling of the near-surface expansive soils.

3. Drilled shaft foundations be used for the support of the bridge abutments due to the potential for stream scour at the Nuuanu Stream crossing. Alternatively, a shallow foundation system may be considered provided that the footings are set-back far enough from the stream bank, or the channel floor and stream bank at the bridge crossing are lined with rip-rap facing.

Due to the proximity of the proposed residence to Nuuanu Stream, special attention shall be given to the subgrade preparation work to reduce the potential for pumping subgrade conditions resulting from the high in-situ moisture contents of the subsoils anticipated at the proposed design subgrade elevations.

Rock and rock formations will be checked for stability and will be supported up as needed. Planting around rocks will help stabilize the soil around the rocks. Rocks from the construction areas will be salvaged and utilized in the new gardens planned adjacent to the house.

B. Grading and Storm Runoff:

The existing drainage patterns will be maintained and preserved as much as possible. Grading will be limited to approximately 0.38 acre of the conservation area and 0.08 acre on the west side of Nuuanu Stream as shown on the Access, Utility, and Grading Plan. It is estimated that there will be 900 cubic yards of excavation and 750
CORRECTION

THE PRECEDEING DOCUMENT(S) HAS BEEN REPHOTOGRAPHED TO ASSURE LEGIBILITY. SEE FRAME(S) IMMEDIATELY FOLLOWING.
4. Vehicles used for construction may contribute to traffic on Pali Highway. Deliveries for construction materials will be scheduled during non-peak traffic hours to minimize impact on local traffic.

[PROPOSED MITIGATION MEASURES]

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The existing drainage patterns will be maintained and preserved as much as possible. Grading will be limited to approximately 0.38 acre of the conservation area and 0.08 acre on the west side of Nuuanu Stream as shown on the Access, Utility and Grading Plan. It is estimated that there will be 900 cubic yards of excavation and 750
cubic yards of embankment. *Excavated material shall be used for embankment except for structural.* The excess excavated material will be hauled off-site to a disposal area.

Cement rubble masonry (CRM) walls is planned for retaining the access driveway near the bridge abutments and the front of the new home. CRM walls are also proposed in developing a yard/lawn area at the back of the new home, and also to divert the off-site storm runoff around the new home.

Although there is a slight increase in storm runoff due to the construction of the paved driveway and home, the impact on the area and Nuuanu Stream is insignificant. *Mitigating measures will include compliance with the City Grading Ordinance which imposes requirements for erosion control during construction.*

The new bridge crossing the stream will be constructed above the previously computed water surface elevation of Nuuanu Stream. *Building permit for the bridge will be obtained from the City and County of Honolulu prior to construction.*

No grading work is planned within the wetland limit and Nuuanu Stream beyond the existing bridge abutments.

Grading will be done in accordance with the City and County of Honolulu’s Grading Ordinance, Board of Health’s Rules and Regulations and other conditions required by the Department of Land and Natural Resources. *Studies for grading, layout of the house and driveway and utility alignments were made with the goal of retaining as much native vegetation as possible.*

C. Building:

*The final development of the 4.84 acre lot uses approximately .2 acre for building, driveway and related site elements. This leaves 4.64 acres untouched and preserved.*

The plan is configured with separate elements joined into one dwelling by covered breezeways, which permitted more flexibility in placing the building’s footprint on the site and allowed the design to minimize disturbance to the existing terrain. This configuration lends itself to the existing topography and the structure’s connection to the landscape makes its impact on drainage patterns minimal.

The house is designed to blend visually with the natural characteristics of the site and to provide occupants with open views of the forest. *The design is simple, with low-pitched roofs and broad eaves, wood windows and doors. The house will be wood framed with tile roof and stucco finished walls. The use of subdued colors both on the exterior and interior will have a mitigating effect on the site.* The proposed project will not impair view planes or corridors from public vantage points.
D. Landscaping:

Wherever possible existing site features such as trees, shrubs, groundcover, rocks, rock formations and landforms will be retained. Preservation of this landscape will include work to improve the site such as:

Clearing areas of accumulated debris.

Trimming to remove dead, dying, diseased and unhealthy growth. This work will open the site for better air circulation and allow sunlight to the forest floor.

Planting of bare areas on the ground with shrubs and groundcovers to minimize soil erosion.

E. Sanitary Sewer Service:

Approximately 320 gallons per average day of waste water will be generated by the planned single-family residence. The sewage will be conveyed by an on-site 6-inch pipe from the new home to connect with an existing municipal sewer manhole located in the property's driveway on the west side of Nuuanu Stream approximately 250 linear feet from the house. At the crossing of Nuuanu Stream, the pipe will be strapped to the inside portion of the bridge girder. Although the pipe at this point will be lower than the invert of the existing sewer manhole, wastewater will be pushed through the low point by subsequent flow from the much higher elevation of the home and its plumbing fixtures. The addition of the wastewater from the new residence should have an insignificant impact on the existing municipal system.

The new 6-inch sewer lateral will remain a private system to be maintained by the Owner.

F. Water Service:

The potable water demand for the new residence is approximately 500 gallons per average day. Water for the home and irrigation of landscaping will be conveyed in a 1-1/4 inch pipe along a 20 foot wide private roadway (Tax Map Key: 2-2-31:01) from a BWS meter to be installed within the Pali Highway Right-of-Way. At the crossing of Nuuanu Stream, the pipe will be strapped to the underside face of the bridge girder. The additional water demand for the new home should have any insignificant impact on the existing municipal system. In addition, water conservation measures will be implemented such as using low-flow plumbing fixtures and water-efficient clothes washers and dishwashers.

The 1-1/4 inch pipe line from the meter to the new home will remain a private system to be maintained by the Owner.

G. Electrical, Telephone and CATV Services:

Electric, telephone and CATV service will be extended underground from a overhead pole line located in the existing access driveway. At the crossing of Nuuanu Stream the ducts will be strapped to the inside of the bridge girder. The additional services should have an insignificant impact on the existing public utilities.
H. Archaeological Features:

State Site 50-80-14-2464 (Bishop Museum Site 50-0a-A5-18) as a whole is considered eligible for listing on the National Register of Historic Places under 36 CFR 60.4, criteria d and e. Proposed mitigation treatment includes preservation of selected features (Features 7-11.2, a portion of Feature 12, Features 18-22 and 25-30), monitoring of construction work at features 15 and 15.01, and creation of preservation and burial treatment plans. The preservation plan should include interim and long-term components. An element of such a plan could be a buffer zone of 8 m (roughly 27 ft) around the groups of features recommended for preservation.

A written archaeological monitoring plan and interim preservation plan will be prepared and submitted to the State Historic Preservation Division for review and acceptance prior to the onset of construction activities. Also, a long-term preservation plan dealing with aspects of rehabilitation, restoration or adaptive reuse will be submitted to SHPD prior to any work in the preservation area. In addition, excavations will be monitored at selected features by a qualified professional archaeologist who will record the occurrence of any archaeological deposits encountered and take appropriate action should significant deposits be unearthed.

I. Botanical Features:

Vegetation in the project area includes numerous introduced, naturalized species. Notable in the southern portion of the project area are extensive stands of bamboo. The highly diverse and exotic nature of the vegetation in the project area is perhaps related to a large estate garden of the early twentieth century known in the vicinity.

The existing site can be considered landscaped with its rock arrangements and the mature trees, which create serene yet exciting landscape spaces. The landscape concept is the preservation of this landscape, wherever possible, and the integration of the new landscape into this environment.

The proposed house would be situated to take advantage of the site's unique landscape resources and the new gardens would follow this landscape character. The house site would become "the clearing in the forest".
SECTION IV

ALTERNATIVES TO PROPOSED ACTION:

1. Site:

Two areas of the site were considered for the house, one was the west side of the property closer to the stream. The other was the particular location shown on the drawings which has the flattest area on the property, this was selected primarily because of its topography. The choice of this location eliminated the need for extensive regrading which would disrupt the existing drainage patterns.

2. Building:

A two-story house was originally planned, but it would have been higher and more visible from the neighboring properties. The final design opt for an open plan concept to lower the visual impact of the house, a cluster of smaller buildings connected by covered breezeways that sits lightly on the site than a large single structure.
SECTION V

DETERMINATION OF SIGNIFICANCE:

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (11-200-12). Since no significant effects on the environment are expected for the proposed use in the General subzone, the applicant requests that a Finding Of No Significant Impact (FONSI) determination for this action be made with respect to the need for an environmental impact statement.

[IX.] Findings and reasons supporting determination: [and]

The applicant has been made aware of the sum of effects on the quality of the environment and has evaluated the overall cumulative effects of the proposed action in considering the potential environmental effects of this proposed project. As a result of these considerations and purposes, the applicant has determined that:

1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

The proposed action will not involve an irrevocable commitment to loss or destruction of any significant natural or cultural resource. Any significant cultural resource on the property will be treated with an approved preservation plan. Other cultural resources not in the preservation category have been mapped and information about them have been gathered and reported. A monitoring plan will be implemented during construction.

2) Curtails the range of beneficial uses of the environment;

The proposed project will not curtail the range of beneficial uses of the environment. The property, which is bordered by existing residential uses, is in itself suitable for residential use. Most of the archaeological features of the site indicate post-contact habitation and use from the late 1800's.

Existing features of the site such as the stream, vegetation and archaeological features will be maintained and preserved.

3) Conflict's 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 proposed action is in keeping with the State and County's long-term environmental policies, goals and guidelines as expressed in Chapter 344 HRS, and any revisions and amendments thereto, court decisions and executive orders.
4) Substantially affects the economic or social welfare of the community or State;

The proposed action will not adversely affect the economic or social welfare of the community or state.

5) Substantially affects public health;

The proposed action will not affect public health in any way. The condition will not adversely affect the health and safety of the public at large or the residents of the surrounding area. Applicable statutes and regulations imposed by the State of Hawaii and the City and County of Honolulu will be complied with in order to minimize any adverse short term impact that the construction of the project will cause.

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

The proposed action will not involve secondary impacts, such as population changes or effects on public facilities that are not already contemplated. The house will be occupied by a small family of four. The property will not be subdivided.

7) Involves a substantial degradation of environmental quality;

The proposed action will not involve degradation of environmental quality. The existing physical and environmental aspects of the site, such as natural beauty and open space characteristics, will be preserved and improved upon as much as possible.

8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The proposed action is individually limited and cumulatively will not have any effect upon the environment.

9) Substantially affects a rare, threatened, or endangered species, or its habitat;

No endangered plant or animal species are located within the project site. The proposed action will not adversely affect any rare, threatened, or endangered species or habitat in the area.

10) Detrimentally affects air or water quality or ambient noise levels;

The proposed action will not include anything that will affect air or water quality or ambient noise levels in the long term. Ambient air quality may be affected by fugitive dust and combustion emissions during
construction but can be controlled by measures stipulated in this Assessment. Construction noise will be pronounced during site preparation work but should be eliminated when the house is erected. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health.

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

The proposed action is not in an environmentally sensitive area such as flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary or coastal waters.

12) Substantially affects scenic vistas and view planes identified in county or state plans or studies; or,

The proposed project will not substantially affect scenic vistas and view planes identified in county or state plans or studies. Nestled in the existing vegetation which will be preserved as much as possible, the proposed structure will be unobtrusive, it will not be visible from public view along Pali Highway.

13) Requires substantial energy consumption.

The proposed project will not require substantial energy consumption. The house will have energy efficient light fixtures and appliances.

Further, the proposed action is compatible with the locality and surrounding residential areas and appropriate to the physical conditions and capabilities of the area to be served; the existing physical and environmental aspects of the project site will be preserved; the proposed action will not result in any adverse effects to the existing environment; and the proposed action is in keeping with the objectives and purposes of the project site and its surrounding areas. The applicant will comply with all applicable statutes, ordinances and rules of the federal, state and county governments.

[X.] Agencies to be consulted in the preparation of the EIS, if applicable.

Not applicable.
SECTION VI

LIST OF PERMITS AND APPROVALS:

The land use and construction permits will require approvals from different State and County agencies. The list below are indicative of rather than a comprehensive listing of these agencies:

State of Hawaii

Department of Land and Natural Resources

City and County of Honolulu

Department of Land Utilization
Division of Engineering
Wastewater Management
Fire Department
Transportation
Board of Water Supply
SECTION VII
REFERENCES


Geolabs Hawaii, Geotechnical Engineering Evaluation, Steele Residence CDUA, 2525 Pali Highway, Honolulu, Oahu, Hawaii

Evangeline J. Funk, Ph. D., Botanical Survey Report for the Proposed Steele Residence Site, 1996

Evangeline J. Funk, Ph. D., Fauna Survey Report for the Proposed Steele House Site, 1997

Helen Higman Leidemann, Department of Anthropology, Bishop Museum, A Nu’uanu House Site, Inventory Survey of Portions of TMK 2-2-31:11 and 12, Nu’uanu Ahupua’a, Kona District, Island of Oahu, Hawaii, January 1998

Hawaii State, Department of Health, Hawaii Administrative Rules, Title 11, Chapter 200, "Environmental Impact Statement Rules"

Hawaii State, Department of Health, Hawaii Revised Statutes, Chapter 344, "State Environmental Policy"

RYM Nuuanu Partners, Inc., CDUA Application and Final Environmental Assessment, TMK: 2-2-31: Por 32, 1992

Hawaii State, Hawaii Revised Statutes, Chapter 205A, Coastal Zone Management

Soils Erosion Standards and Guidelines, Department of Public Works, City and County of Honolulu, November 1975

Hida Okamoto Associates, Grading and Utility Plan, 1998


Helen Higman Leidemann, Department of Anthropology, Bishop Museum, Preservation and Monitoring Plans, Site 50-30-14-2454, August 1998
APPENDIX A

Comment Letters and Responses
September 8, 1998

Mr. Edwin T. Sakoda
Acting Deputy Director
Commission on Water Resource Management
Department of Land and Natural Resources
PO Box 521
Honolulu, HI 96809

Subject: Proposed Construction of a Vehicular Access Bridge
Across Nuanu Stream Using Existing Abutments
at TMK-2-2-31, parcel 12, Honolulu, Oahu

Dear Mr. Sakoda,

Thank you for your response to the letter from Hida Okamoto & Associates, Inc. dated January 8, 1998 indicating that a stream channel alteration permit pursuant to Hawaii Revised Statutes 174C-71 will not be required because the Nuanu Stream channel will not be altered.

The proposed work will include the use of the existing abutments and restoration of one of the abutments to its original configuration. No heavy equipment or materials will be driven or transported across the stream channel, and no construction work will occur in the stream channel. Your letter will be included in the Final Environmental Assessment. We appreciate the participation of the Commission on Water Resource Management in the environmental assessment process.

Sincerely,

[Signature]

Phil White, AIA

cc: Hida Okamoto Assoc.
DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEERING DISTRICT, HONOLULU

February 19, 1998

Operations Branch

Mr. Harvey K. Hida
Hida Okamoto & Associates, Inc.
1440 Kapioihi Boulevard, Suite 915
Honolulu, Hawaii 96814

Dear Mr. Hida:

This is in regards to your request for clarification as to whether construction of a bridge crossing at Wahiawa Stream (TRK 2-2-11, Proj. 12) will require a realignment of the wetland boundary. It was noted that the wetland was originally delineated in November 1992.

A realignment of the wetland will not be required, as long as the scope of the original project has not changed and no discharge to the stream or adjacent wetland is anticipated.

If you have any further questions, please contact Mr. Alan Everson of my staff at 436-9558, extension 11 and refer to File No. 930060036.

Sincerely,

Linda M. Hida, Ph.D., P.E.
Acting Chief, Operations Branch

September 8, 1998

Ms. Linda M. Hida-Endo, Ph.D., P.E.
Acting Chief, Operations Branch
US Army Engineering District, Honolulu
Fort Shafter, Hawaii 96858-5440

Subject: Single-Family Residence

Nanakee, Oahu, Hawaii at TMIC 2-2-31, por 12, COE File No. NP93-035

Dear Ms. Hida-Endo,

Thank you for your response to the letter from Hida Okamoto & Associates, Inc. dated January 8, 1998 indicating that a realignment of the wetland will not be required as long as the scope of the original project has not changed and no discharge to the stream or adjacent wetland is anticipated.

The wetland was originally delineated in November 1992. Similar to the previous project, the proposed bridge crossing will utilize the existing bridge abutment, no discharge to the stream or adjacent wetland is anticipated.

Your letter will be included in the Final Environmental Assessment. We appreciate the participation of the Department of the Army in the environmental assessment process.

Truly Yours,

Philip K. White, AIA

cc: Hida Okamoto Assoc.
MEMORANDUM

TO: Deane Udotea, Administrator
   Land Division

FROM: Don Hibbard, Administrator
   Historic Preservation Division

SUBJECT: Chapter 6E-42 Historic Preservation Review—Conservation District Use Permit Application for a Single Family Residence: State Residence 565 NASA Road, Hawaii, HI 96718

We have reviewed and accepted an archaeological inventory survey report for this parcel at Hauula, Honolulu, Island of Hawaii, HI 96718. The survey was conducted by the Archaeological Resource Management team of Hauula, Hawaii, HI 96718. The survey included a site visit to the parcel and a review of available historical and archaeological records. During the survey, we identified several historic and archaeological features on the parcel, including stone walls, terraces, and other structural elements. We have determined that the parcel is eligible for listing on the National Register of Historic Places.

We are recommending that the applicant be allowed to proceed with the construction of a single-family residence on the parcel. The proposed residence is consistent with the requirements of the Conservation District Use Permit (CDUP) and will not have a significant adverse effect on the historic and archaeological resources of the parcel.

We are forwarding a copy of this memorandum to the appropriate state and federal agencies for their consideration. If you have any questions, please do not hesitate to contact me at (808) 587-0013.

Sincerely,

Don Hibbard, Administrator
Historic Preservation Division
September 8, 1998

Mr. Don Hibbard
Administrator
State Historic Preservation Division
Department of Land and Natural Resources
33 South King Street, 6th Floor
Honolulu, HI 96813

Subject: (File No. OA-2891) Chapter 6E-42 Revised Historic Preservation Review - Conservation District Use Permit for a Single Family Residence: Haleiwa Residential 2329 A Pali Highway

Dear Mr. Hibbard,

Thank you for reviewing the archaeological report for the above project. Per your letters dated June 3, 1998 and August 19, 1998, interim and long-term preservation plans and an archaeological monitoring plan will be submitted to the State Historic Preservation Division (SHPD) for review and approval. The approved interim preservation plan and archaeological monitoring plan will be executed prior to construction. The long-term preservation plan will be implemented after review and approval by SHPD.

Your letters will be included in the Final Environmental Assessment. We appreciate your participation of the State Historic Preservation Division in the environmental assessment process.

Truly yours,

Philip L. White, AIA
Division of Forestry & Wildlife

June 1, 1998

MEMORANDUM

TO: Tom Eilen, Planner
Division of Land Management

THRU: Dean Udida, Administrator
Division of Land Management

FROM: Michael G. Buck, Administrator
Division of Forestry and Wildlife

SUBJECT: CDUA (Board Permit) File #OA-2891, Single Family Residence, Nezuna Valley, Honolulu, Oahu TMK 2-2-3112, 4.84 acres, Lot 2, General Subzone.

We have reviewed this proposal with respect to its impacts on the natural resources and endangered species in particular and have no objections to the development of a single family residence in general subzone.

C: Oahu DOFAW

PHILIP WHITE
AHLERTS

September 8, 1998

Mr. Michael G. Buck
Administrator
Division of Forestry and Wildlife
Department of Land and Natural Resources
1151 Punchbowl Street, Room 323
Honolulu, HI 96813

Subject: CDUA (Board Permit) File #OA-2891, Single-Family Residence Nezuna Valley, Honolulu, Oahu TMK 2-2-3112, 4.84 acres, Lot 2, General Subzone

Dear Mr. Buck,

Thank you for your letter dated June 1, 1998 indicating that you have no objections to the development of a single-family residence in the general subzone after having reviewed the proposal with respect to its impacts on the natural resources and endangered species in particular.

Your letter will be included in the Final Environmental Assessment. We appreciate the participation of the Conservation on Water Resource Management in the environmental assessment process.

Truly Yours,

PHILIP K. WHITE, AIA
June 17, 1998

Honorable Michael D. Wilson, Chairman
Board of Land and Natural Resources
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96829

Dear Mr. Wilson:

Conservation District Use Application, (CDUA #OA-2891),
Steele Family Residence, TMK: 2-2-31:12

We have reviewed the application for a Conservation District Use Application board
permits. We have examined the request in light of the City and County's General Plan and its
Primary Urban Center Development Plan and Special Provisions. The nature of the permit--
the construction of a single-family residence within an established single-family area--does
not involve any impacts that may be detrimental to the City's land use policies nor does it
require any changes to the General Plan nor the Primary Urban Center Development Plan.

Should you have any questions, please contact Robert Reed of our staff at 523-4402.

Yours very truly,

[Signature]

Chief Planning Officer

September 8, 1998

Mr. Patrick Onishi
Chief Planning Officer
Department of Land Utilization
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Subject: Conservation District Use Application (CDUA #OA-2891)
Steele Family Residence, TMK: 2-2-31:12

Dear Mr. Onishi,

Thank you for your letter dated June 17, 1998 indicating that the construction of a
single-family residence within an established single-family area does not involve
any impacts that may be detrimental to the City's land use policies nor does it require
any changes to the General Plan or the Primary Urban Center Development Plan.

Your letter will be included in the Final Environmental Assessment. We appreciate
the participation of the Department of Land Utilization in the environmental
assessment process.

Truly yours,

[Signature]

Philip K. White, AIA
Ms. Julia Abdala, AIA
Philip White & Associates Architects, Ltd.
891 Pohukaina Street, Suite C-1
Hawaii 96813-5327

Dear Ms. Abdala:

Special Management Area Review

Tax Map Key: 2-2-31-12
Type of Project: New dwelling, two-car garage, and other site improvements

The proposed project on the above-referenced tax map key has been reviewed. We find that it:

[ ] Is not within the Special Management Area.
[X] Is within the Special Management Area, but is not defined as "development" and is therefore, exempt (Section 25-1-3 [1], Chapter 25, Revised Ordinances of Honolulu).

Should you have any questions, please contact the Environmental Review Branch at 323-4077.

Very truly yours,

For JAN NOE SULLIVAN
Director of Land Utilization

September 8, 1998

Ms. Jan Noe Sullivan
Director
Department of Land Utilization
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Subject: Special Management Area Review
TMAP: 2-2-31-12
New dwelling, two-car garage, and other site improvements

Dear Ms. Sullivan,

Thank you for your letter dated February 12, 1998 indicating that the proposed project on the subject tax map key is not within the Special Management Area.

A copy of your letter will be included in the Final Environmental Assessment. We appreciate your participation in the environmental assessment process.

Please call if you have any question.

Truly yours,

[Signature]

Julie Abdala, AIA
MEMORANDUM

TO: Michael D. Wilson, Chairman
Department of Land and Natural Resources

ATTN: Dean Uchida, Administrator
Land Division

FROM: Rick Egger
Director, Office of Planning

SUBJECT: Conservation District Use Application for Richard Steels Single-Family Dwelling, Nuuanu Valley, Oahu, OA-2891

June 12, 1998

Dear Mr. Egger,

Thank you for reviewing the Draft Environmental Assessment prepared for the above subject project. We offer the following response to your concerns.

1. With regard to containing potential run-off, the project will comply with the City Grading Ordinance which imposes requirements for erosion control during construction. An erosion control plan will be submitted for approval prior to start of construction. The plan will consist of both permanent and temporary erosion control measures.

Methods of permanent erosion control measures to contain potential run-off and minimize soil erosion will include but not be limited to the following:

- Gravel and landscape will be provided for the exposed and graded areas and top of slopes.
- All permanent cut and fill slopes will be designed with an inclination of 3:1:1 or flatter. For the upper slope with closer* slope, a flatter slope ratio of 3:1:1 will be used for the upper 3 feet of cut slopes. All fill placed on slopes with an inclination steeper than 3:1:1 will be keyed and buried into the existing slope to provide stability of the fill against sliding.

- The site is carefully scoured so that run-off waste is filtered through a series of basins before going into a catchment area and then to the stream. Drainage swales will be provided and maintained to drain all surface run-off and terminate into the catchment area. A siphon system will be provided around the house and connect to an underground drainage system which will also terminate in the catchment area.

Temporary erosion control measures to prevent and minimize polluted run-off into the stream during construction and grading work will include but not be limited to the following:

September 8, 1998

Mr. Rick Egger
Director, Office Planning
Department of Business, Economic Development & Tourism
233 South Beretania Street, 6th Floor
Honolulu, HI 96813

Ref: No. P-2891

Conservation District Use Application for Richard Steels Single-Family Dwelling, Nuuanu Valley, Oahu, OA-2891
Temporary silt fences around the site and along the stream will be constructed to control run-off within the site.

Graded areas will be kept moist or a granular blanket will be provided for dust control.

2. The project will comply with the Coastal Zone Management (CZM) policies and objectives dealing with point and non-point pollution.

A solid waste management and environmental protection plan will be developed for implementation during construction. Construction requirements will include minimizing construction site waste during construction. Discharge to the stream and adjacent wetland will not be permitted.

3. Construction of the bridge will require a building permit from the City and County of Honolulu. According to Mr. Alan Evers of the Department of the Army in my telephone conversation with him on August 25, 1999, since the property has no tidal influence, a permit from them will not be required, however, plans for the removal process of the collapsed bridge girders and construction of the new bridge will need to be submitted to them for review prior to start of work.

If a CZM Federal consistency review will be required by your office, requirements will be submitted before any construction begins.

A copy of your comment letter and this response will be included in the Final Environmental Assessment. Thank you for participating in the environmental assessment process. Should you have further questions, please call me at 596-0260.

Truly Yours,

[Signature]

Philip E. White, AIA
MEMORANDUM

TO: Engineering Branch, Oahu District Land Agent, Aquatic Resource, Conservation and Resource Enforcement, Forestry & Wildlife, Historic Preservation

FROM: Dean Y. Dallin, Administrator, Land Division

SUBJECT: REQUEST FOR COMMENTS - Conservation District Use Application

APPLICANT: Mr. & Mrs. Richard D. Sterling

FILE NO.: OA-2091

REQUEST: Single Family Residence

LOCATION: Nuuanu Valley, Honolulu, Oahu

TIME: 9/2-3/1987

PUBLIC HEARING: Yes _ No _

DOCEARE: Please conduct field inspection

Should you require additional information, please call Tom Eileen at 387-0385.

If no response is received by the suspense date, we will assume there are no comments.

Attachment

(3) Comments Attached

Done: 9/2/1987

PHILIP WHITE

September 8, 1983

Mr. Andrew M. Monden
Chief Engineer
Engineering Branch
Land Division
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Subject: Proposed Construction of a Vehicular Access Bridge at TMK 2-3-51, ppa 12, Honolulu, Oahu

File No. OA-2091

Dear Mr. Monden,

Thank you for your comments on the Draft Environmental Assessment for the above project. The proposed bridge will be designed to conform to the City and County of Honolulu rules and regulations. A permit for the bridge will be acquired before construction begins.

Your comments will be included in the Final Environmental Assessment. We appreciate the participation of the Engineering Branch in the environmental assessment process.

Truly yours,

Philip K. White, AIA
June 24, 1998

Mr. Dean Y. Uchida
Land Division
DLNR
P.O. Box 621
Honolulu, HI 96809

Subject: Conservation District Use Permit Application and Draft Environmental Assessment (DEA) for the Steele Residence, Island of Oahu

Dear Mr. Uchida:

Thank you for the opportunity to review the Conservation District Use Permit Application and DEA for the Steele Residence, Island of Oahu. The applicant is seeking to construct a one story residence in an area of approximately 4,000 square feet located along the lower hillside of Nuuanu Valley adjacent to Nuuanu Stream.

The Office of Hawaiian Affairs (OHA) has reviewed the Conservation District Use Permit Application and the companion DEA and has some serious concerns at this time. The subject property is located in a high rainfall area and the dominant soils belong to the Kameka clay (15-20%) and Kameka very sandy clay series (10-15%). These soils are described as heavy textured of gentle to steep slopes and exhibit poor drainability. OHA is concerned that land clearing and building operations will drastically increase runoff and soils losses in an area which already possesses all of the characteristics of an ecosystem highly vulnerable to runoff and soil erosion.

Furthermore, there is a problem of potential landslides due to the intricate nature of the prevailing soils. The applicant argues that landslides will not happen in Nuuanu because the Kameka series are different from the Launani series (See page 6 of soils report). But the applicant fails to substantiate why these series are different. OHA is concerned that if the clay fraction of the Kameka soils is dominated by expanding clay minerals, then there exists a high likelihood of land slide occurrence in the area.

The Office of Hawaiian Affairs is also concerned about the applicant's intent to build a residence in an area with a high density of archaeological resources. OHA acknowledges the applicant's efforts to survey and document existing cultural resources (See Archaeological Survey). But OHA seriously questions the feasibility of (i) implementing mitigation procedures to conserve and preserve cultural resources, and (ii) at the same time conducting irreversible land clearing procedures and building operations. In the final analysis, perhaps the best alternative is to forgo construction plans and leave the land unaltered.

Please contact Colin Kippen (594-1938), LNR Officer, or Luis Gutiérrez (594-1738), should you have any questions on this matter.

Sincerely yours,

[Signature]

Colin Kippen
Administrator

cc: Board of Trustees
OEQC
PHILIP WHITE

September 8, 1998

Mr. Randall Ogata
Administrator
Land and Natural Resources Division
Office of Hawaiian Affairs
711 Kapilani Blvd Suite 500
Honolulu, Hawaii

Subject: Conservation District Use Permit Application and Draft Environmental Assessment (DEA) for the Sterle Residence, Island of Oahu

Dear Mr. Ogata,

Thank you for reviewing the Draft Environmental Assessment prepared for the Sterle Residence. We offer the following response to your comments.

Concerning the likelihood of landslide in the area, this issue is addressed in the Final EA. Although the Soil Conservation Service classifies the soil at the site as Karea clay soil, historically, these soils have not had serious landslide problems. More importantly, the surface clay soils are very thin at the site and are underlain by competent alluvial soils. Therefore, the landslide potential is very small.

Concerning the alternative of merging construction phases and leaving the land untouched, the proposed house and associated improvements are outside the preservation area as shown on the Archaeological Site map prepared by Bishop Museum and the site plan prepared by us.

An interim preservation plan and a monitoring plan to protect certain archaeological features and mitigate adverse construction impacts to others will be submitted to the State Historic Preservation Division for review and approval prior to construction.

A long term preservation plan will be submitted to SHPD as well for review and approval prior to its implementation.

Your comments and our response will be included in the Final Environmental Assessment. We appreciate the participation of the Office of Hawaiian Affairs in the environmental assessment process.

Yours truly,

Philip K. White, AIA
September 8, 1998

Mr. Dwayne Steele
2325A Pali Highway
Honolulu, HI 96817

SUBJECT: Conservation District Use Application, CDUA OA-2891, TMK: 1-1-31:12

Dear Mr. Steele:

Thank you for appearing before the Nuuanu-Punchbowl Neighborhood Board on July 8, 1998 and presenting your proposed plan for a single story residence to be developed within the General Intake of the Conservation District. Notification of your CDUA application has been posted in our agenda during the month of June and July.

Based on your presentation and a review of the information provided, the Nuuanu-Punchbowl Neighborhood Board No. 12 has taken action through a majority vote of its members to support your petition to the Department of Land and Natural Resources for a Conservation District Use Application permit. This action will be reflected in the minutes of our July meeting. You may obtain a copy of the minutes by contacting the Neighborhood Council at 327-5749. It should be available to you in approximately 3 weeks.

We look forward to welcoming your new residence into our community. Please feel free to call me if you have any questions or if our Board may be of service.

Yours Truly,

Michael S. Chu, Chairperson

cc: Dean Uehida, Administrator, Land Division

PHILIP WHITE, AIA
MEMORANDUM

July 30, 1998

TO:      Tom Eisen, Land Management Division
FR:      Curt Cotrell, DOWAF - Na Ala Hele Trail and Access Program
RG:      Steele Family Residence, TMK 2-3-31:12, Naunau, Oahu

This memorandum is pursuant to our telephone on Tuesday, July 27, regarding the CDUA for the proposed grading and construction of the Steele residence in Naunau Valley. The deadline for comment on the DEA for this project has expired, but I am compelled to provide information on the potential effect on future public access along the Naunau stream corridor.

Background

In the 1970's there were planning documents generated that delineated potential trail corridors along several of Honolulu's principal streams, including Naunau. These plans were never implemented. In the early 1990's, community organizations again focused attention on these stream corridors and their lingering potential for formal recreational development. I attended a meeting in the early 1990's, with several interested individuals, including then City Council member Gary Gill, on exploring the opportunity of implementing the plan for formal recreational development of the Naunau stream corridor. No action came out of this initiative. Nevertheless, informal public use of the Naunau stream corridor occurs, especially along Kapiolani pool.

Malama O Mana is currently engaged in this effort for Mana stream, and has contacted the University of Hawaii with a conceptual plan. I recently attended a meeting coordinated by representatives of Hawaii's Thousand Friends that again focused on the recreational potential of Naunau stream. Both of these streams would provide feasible recreational corridors adjacent to a high density urban population, and I suspect that there is suppressed public demand for access to these stream corridors.

Conclusions

I concur that including lateral stream access as a condition for the aforementioned CDUA would not be reasonable. I offer these comments only in an effort to explore the possibility to allow for access and commodity for a potential route along Naunau stream, and in so doing maintain the public's access options and the feasibility of formal trail development in the future.

cc: Mike Burk, DOWAF
    Anne Low, OHAM
    Philip K. White Associates Ltd.
    UIHC

September 8, 1998

Mr. Curt Cotrell
Na Ala Hele Trail and Access Program
DOWAF
Department of Land and Natural Resources
1513 Punchbowl Street
Honolulu, Hawaii 96813

Subject: Steele Family Residence, TMK 2-3-31:12, Naunau, Oahu

Dear Mr. Cotrell,

Thank you for your memorandum of July 30, 1998 regarding the CDUA for the above proposed project. We offer the following response to your concerns.

In your memorandum, you stated that plans for trail corridors along principal streams, including Naunau, were never implemented. Subsequent efforts by Council Member Gary Gill to explore the implementation of a plan for recreational development of the Naunau stream corridor also resulted in no action.

While there appears to have been public discussion about the recreational potential of Naunau stream, the State Na Ala Hele program does not have long-term plans to connect the hiking trail on the ridge above Pacific Heights to Kapiolani Hills. Until such plans have been developed and approved by the appropriate State and County authorities, the applicant would have no way of assessing the potential impact of an easement across his property. The land and terrain is steep and wet. Substantial maintenance would be required. Liability issues need to be addressed as well.

When specific plans have been developed, approved by all necessary governmental agencies, and provided to the applicant with the applicable language for drafting a modification regarding such an easement. In addition, the applicant's architects and engineers would have an opportunity to review those plans and to provide comments to the applicant on such a proposed use upon the applicant's property. Without the benefit of such specific plans and a formal state program, it would be difficult for the applicant to discuss such issues with his neighbors.

You also referred to a condition in the CDUA application for lateral stream access. Such a condition on non-public property must bear a rational nexus to the purpose for which the governmental approval is sought. Here, approval for a residence is being sought on private lands. The statewide public trail system is an entirely different program, not currently associated with the Naunau stream. Again, until a formal program has been developed in the future, it would be premature to assess the viability and impact of such a use on applicant's property.
A copy of your memorandum and this response will be included in the Final Environmental Assessment. Should you have any questions, please contact me at 596-0269.

Truly Yours,

[Signature]

Philip K. White, AIA
June 14, 1998

Mr. Wilson
Chair
Department of Land and Natural Resources
P.O. Box 921
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Subject: Draft Environmental Assessment for the Steele Residence, Oahu (CDQA 97-291)

This is in response to the review of the subject document. We have the following questions and comments:

1. This project involves grading activities next to the Huanu Stream. Please describe the specific mitigation measures that will be implemented to prevent stormwater runoff carrying sediments from entering the stream.

2. The soil study recommends several alternative improvements to support the bridge across Huanu Stream. Please describe the impacts of the potential improvements on the stream. Consult with the Commission on Water Resources Management regarding this matter and document the consultation in the final environmental assessment.

3. If known, please describe the previous use of the collapsed bridge across Huanu Stream.

4. Please describe any known plans for the abutting parcels. What are the cumulative impacts of this project?

5. From an archaeological standpoint, this site is eligible for inclusion on the National Register of Historic Sites. Please consult with the State Historic Preservation Division regarding the archaeological issues and document the consultation in the final environmental assessment.

6. Please list nearby groups and individuals who were consulted regarding this project and document the consultation in the final environmental assessment.

7. Please list all federal, state and county permits that would be required for this project.

8. Please discuss the different alternatives that were considered for this project.

9. Please note that the term "negative declaration" has been replaced by the term "finding of no significant impact" (FONSI).

10. Please discuss the findings and reasons for supporting the FONSI determination based on all 11 significant criteria listed in 140-300-12 of the EIS rules. Please see the enclosed example.

11. The parcel soil of the project contains a number of foundations and architectural remains. Please identify the ownership of this site, its past, present and any known future use. Aerial photographs may provide information on this matter. The only access to this parcel would be along the reconstructed bridge and Steele Residence driveway. Is there or will there be any right of easement granted to the main parcel to provide for ingress or egress?

12. The State Na Ala Hele project may have plans in the long-term to connect the hiking trail on the ridge above Pacific Heights to Kapiolani Falls. Such a trail would require an easement across the Steele property. Will the Steele property grant such an easement? Please consult with Na Ala Hele on this issue.

Should you have any questions, please call Jayan Thirupram at 856-4185.

Sincerely,

Gary Hill
Director

Enclosure

cc: Philip White and Associates Architects Ltd.
September 8, 1998

Mr. Gary Gill
Director
Office of Environmental Quality Control
215 South Beretania Street, Suite 702
Honolulu, HI 96813

Subject: Draft Environmental Assessment for the Steele Residence,
Oahu (CDUA OA-2891)

Dear Mr. Gill,

Thank you for your letter dated July 16, 1998 regarding the Draft EA for the project. We appreciate your efforts in reviewing the document and offer the following response to your comments.

1. This project involves grading activities near to the Nuuanu Stream. Please describe the specific mitigation measures that will be implemented to prevent stormwater runoff carrying sediments from entering the stream.

The project will comply with the City Grading Ordinance which imposes requirements for erosion control during construction. An erosion control plan will be submitted for approval prior to start of construction. The plan will consist of both permanent and temporary erosion control measures.

Methods of permanent erosion control measures to contain potential runoff and minimize soil erosion will include but not be limited to the following:

- Ground cover and landscaping will be provided for the exposed and graded areas and top of slopes.

- All permanent cut and fill slopes will be designed with an inclination of 2H:1V or flatter. For the upper 3 feet of cut slopes, a 1H:1V fill will be used for the upper 3 feet of cut slopes. All fill placed on slopes with an inclination steeper than 2H:1V will be bermed and seeded into the existing slope to provide stability of the new fill against sliding.

- The site is carefully landscaped so that runoff water is filtered through a series of basins before going into a containment area and finally to the stream. Drainage swales will be provided and maintained to drain surface runoff and terminate into the containment area. A gutter system will be provided around the house and connect to an underground drainage system which will also terminate in the containment area.

- Temporary erosion control measures to prevent and minimize polluted runoff into the stream during construction and grading work will include but not be limited to the following:

- Temporary silt fences around the site and along the stream will be constructed to control run-off within the site.

- Graded areas will be kept moist or a granular blanket will be provided for dust control.

2. The soil study recommends several alternative improvements to support the bridge across Nuuanu Stream. Please describe the impacts of the potential improvements on the stream. Consult with the Commission on Water Resources Management regarding this matter and document the consultation in the final environmental assessment.

No heavy equipment or materials will be driven or transported across the stream channel and no construction work will occur in the stream channel. A stream channel alteration permit will not be required because the Nuuanu stream channel will not be altered. The Commission on Water Resources Management has been consulted regarding this matter. A copy of their letter is included in the Final EA.

3. If known, please describe the previous use of the collapsed bridge across the Nuuanu Stream.

Enclosed are some background information on the roadway connected to the Nuuanu Stream, which was prepared by Gwolla Harris, M.A., for the construction permit application. Any documentary evidence, showing the 1992 bridge to be an existing bridge, is not available. It is estimated that the 1992 bridge exists and was built in the 1940s. The enclosure displays an illustration from the 100 Years Ago by Elsa Watson, owner of the Centi House property. The plans ("Top right. The plans during construction") show what might be a bridge-like structure, the darker line in the middle of the area.

4. Please describe any known plans for the abutting parcels. What are the cumulative impacts of this project?

There are no known plans for the abutting parcels. The proposed action is individually limited and cumulatively will not have any effect on neighboring properties.

5. From an archaeological standpoint, this site is eligible for inclusion on the National Register of Historic Sites. Please consult with the State Historic Preservation Division regarding the archaeological issues and document the consultation in the final environmental assessment.

Interim and long-term preservation plans and archaeological monitoring plans will be submitted to the State Historic Preservation Division for review and approval. The approved interim preservation plan and long-term preservation plan will be implemented after review and approval by SHPO. Copies of the letters from SHPO are included in the Final EA.
6. Please list nearby groups and individuals who were consulted regarding this project and document the consultation in the final environmental assessment.

A list of groups and agencies consulted regarding the project and the consultation are included and documented in the Final EA.

7. Please list all federal, state, and county permits that would be required for this project.

The list of permits and approvals can be found in Section VI of the Final EA.

8. Please discuss the different alternatives that were considered for this project.

The alternatives that were considered for this project are discussed in Section IV of the Final EA.

9. Please note that the term "negative declaration" has been replaced by the term "finding of no significant impact" (FONSI).

Thank you for this correction. The negative declaration mentioned in the Draft EA has been changed to FONSI in the Final EA.

10. Please discuss the findings and reasons for supporting the FONSI determination based on all 13 significant criteria listed in Section 151-200-12 of the NEPA rules. Please see the enclosed example.

Thank you for sending us an example of the 13 significant criteria. The findings and reasons supporting the FONSI determination are discussed in Section V of Final EA.

11. The parcel used in the project contains a number of foundations and architectural remains. Please identify the ownership of this site, its past, present and any known future use. Aerial photographs may provide information on this matter. The only access to this parcel would be along the reconstructed bridge and storm drain system. Is there or will there be any right of easement granted to the parcel to provide for ingress or egress?

The parcel in question is part of TMK 2-2-22:03 which is owned by the Hawaii Baptist Convention. Entry to the property is from the Pali Highway Ramp "P". See attached tax map.

12. The State Na Ala Hele program may have plans in the long-term to connect the hiking trail on the ridge above Pacific Heights to Kapena Falls. Such a trail would require an easement across the property. Will the State’s grant such an easement? Please consult with Na Ala Hele on this issue.

Please refer to our letter to Mr. Curt Cowell of Na Ala Hele which is included in the Final EA regarding this issue.
Department of the Interior land record files from 1888-1900, building permit records, and several maps detailing the site area from 1888 through 1933 were consulted. No records of permits for construction of roads or bridges appear in these sources for this section of Nu‘uanu, and no structures, roads, or improvements to the site appear on the maps consulted (Alexander 1898; Boysen 1896, Newton 1902, Honolulu Tax Office 1923, 1933). Fire insurance maps (Sanborn) for 1918 and 1927 show the area as being "residential".

In summary, the Nu‘uanu hillside site area was used as cattle pasture in the 1890’s, and was barren with a few cattle on the land in 1910.

Documented land improvements include reforestation of the hillside directly south of the site by the Waldron’s between 1923 and 1933/35, and the construction of a private roadway first traced in 1927. Currently, the abandoned roadway and bridge, and the site area is overgrown with vegetation. Development impacts to the site appear to be confined to the road construction and disturbance of trees and plants after 1923.

Following automobile accidents in about 1923 Jack and Elza Waldron:

"...decided automobiling was not for us and that we would like to put the future concentrate on the reforestation of the hillside. So this was our first project and we began on it without delay. The ground on the mountain was so hard that we used dynamite to start the holes for the tree... for the next ten or twelve years we spent every interesting week end on our hillside..." (Waldron 1957:61, 65).

On the site area remains of a 2.8 to 3.0 meter wide bridge crosses Nu‘uanu Stream from Parcel 36 (THK 2-2-31) to the northern boundary of Parcel 33. The bridge superstructure is made of a lattice-work girders of cast iron which is failing, with three extra high concrete piers at each end of the bridge. The bridge appears to have been planked with 2” x 6” boards using common 20d nails, and is overgrown with vines and vegetation. Large fragments of the ironwork and concrete rubble are found in the Nu‘uanu Stream as on the bridge. The bridge is an extension of an overgrown asphalt roadway on the east side (Parcels 1 and 3 of THK 2-2-31) and connects with a paved roadway having a concrete retaining wall on the watershed side in Parcel 33. The Honolulu tax records state that the roadway on Parcel 1 was vacated between 1937 and 1951 at 1/4 interest each to various owners, and that Parcel 36 was vacated from Parcel 33 in 1947 as a sewer easement (Honolulu Tax Office, THK 2-2-31:1, 32, 33).