
FINAL ENVIRONMENTAL ASSESSMENT

PROPOSED HAWAII PUBLIC RADIO FACILITY

Tantalus, Honolulu, Oahu, Hawaii

ACCEPTING AUTHORITY:

State of Hawaii
Department of Land and Natural Resources

PREPARED BY:

Analytical Planning Consultants, Inc.

and

Land Planning Consultants LLC

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FINAL ENVIRONMENTAL ASSESSMENT

PROPOSED HAWAII PUBLIC RADIO FACILITY

Tantalus, Honolulu, Oahu, Hawaii

TMK: 2-5-19: 005

APPLICANT:

Hawaii Public Radio
Honolulu, Oahu, Hawaii

ACCEPTING AUTHORITY:

State of Hawaii
Department of Land and Natural Resources

PREPARED BY:

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FEBRUARY 2005

FINAL ENVIRONMENTAL ASSESSMENT

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SUMMARY

Applicant: Hawaii Public Radio
738 Kaheka Street, Suite 101
Honolulu, Hawaii
Contact: Michael Titterton
President and General Manager
Phone: 955-8821

Accepting Agency: Department of Land and Natural Resources
Kalanimoku Building, Room 130
1151 Punchbowl Street
Honolulu, HI 96813

EA Preparer: Analytical Planning Consultants, Inc.
928 Nuuanu Avenue, Suite 502
Honolulu, HI 96813
Contact: Donald Clegg, President
Phone: 536-5695 Fax: 599-1553

Design Consultant: Hawaii Engineering Group, Inc.
98-023 Hekaha Street, Unit 2B
Aiea, HI 96701
Contact: Ather Dar, P.E., President
Phone: 486-2092

Project Location: Tantalus, Honolulu, Oahu, Hawaii

Recorded Fee Owner: State of Hawaii

Tax Map Key: 2-5-019: 005

Area: Approximately 2,625 square feet

State Land Use Classification: Conservation

County Zoning: Preservation (P-1)

Proposed Action: Construction of one radio transmission tower with mounted antennas and an 800 square foot equipment building.

Parties Consulted During Pre-Assessment: State of Hawaii Department of Land and Natural Resources
Verizon Hawaii

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PREFACE

The Hawaii Public Radio tower project is proposed to be constructed on state land located in the State Conservation District. Per Chapter 343, Hawaii Revised Statutes (HRS), as amended, Environmental Impact Statements, a project located in the State Conservation District requires that the applicant proposing the project complete the environmental impact assessment process.

This Environmental Assessment (EA) has been prepared to meet the requirements of Chapter 343, HRS, as amended, and Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules. A Finding of No Significant Impact (FONSI) is anticipated for the Hawaii Public Radio Tower Facility at Tantalus.

The State Land Use Commission designates the Tantalus project site as in the Conservation District. An associated Conservation District Use Application has been submitted to the Department of Land and Natural Resources. Approval by the State Land Board will be required to construct the Hawaii Public Radio Tower Facility at the Tantalus site.

The Hawaii Public Radio Tower Facility is located in the County Zoning District Preservation P-1 (Restricted Preservation). According to the City and County of Honolulu's Land Use Ordinance (LUO), within the P-1 restricted preservation district, all uses, structures and development standards shall be governed by the appropriate state agencies.

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1. INTRODUCTION

1.1 Project Background

Hawaii Public Radio is a local private 501 (c) 3 non-profit organization that broadcasts musical and in-depth news and informational programming from National Public Radio, Public Radio International, and other local, national and international program sources. Hawaii Public Radio also creates and produces a number of programs locally. Hawaii Public Radio, whose offices are located at 738 Kaheka Street, broadcasts its programs on 4 stations: 2 on Oahu area KHPR 88.1 FM, KIPO 89.3 FM; and 1 on the Big Island KANO 91.1 FM and 1 on Maui KKUA 90.7 FM.

For more than a decade, Hawaii Public Radio (HPR) has searched for a way to increase the reach of KIPO 89.3 FM to a larger and wider audience. Since its first broadcast in 1989, KIPO has played an important role in Hawaii Public Radio's mission to offer a variety of high quality programs. In addition to its alternative music jazz format, KIPO 89.3 provides an important forum discussion of local issues by local community leaders, and performances by local artists, while KHPR 88.1 tends to offer a number of programs from National Public Radio and Public Radio International. All of these programs cannot fit into one radio station's broadcast schedule.

The existing KIPO 89.3 tower, located on Palehua Ridge in West Oahu, broadcasts at only 3,000 watts. A significant portion of Oahu cannot receive the KIPO signal, including almost all of Windward Oahu and much of East Honolulu. Listeners routinely experience a complete loss of receiving the radio signal when driving over the Pali from Honolulu to Windward Oahu. Existing and want-to-be listeners have complained that they are unable to receive the signal.

Following a search of potential sites, HPR had hoped to relocate the KIPO transmitter to an existing Verizon tower atop Tantalus. However, after a couple of years of contact with Verizon's local Hawaii offices, a California representative stated that Verizon would not allow co-location of the Hawaii Public Radio transmitter on the existing Verizon tower on Tantalus. A copy of the statement is in Appendix A.

HPR hired Hawaii Engineering Group, with whom HPR has worked with on other tower construction projects, to prepare a relocation study. In talks with the State Department of Land

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and Natural Resources, it became evident that HPR could apply for state approval to build a new tower near the Verizon site, all of which are located on state-owned property.

1.2 Purpose and Need

The purpose of the Hawaii Public Radio tower project at Tantalus is to construct a transmission facility for KIPO 89.3 FM; replacing the existing facility on Palehua Ridge. FM transmission is primarily line of sight. The Tantalus location is ideal. Being centrally located and at a high elevation it provides for FM coverage 92 percent of Oahu's population. The new FM antenna for KIPO will broadcast at 26,000 watts, which is significantly less than the 100,000 watts for which the existing KIPO transmission was originally licensed. Therefore, the new FM antenna will require much less electricity to operate, while reaching a significantly broader area of Oahu. A small equipment building will also be constructed.

In the future, Hawaii Public Radio may relocate the existing Wiliwilinui Ridge transmitter for KHPR 88.1 FM to the proposed new Tantalus tower. However, there are no immediate plans at this time to relocate the KHPR 88.1 FM transmitter.

The proposed Hawaii Public Radio tower location is on State-owned property atop Tantalus; already the location of an existing transmitter tower and a receiver tower, both owned and used by Verizon with a land lease with the State. The HPR tower will be located about 300 feet to 400 feet further mauka of the Verizon transmitter tower. The height of the HPR tower will not exceed the height of the Verizon transmitter tower.

Additional Project Background, Purpose and Need Information

For the past 14 years, Hawaii Public Radio has diligently searched and spent a great deal of time, effort and money to fix the problems associated with the present location of KIPO's 89.3 FM transmitter antenna, only to realize that KIPO would have to be rebuilt at a new location.

Background of KIPO at its Present Location

KIPO first went on the air in 1989. The KIPO transmitter (approved and licensed by the Federal Communications Commission (FCC)) was designed and constructed as a 100,000 watt station that would reach all of Oahu. When it first went "live", it had a very far reaching signal.

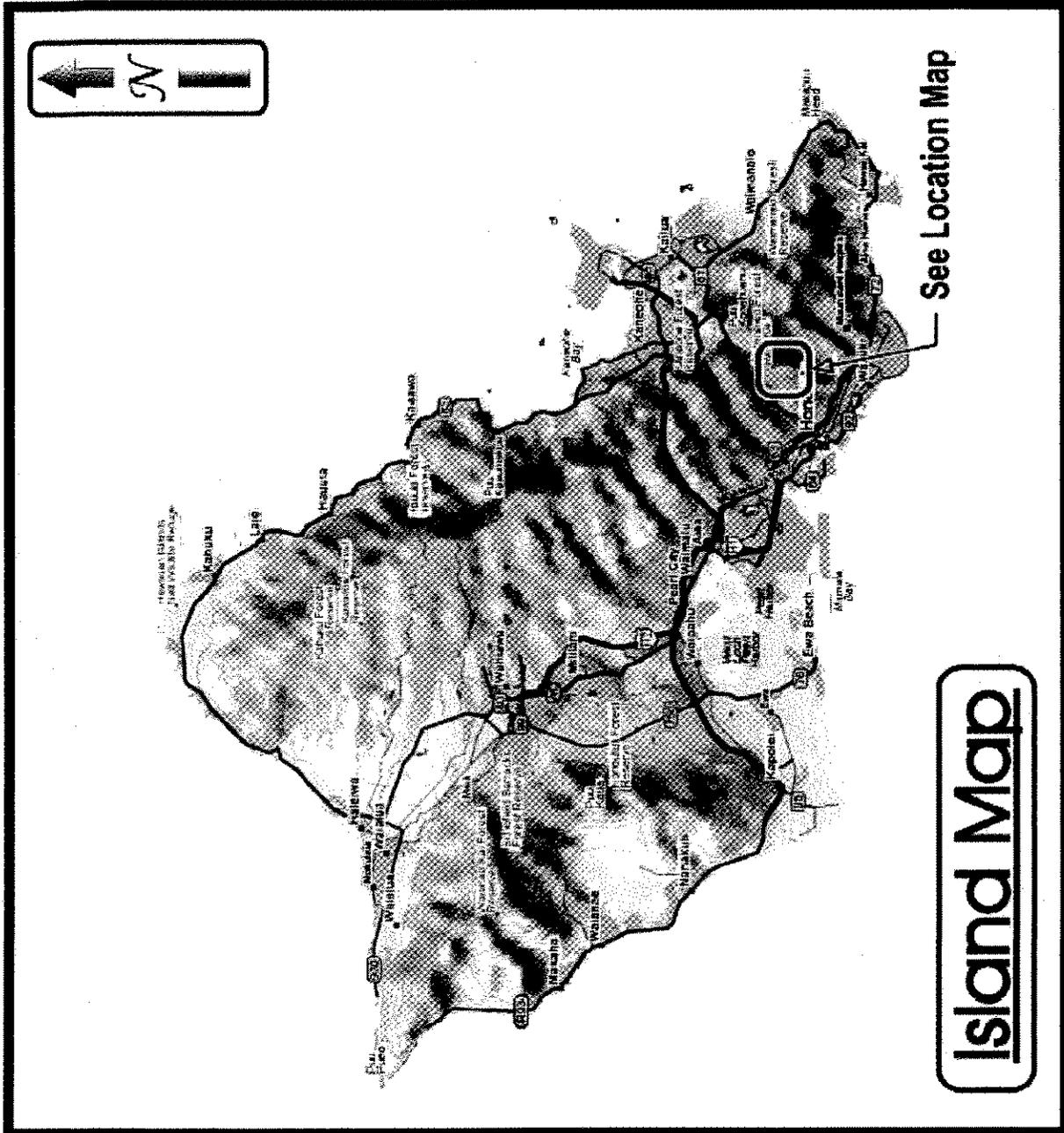


FIGURE 1

Island Map

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii

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Approximately 6 hours after KIPO's first transmission, the FCC called to alert the station's engineers that the new station was interfering with two local monitoring stations. One of these was operated by the Federal Aviation Administration, the other by the FCC itself. Both of those monitoring stations performed (and continue to perform) critically important functions with their arrays of highly sensitive receivers and antennas.

Due to an unfortunate combination of circumstances, the high powered signal at KIPO 89.3 FM was causing a lot of disturbance with those receivers. The HPR engineers were asked to decrease broadcast power until the interference was eliminated. The engineers immediately complied and the power level was reduced to only 3,000 watts; the power level that was acceptable so as not to interfere with the monitoring stations. Today, KIPO continues to operate at only one-thirteenth of its originally FCC-licensed power. A significant portion of Oahu cannot receive the KIPO signal, including almost all of Windward Oahu and much of East Honolulu.

Over the next 15 years, HPR diligently searched to fix the KIPO problem in its existing location at Palehua Ridge. Specially-designed antennas, notch filters and screening devices of various types have all been tried and all were unsuccessful. Finally, HPR recognized that KIPO's present location could not be "fixed". HPR realized that it would have to search for another location and KIPO would have to be rebuilt. Constructing a new tower and equipment building was akin to a last resort because it would a very long and expensive process.

Search for Alternative Solutions and Sites

For over two years, Hawaii Public Radio worked with engineers, conducted studies, and considered a range of possibilities. HPR contacted the owners of other towers and requested to co-locate (some of which were extremely large mainland broadcast corporations). Those owners were under no obligation to have HPR co-locate. Either those owners declined or asked exorbitant rent that would have significantly overburden HPR's limited non-profit budget; rent for just one station was on the order of the combined budget of all of HPR's other stations.

HPR also evaluated placing KIPO on the same tower as KHPR at Wiliwilinui Ridge, which is located on State land and is in the Forest Reserve. However, there is no room for additional transmission on the Wiliwilinui Ridge tower (owned by a California company) where KHPR 88.1 FM and a number of other station broadcasters are presently located. Additionally, the

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Wiliwilinui Ridge tower is only accessible by helicopter, making construction and maintenance difficult and extremely expensive.

HPR also contacted the local authorities of Verizon for over two years to request to co-locate on the Verizon Tantalus tower. Finally, after a definitive response was not forthcoming from Verizon's Honolulu offices, HPR was informed in the fall of 2003 by a California office that "Verizon will not be able to accommodate your request to attach to a Verizon facility in Tantalus, Hawaii."

For approximately 15 years, Hawaii Public Radio has diligently sought out solutions to and alternative locations for the KIPO situation.

1.3 Project Location

The project site is located off of Tantalus Drive a little over 3 miles northeast of Honolulu's downtown and about one-half (1/2) mile up a gated road that is located on state land. The project site will occupy an area of about 2,625 square feet within the Tax Map Key: 2-5-019: 005, which is owned by the State of Hawaii. The base of the proposed HPR tower and equipment building would be at an elevation of 1,920 feet. Access to the HPR site is via the same gated road off of Tantalus Drive that already services the Verizon towers. The HPR project site is located adjacent to the access road.

The following figures illustrate the project site: Figure 1 depicts the project location on the Oahu Island map; Figure 2 is the project location map; Figure 3 is the tax map key; Figure 4 depicts the general location of the proposed HPR Tower on state-owned land and shows the location of the existing Verizon transmitter and receiver towers; Figure 5 shows a topographic site plan.

1.4 Existing Project Site Conditions

The HPR Tower project site is located within Tax Map Key: 2-5-019: 005, on land owned by the State of Hawaii. A lease between the State of Hawaii (the landowner) and HPR will need to be executed. The Hawaii Public Radio Tower project site is approximately 2,625 square feet and is currently undeveloped; covered with brush and small trees. No buildings or other structures are currently located on the HPR project site.

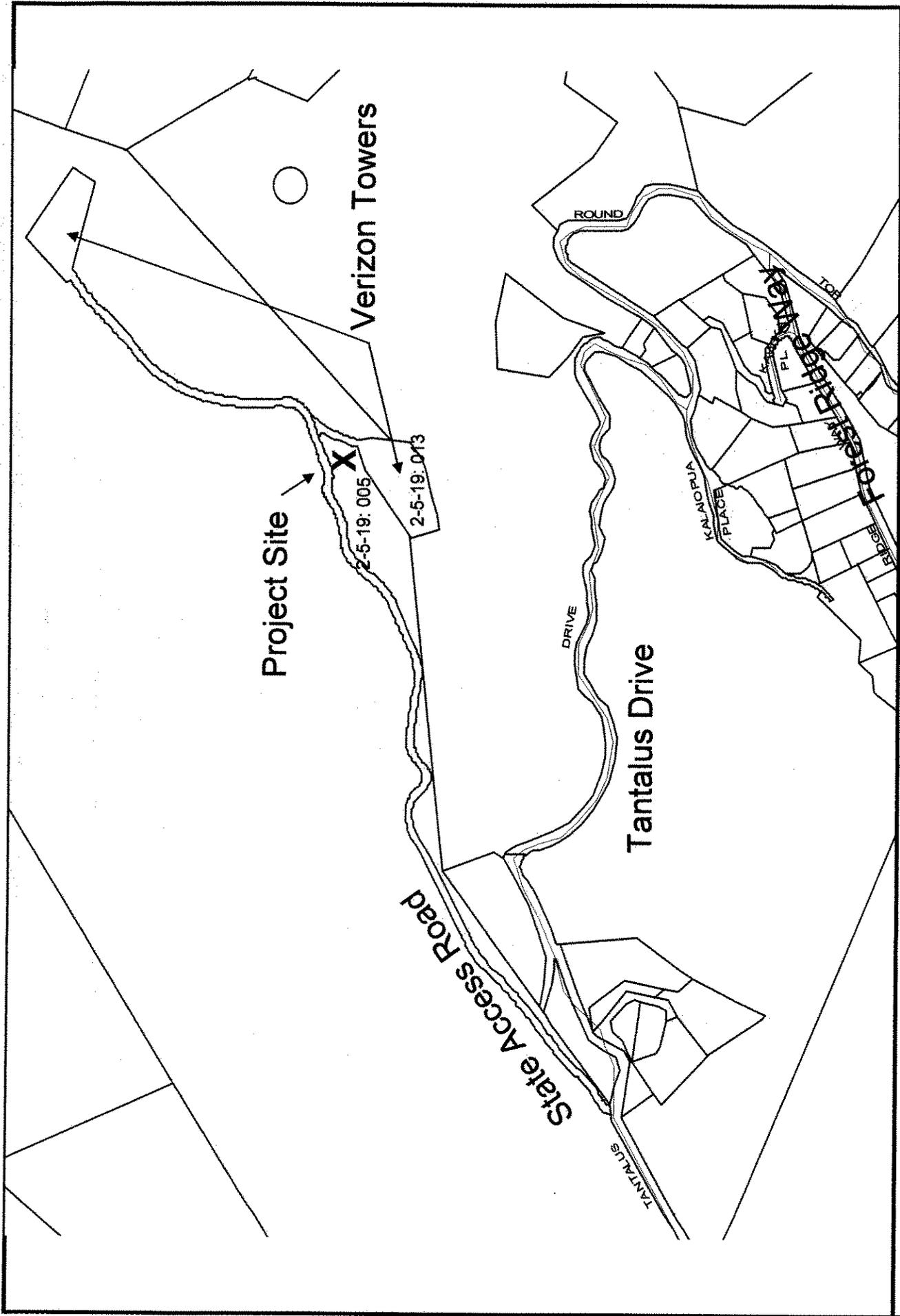
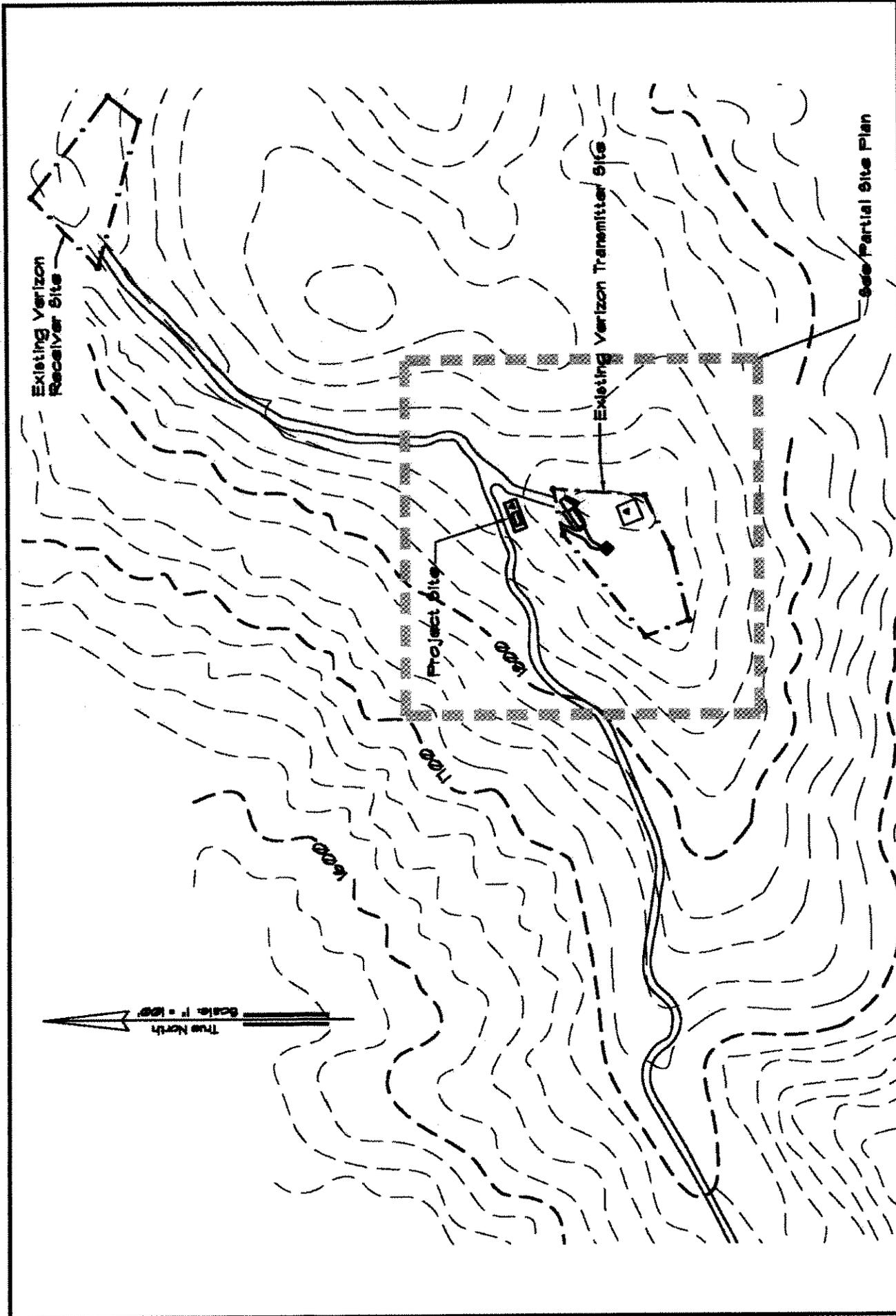


FIGURE 3

Tax Map Key

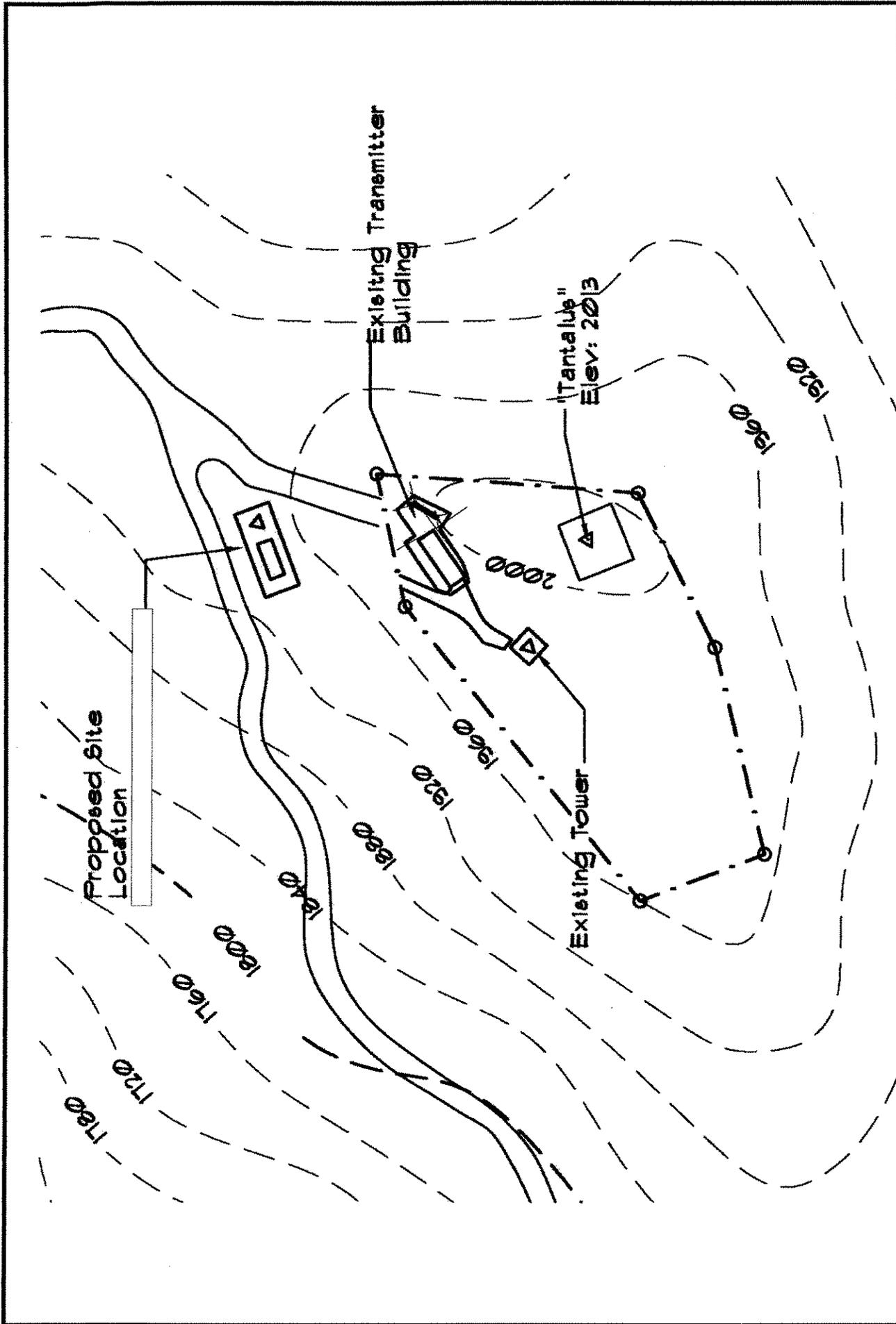
TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii



Not To Scale

FIGURE 4
Site Plan

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii



Not To Scale

FIGURE 5

Topographic Site Plan

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Although seemingly “undisturbed”, the project site is surrounded on 3 sides by the existing road that accesses the Verizon towers and equipment buildings. The project site would likely have been disturbed when the road was originally constructed. The vegetation growth on the project site does not appear to be “old growth”. Currently, vegetation along the road, including the 3 sides of the project site, is supposed to be routinely cut back as part of overall road maintenance.

Accessibility and minimizing disturbance of the surrounding ecosystem were important considerations in site selection for the HPR tower site. The proposed location was chosen because it is at a high elevation and minimizes disturbance of the Forest Reserve by using the existing road located on State land, which already accesses two tower structures.

The 75-foot tall Verizon transmitter tower and Verizon equipment building are located approximately 400 feet makai of or south of the HPR project site. The base of the Verizon transmitter tower is at elevation 1,985 feet and reaches a maximum height at elevation 2,060 feet. The Verizon receiver tower is located approximately 1,800 feet mauka or north of the project site. See Figure 4.

1.5 Other Project Site Data

The project site is designated Preservation in the Primary Urban Center Development Plan (June 2004). The County zoning designation is P-1 Restricted Preservation. The State Land Use Commission designates the project site as in the Conservation District (Resource Subzone). The project site is in the State Forest Reserve. A Conservation District Use Application (CDUA) permit, which must be approved by the State Land Board, will be required to construct and operate the HPR Tower at the Tantalus project site.

1.6 Project Description

1.6.1. Site Plan

The project site will occupy a 2,625 square foot area that will contain a tower and an 800 square foot equipment building. As noted, Hawaii Public Radio will need to enter into a lease with the State of Hawaii for use of the proposed project site. Access to the site will be from the existing

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interior concrete road that leads off of Tantalus Drive. A short driveway into the HPR site will be constructed by HPR. Figure 6 depicts the site plan.

The project consists of one 140-foot tall three-legged self-supported tower and an 800 square foot concrete block equipment building measuring 12-feet tall. The tower will have either a concrete slab foundation or drilled-piers. A separate concrete pad will be constructed as the base of the equipment building. A retaining wall will be constructed along the south and west sides of the project site. Grading and clearing of the site will be required.

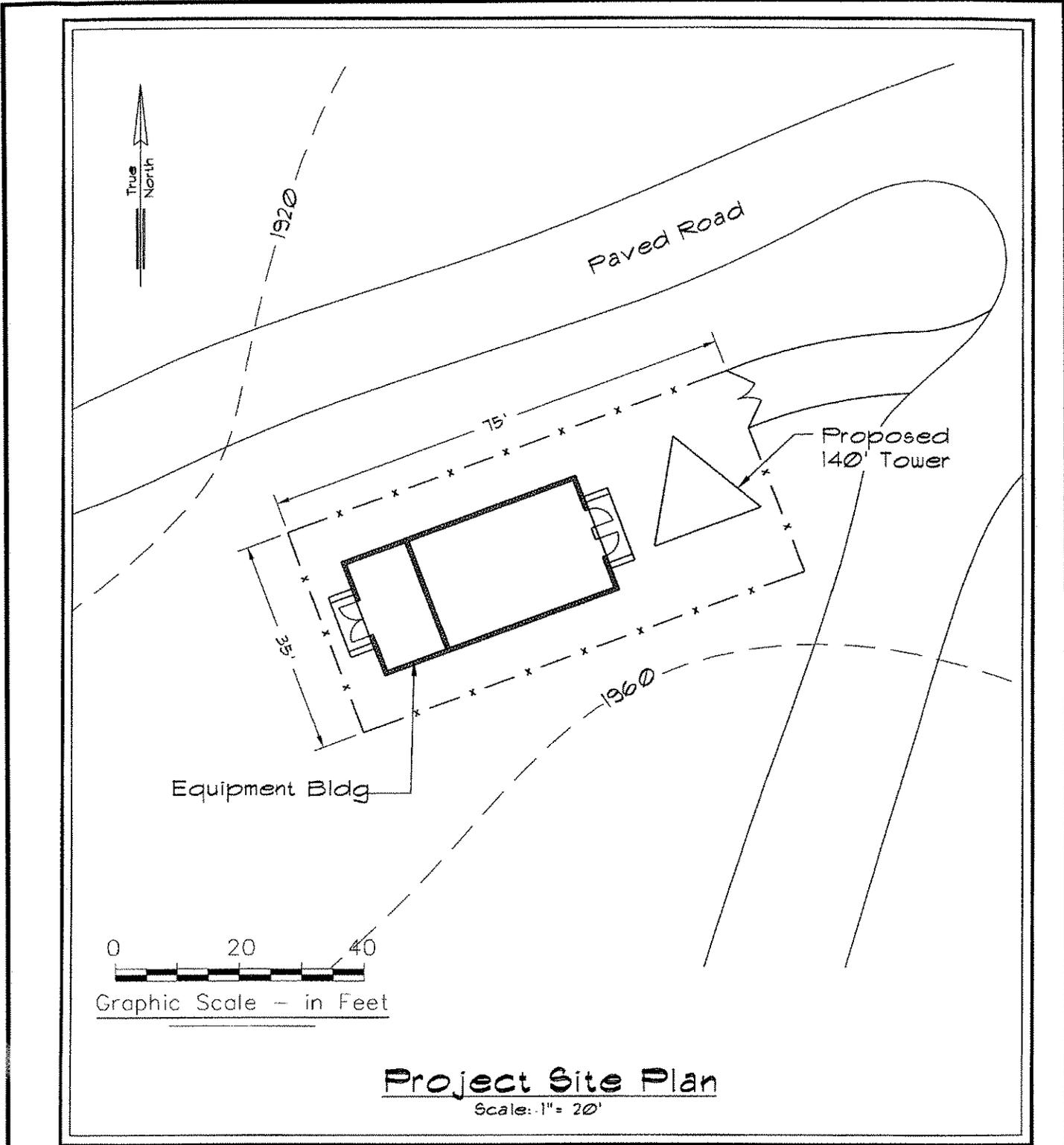
The tower and equipment building will be constructed at approximately elevation 1,920 feet msl. This means that the maximum height of HPR 140-foot tall tower will reach the same elevation – 2,060 msl - as the Verizon tower. The HPR site is located at a lower elevation and is located about 300-400 feet mauka than the Verizon site (Figure 7). The project site will be surrounded by a high security fence with a locked gate at the site driveway. The project site will have a gravel yard and there will be sufficient room for personnel to park vehicles while servicing and maintaining equipment.

No potable water will be provided at the project site. Also, no restroom facilities will be provided in the building or at the project site.

Electrical and other utility lines needed to power the project tower and equipment building will be routed via the existing Hawaiian Electric Company's (HECO) overhead lines. There are active utility poles that service the 2 Verizon towers in close proximity to the project site.

1.6.2. Access

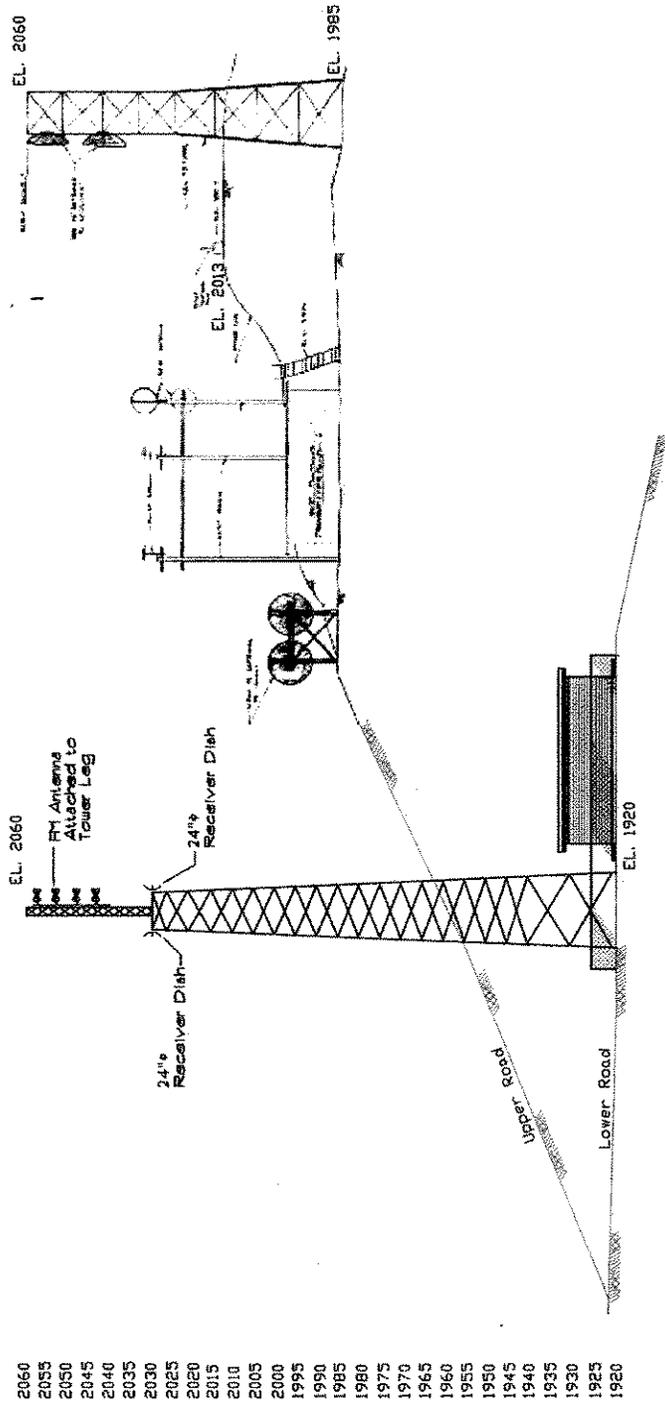
The project site is about one-half mile off of Tantalus Drive. The existing road on State land is gated and access is controlled by the Department of Land and Natural Resources. According to DLNR, the road is maintained by Verizon; Hawaii Public Radio would participate in the maintenance of the road. The proposed tower and equipment building improvements will not impact the existing access road. As noted earlier, a short driveway from the access road to the HPR site will be constructed by the applicant as part of the overall project. The security fencing will be located so as not to affect vehicular use of the access road.



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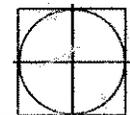


FIGURE 6
Detailed Site Plan
 TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii



Site Elevation
Scale: 1" = 40'

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Honolulu, Oahu, Hawaii



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Not To Scale

FIGURE 7
Site Elevation

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1.6.3. Equipment Building Plan

The 800 square foot air conditioned equipment building will be a single-story concrete block structure with a concrete slab floor and a concrete roof. The base elevation will be at 1,920 feet msl. The new building will be located so that the bulk of the structure is below and behind the top of the ridge to reduce visual impact. It is anticipated that the building will not be visible due to its location and the height of trees and vegetation surrounding the project site. The building will have access doors on the east and west sides of the structure as shown in Figure 8. As depicted in Figure 9, the equipment building's floor plan is divided into the generator room and the radio equipment room.

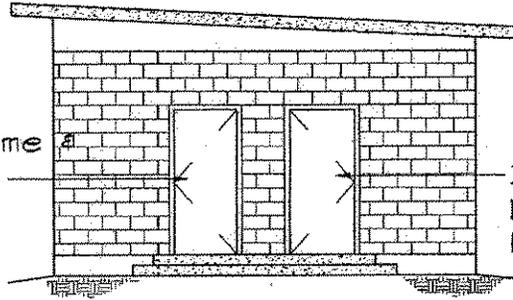
The 560 square foot radio room will be designed with 9-foot high clear height ceiling to accommodate equipment racks, overhead wiring trays, microwave waveguide coaxial cables, and waveguide support hardware. The building will be protected from potential damage caused by lightning strikes, such as isolating equipment racks from the floor with an insulation gasket. Protection will also include a single point ground for user equipment. The tower and the building ground systems will be interconnected to a ground well, buried ground halos, and an exothermically welded connection to the reinforcing bars of the tower (a Ufer ground).

In the event of a power outage to the commercial power system, there will be a battery back-up system that would provide power for a 100-watt transmitter. Additionally, the 200 square foot generator room will house a 30-kilowatt (kW) diesel generator to provide emergency power for charging the batteries, running the air conditioning and other general needs in the event of a power outage. The generator and diesel fuel tank will be a self-contained double-walled unit all located within the generator room. The double-walled unit will not require a spill containment system around its base. The building will be equipped with a fire alarm and Halon (non-water based) fire-suppression system suitable for electronic equipment.

1.6.4. Tower and Antennas

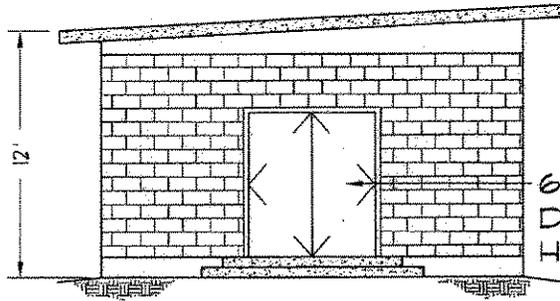
The tower will be a three-legged 140-foot high self-supporting pipe-leg structure that will have one (1) FM linear antenna that will be mounted parallel to the tower (Figure 10). The FM antenna will be approximately 20 feet in length. The bottom of the FM antenna will be about 120 feet above the ground and will reach to the top of the tower. The FM antenna will **not** protrude beyond the 140 foot tall tower. One (1) microwave receiver antenna, a dish

3070 HM
Door, Frame
Hardware



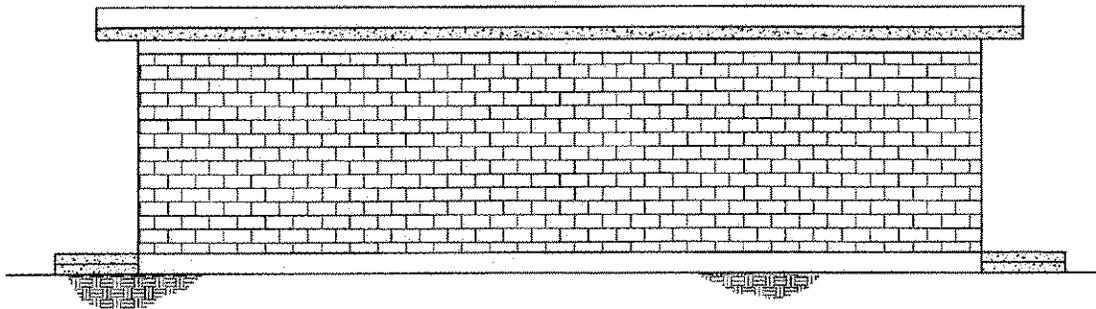
3070 HM
Door, Frame &
Hardware

East Elevation



6070 HM
Door, Frame &
Hardware

West Elevation



North Elevation



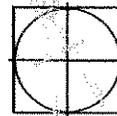
Graphic Scale - in Feet

Building Elevations

Scale: 1/8" = 1'-0"

Project:

Hawaii Public Radio - Tantalus
Honolulu, Oahu, Hawaii

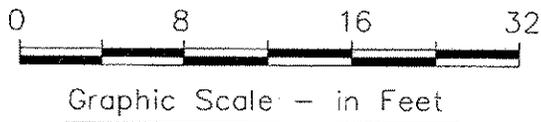
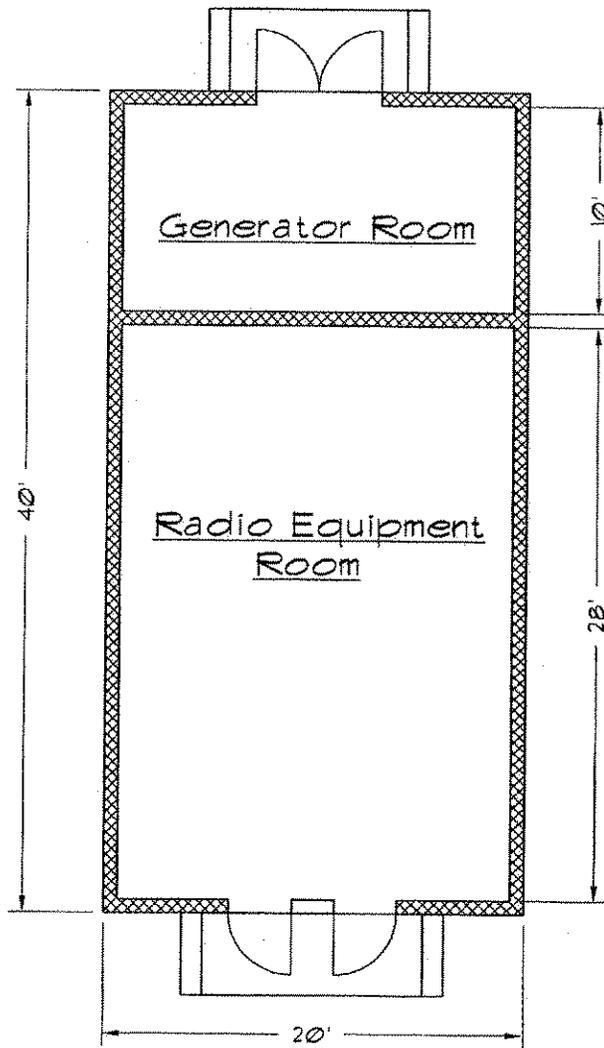


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FIGURE 8

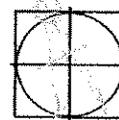
Building Elevations

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii



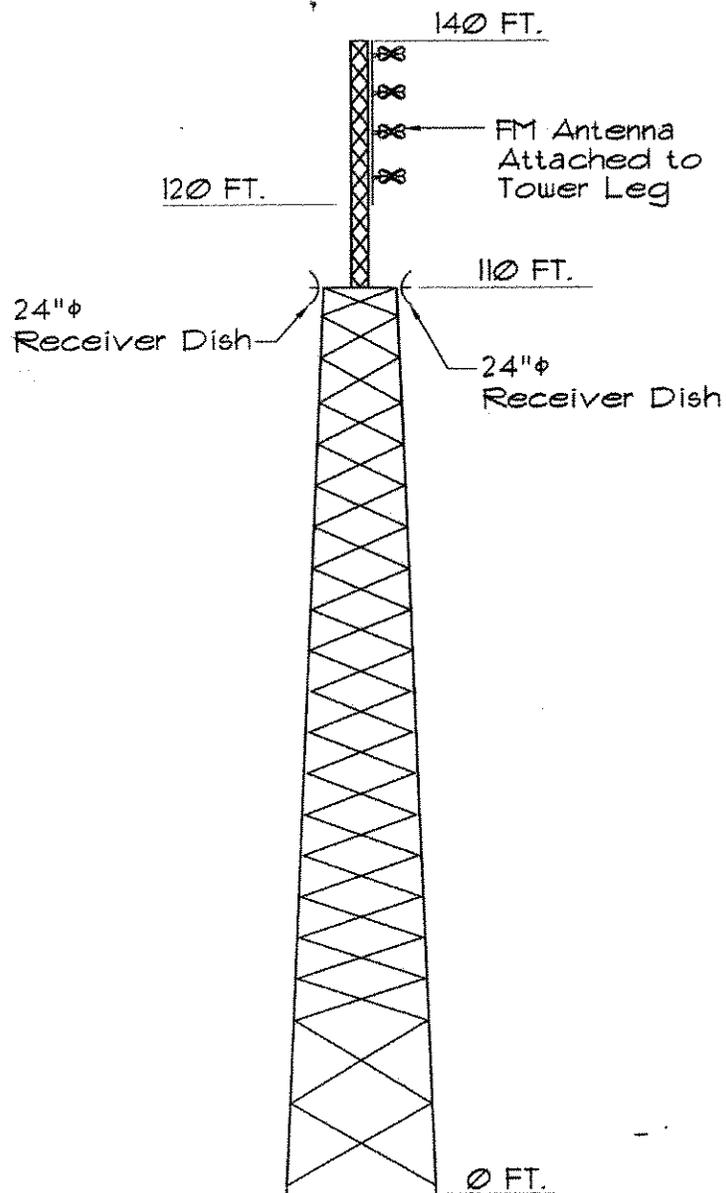
Building Floor Plan
 Scale: 1/8" = 1'-0"

Project:
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 Honolulu, Oahu, Hawaii



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FIGURE 9
Building Floor Plan
 TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii

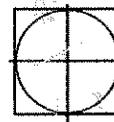


Tower Elevation

Scale: 1" = 20'

Project:

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**FIGURE 10
Tower Elevation**

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii

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approximately 24-inches in diameter, is required for KIPO 89.3 FM. The microwave receiver dish will be mounted to the tower structure and will be about 110 feet above the ground.

As stated previously, the proposed project is being undertaken in order to transmit KIPO 89.3 FM at 26,000 watts. If, in the future, KHPR 88.1 FM is transmitted from the Tantalus site, then a transmitter for the 88.1 FM frequency will be added to the equipment building and one (1) additional 12-inch to 18-inch in diameter microwave receiver dish will be mounted to the tower at about 110 feet above the ground. **No new FM linear antenna would be necessary.** A combiner box will be installed, which will allow the two radio station frequencies to come out of the one single linear FM antenna. If in the future both KIPO and KHPR are transmitted from the Tantalus site, then the one linear FM antenna would broadcast 2 signals: KIPO 89.3 FM (26,000 watts) and KHPR 88.1 FM (26,000 watts) at a total of 52,000 watts.

The tower will include work platforms, internal climbing ladder equipped with safety climbing device, ladder and trap door locks, waveguide ladder, and covered transmission line ridges between the tower and the building entry point. The tower, building and antennas will be designed to remain operation at wind speeds up to 100 miles per hour and survive wind speeds up to 100 miles per hour.

1.6.5. Electromagnetic Radiation (EMR)

The electromagnetic radiation associated with the HPR tower is Radio Frequency Radiation. The FM Antenna selected for Hawaii Public Radio is a 4-element minimum downward radiation model. Radiation center is 32 meters above ground. The current Federal Communications Commission radiation limit for "public exposure" is 200 (two hundred) micro-watts. The combined signal of KIPO 89.3 (26,000 watts) and KHPR 88.1 (26,000 watts) equals 52,000 watts effective radiated power. The calculated maximum radiation level is 63 (sixty-three) micro-watts at 21 meters from the base of the tower, six-feet above the ground. This is 31.5% (thirty-one and five tenths percent) of the allowable radiation at ground level for the "general public" as defined by the FCC. This is 6.3% (six and three tenths percent) of the allowable radiation at ground level for "employees" as defined by the FCC. The software used for the study of EMR for the HPR tower is provided by the FCC and the analysis was prepared by an FCC-licensed General Radiotelephone Operator consultant.

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1.7 Project Operation

The radio transmitter and related equipment will operate 24 hours per day 7 days per week.

1.8 Project Schedule

Following the permitting process and lease negotiations, a detailed site survey and geotechnical investigation would be completed in the Spring of 2005, architectural and engineering design in June 2005, and the building permit process would last through November 2005. Construction is projected to begin in December 2005 and last approximately six months. The tower would be operational by May 2006.

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approximately 24-inches in diameter, is required for KIPO 89.3 FM. The microwave receiver dish will be mounted to the tower structure and will be about 110 feet above the ground.

As stated previously, the proposed project is being undertaken in order to transmit KIPO 89.3 FM at 26,000 watts. If, in the future, KHPR 88.1 FM is transmitted from the Tantalus site, then a transmitter for the 88.1 FM frequency will be added to the equipment building and one (1) additional 12-inch to 18-inch in diameter microwave receiver dish will be mounted to the tower at about 110 feet above the ground. **No new FM linear antenna would be necessary.** A combiner box will be installed, which will allow the two radio station frequencies to come out of the one single linear FM antenna. If in the future both KIPO and KHPR are transmitted from the Tantalus site, then the one linear FM antenna would broadcast 2 signals: KIPO 89.3 FM (26,000 watts) and KHPR 88.1 FM (26,000 watts) at a total of 52,000 watts.

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2. EXISTING ENVIRONMENT, IMPACTS AND MITIGATION MEASURES

2.1 Geology and Soils

Existing Conditions

The project site is located near the summit (Tantalus) of Puu Ohia. The *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* prepared by the U.S. Department of Agriculture Soil Conservation Service depicts the soil type of the project site to be Tantalus Silt Loam of the Tantalus Soil Series, which consists of well-drained soils on uplands on the island of Oahu. These soils developed in volcanic ash and material weathered from cinders. They are moderately sloping to very steep. These soils are used for homesites, water supply, and recreation. The natural vegetation consists of ferns, Formosa koa, koa haole, kukui, and eucalyptus.

The Tantalus Silt Loam soil (TAF) with 40% to 70% slope at the project site is on volcanic spurs and cinder cones in the uplands. According to the *Soil Survey*, in a representative profile the surface layer, about 18 inches thick, is very dark brown silt loam that has subangular blocky structure. The subsoil, about 11 inches thick, is dark reddish brown, massive very fine sandy loam. The substratum is black, unweathered, gravel-size cinders. The soil is neutral in the surface layer and subsoil. Permeability is moderately rapid. Runoff is medium to rapid, and the erosion hazard is severe. In places roots penetrate to a depth of 3 feet.

Anticipated Impacts and Mitigative Measures

The tower and the related equipment building will require construction of foundations and footings. Grading and subsurface excavation will be necessary, which will disturb surface and subsurface soils. The slab foundations for the building and the tower will displace existing soils. However, the area of disturbance is relatively small and is not anticipated to adversely impact the soils and/or geology of the project site or surrounding area. No significant negative impacts are anticipated.

2.2 Water Resources and Flood Hazard

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Existing Conditions

The project site is located near the summit (Tantalus) of Puu Ohia at an elevation of about 1,920 feet above mean sea level (msl). The U.S. Geological Survey topographic map shows that there are no surface water resources on the immediate project site. The site is depicted as Zone X (areas determined to be outside the 500 year flood plain) in the November 20, 2000 Federal Emergency Management Flood Insurance Rater Map Panel Number 360. Based on the project site's elevation and lack of proximity to any surface water resources, flooding is not anticipated to be an issue.

Anticipated Impacts and Mitigative Measures

The project site is located at 1,920 feet above mean sea level. There are no surface water sources on the project site or in the immediate vicinity. No discharges to waters of the State of Hawaii will occur. During construction, temporary erosion control measures will be used to prevent runoff. The site would be cleared and graded in order to construct the other and equipment building. Surface flow will be directed to lower elevation areas that are not developed.

2.3 Recreation Resources

Existing Conditions

The project site is located on State-owned land on Puu Ohia near the summit (Tantalus). As shown in Figure 11, there are a number of public hiking trails in the area which are maintained by the Department of Land and Natural Resources. Trails in the area include: Manoa Cliff Trail, Pauoa Flats Cut-Off Trail, Puu Ohia-Puuoaa Flats Trail, Crater Rim Trail, and Puu Ohia Trail. The existing concrete access road to the Verizon transmitter and receiver towers is used by hikers' to access the area's public hiking trails. The proposed project site is adjacent to the existing access road.

Anticipated Impacts and Mitigative Measures

The proposed project and its security fence will not impact or impede public access to the concrete road or public hiking trails in the area. The proposed tower and building compound area will have perimeter security fence and a security gate to keep out potential trespassers and for public safety. No adverse impacts to hikers are anticipated.

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2.4 Air Quality

Existing Conditions

The consistent tradewinds that blow from a northeasterly direction in Hawaii generally create conditions for excellent air quality because the winds blow pollutants out to sea. During the summer months when tradewinds are diminished, there may be some reduction in visibility, but air quality standards are not typically violated.

Anticipated Impacts and Mitigative Measures

Impacts to air quality associated with construction activities will be temporary. This includes construction vehicles exhaust and dust generated by short-term construction activities. Dust control measures will be implemented as needed to minimize impacts. Work will be in conformance with the air pollution control standards contained in Hawaii Administrative Rules (HAR), Title 11, Chapter 59 "Ambient Air Quality Standards", and Chapter 60 "Air Pollution Control".

2.5 Noise

Existing Conditions

The ambient noise levels at the site are very low due to the surrounding open space. Traffic noise from Tantalus Drive is not a significant source of noise because it does not carry heavy volumes of traffic.

Anticipated Impacts and Mitigative Measures

During construction activities, there will be some short term noise impacts related to the operation of construction machinery and vehicles. Noise will be minimized by requiring contractors to adhere to applicable State and County regulations. Work will be limited to daylight working hours only. Construction activities will comply with Hawaii Administrative Rules, Chapter 11-46 "Community Noise Control" as administered by the State Department of Health. No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the Department of Health, provided that such grading work is also in conformance with HAR, Chapter 11-46.

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Once the project has been constructed and is fully operation, it is anticipated that the HPR transmitter tower and equipment building facilities will not have a significant adverse impact on existing noise conditions.

2.6 Access and Traffic

Existing Conditions

The project site is located about one-half mile from Tantalus Drive, a two-way street under the control of the City and County of Honolulu. The project site is accessed via a gated concrete road located on state land. Access is controlled by the Department of Land and Natural Resources. The road is maintained by Verizon; Hawaii Public Radio would participate in the maintenance of the road. The proposed tower and equipment building improvements will not impact the existing access road. As noted earlier, a short driveway from the concrete access road to the HPR site will be constructed by the applicant as part of the overall project. The security fencing will be located so as not to affect vehicular use of the access road.

Anticipated Impacts and Mitigative Measures

Due to the nature of the project, it is not expected to alter the total volume of traffic on Tantalus Drive. Short-term impacts will include construction-work related vehicles that will utilize Tantalus Drive and Round Top Drive, which may impact traffic flow. Both streets will remain open and project related delays are anticipated to be minor.

2.7 Flora and Fauna

There is no known rare, threatened, or endangered plant or animal species or significant habitats on the subject property.

Existing Fauna

In September 2004, the Department of Land and Natural Resources, Division of Forestry and Wildlife was consulted regarding native and introduced bird species that may be found in the vicinity of the project site. According to a DLNR biologist, native birds that may be found in the area include `Apapane (*Himatione sanguinea*), `Amakihi (*Hemignathus virens*), and, more rarely Pueo (*Asio flammeus*)(State listed). In addition, the Oahu Creeper (*Paroreomyza montana*), Elepaio (*Chasiempis sandwichensis ibidis*), and Iiwi (*Vestiaria coccinea*) were likely once

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common but are now no longer present. Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) and Newell's Shearwaters (Threatened) may fly over the area, but no reports exist due to the cryptic habits of these species. Several species of seabirds may also fly over the site such as Tropic birds and White terns. Introduced passerine birds include House Finch, Nutmeg Mannikin, Red-billed Leiothrix, Hwamei, Japanese White-eye, Common Myna, Common waxbill, and Northern Cardinal. The introduced Barn Owl is likely common in the area as well. Rats, mice, and feral cats may reside in some areas of the project site or the general area. No rare, threatened or endangered species are known to exist.

Existing Flora

Vegetation observed on the site consists of young bamboo and young wild fiddlewood trees (*Citharexylum Caudatum*). The fallen bamboo leaves serve as a natural form of mulch which impedes the other low growth plant materials. The project site (2,625 sf) is a relatively small portion of the ridge area that is characterized as "brush and scrub" according to DLNR Division of Forestry and Wildlife. According to DLNR Division of Forestry and Wildlife staff, there are no known rare or endangered species in the vicinity of the project site and "no impacts" are anticipated in relation to clearing the site and construction of the project. In order to minimize impacts and reduce potential fire hazard, DLNR Division of Forestry and Wildlife requests that cleared materials from the site be removed and taken entirely off site. No rare, threatened or endangered species are known to exist.

Anticipated Impacts and Mitigative Measures

There is no known rare, threatened, or endangered plant or animal species or significant habitats on the subject property. The proposed project tower will not have lights mounted on the tower. While bird strikes are possible, the overall potential for bird strikes should be low and not present a significant threat. Since there will be no lights mounted on the tower, birds should not be distracted or disoriented in flight at night. The proposed project is not anticipated to have any adverse impacts to plant or animal species.

2.8 Archaeological Resources and Cultural Impact Assessment

Existing Conditions

According to the *Sites of Oahu*, the subject property is located in the Makiki ahupuaa. The Hawaiian land division, known as an ahupuaa, generally runs from the top of the mountains to

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the edge of the coral reef in the sea. The *Sites of Oahu* does not indicate specific historic sites in the vicinity of the project area. No known historical, archaeological or Native Hawaiian cultural resources are anticipated to be found on the relatively small (2,625 sf) project site. The area surrounding three sides of the subject property has been previously disturbed and developed by the existing concrete access road that services the 2 existing Verizon towers. The proposed project does not impede access to forest resources.

Anticipated Impacts and Mitigative Measures

No impacts to historic or cultural resources or practices are anticipated to result from the proposed project. In the unlikely event that archaeological features are uncovered, all work will stop and immediate archaeological consultation will be sought with the Department of Land and Natural Resources, State Historic Preservation Division in accordance with applicable regulations.

2.9 Visual Resources

Existing Conditions

The project site is located on Puu Ohia, near the Tantalus summit. Public views of the Tantalus summit are visible from along the southwestern and southern parts of Oahu. Closer to the summit and the project site, especially driving along Tantalus Drive and Round Top Drive, the intervening terrain and mountain slopes obstruct view of the project site and summit area. There are 2 existing Verizon towers (transmitter and receiver) in close proximity to the project site. The Verizon transmitter tower is the more visible of the two towers because it is located towards the front of the ridge. There is a related equipment building near the base of the transmitter tower that is not visible. The Verizon receiver tower is located about 1,200 feet mauka of the Verizon transmitter tower and is not readily visible.

Anticipated Impacts and Mitigative Measures

The proposed HPR transmitter tower and related equipment building have been sited to reduce potential visual impacts. The proposed HPR tower would reach the same height as the Verizon transmitter tower – elevation of 2,060 feet above mean sea level. However, the HPR tower is located further mauka of and set back away from the front of the ridge. The project site for the HPR tower and equipment building will be about 65 feet lower than (1,920 feet msl) the Verizon transmitter site (1,985 feet msl). This means that the proposed HPR tower, and especially the

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equipment building, will be buffered from view. It is anticipated that the HPR 12-foot high equipment building will not be visible due to its placement and because the surrounding trees and vegetation will block views. It is not anticipated that the tower will require lighting, which might detract from night views of the ridge or inadvertently attract seabirds.

Photographs were taken of the project site to illustrate viewing conditions from various vantage points. The photograph in Figure 12 was taken from the Liliha area, Figure 13 was taken from the upper Manoa area, Figure 14 contains a photo taken from Pacific Heights and one from Punchbowl – both of these photos were taken utilizing the digital camera's zoom feature in order to be able to even capture the view of the existing tower. The photos show the existing Verizon transmitter tower and illustrate that it is relatively difficult to see given the distance between public viewing areas and the summit, the scale of a tower structure relative to the mass of the ridge, the transparent nature of tower structure and that the mountain areas are heavily vegetated.

The proposed HPR tower would be visible as a small feature, similar to the Verizon tower. As stated earlier, closer to the summit and the project site, especially driving along Tantalus Drive and Round Top Drive, the intervening terrain and mountain slopes would obstruct views of the project site. Therefore, the addition of the proposed tower and related equipment building should not be an adverse impact to public views from these areas.

2.10 Utilities

Existing Conditions

There are existing 20- to 30-foot high wood utility poles along the shoulder of the access road that are strung with Hawaiian Electric Company utility lines which service the existing Verizon towers and related equipment building. There is no municipal water or sewer service to the project area. Residents in the area maintain their own private water catchment and wastewater systems. There are no gas lines in the vicinity.

Anticipated Impacts and Mitigative Measures

The proposed project – tower and equipment building - will consume 15.4 kW of power. Existing pole-mounted utility lines along the existing access road will be maintained during construction in order to provide power to the existing Verizon towers. The proposed project will be coordinated with Hawaiian Electric Company (HECO) as the project's planning and design proceeds in order to minimize impacts on existing utilities.

2.11 Electromagnetic Radiation (EMR)

Anticipated Impacts and Mitigative Measures

The electromagnetic radiation associated with the HPR tower is Radio Frequency Radiation. The FM Antenna selected for Hawaii Public Radio is a 4-element minimum downward radiation model. Radiation center is 32 meters above ground. The current Federal Communications Commission radiation limit for "public exposure" is 200 (two hundred) micro-watts. The combined signal of KIPO 89.3 (26,000 watts) and KHPR 88.1 (26,000 watts) equals 52,000 watts effective radiated power. The calculated maximum radiation level is 63 (sixty-three) micro-watts at 21 meters from the base of the tower, six-feet above the ground. This is 31.5% (thirty-one and five tenths percent) of the allowable radiation at ground level for the "general public" as defined by the FCC. This is 6.3% (six and three tenths percent) of the allowable radiation at ground level for "employees" as defined by the FCC. The software used for the study of EMR for the HPR tower is provided by the FCC and the analysis was prepared by an FCC-licensed General Radiotelephone Operator consultant.

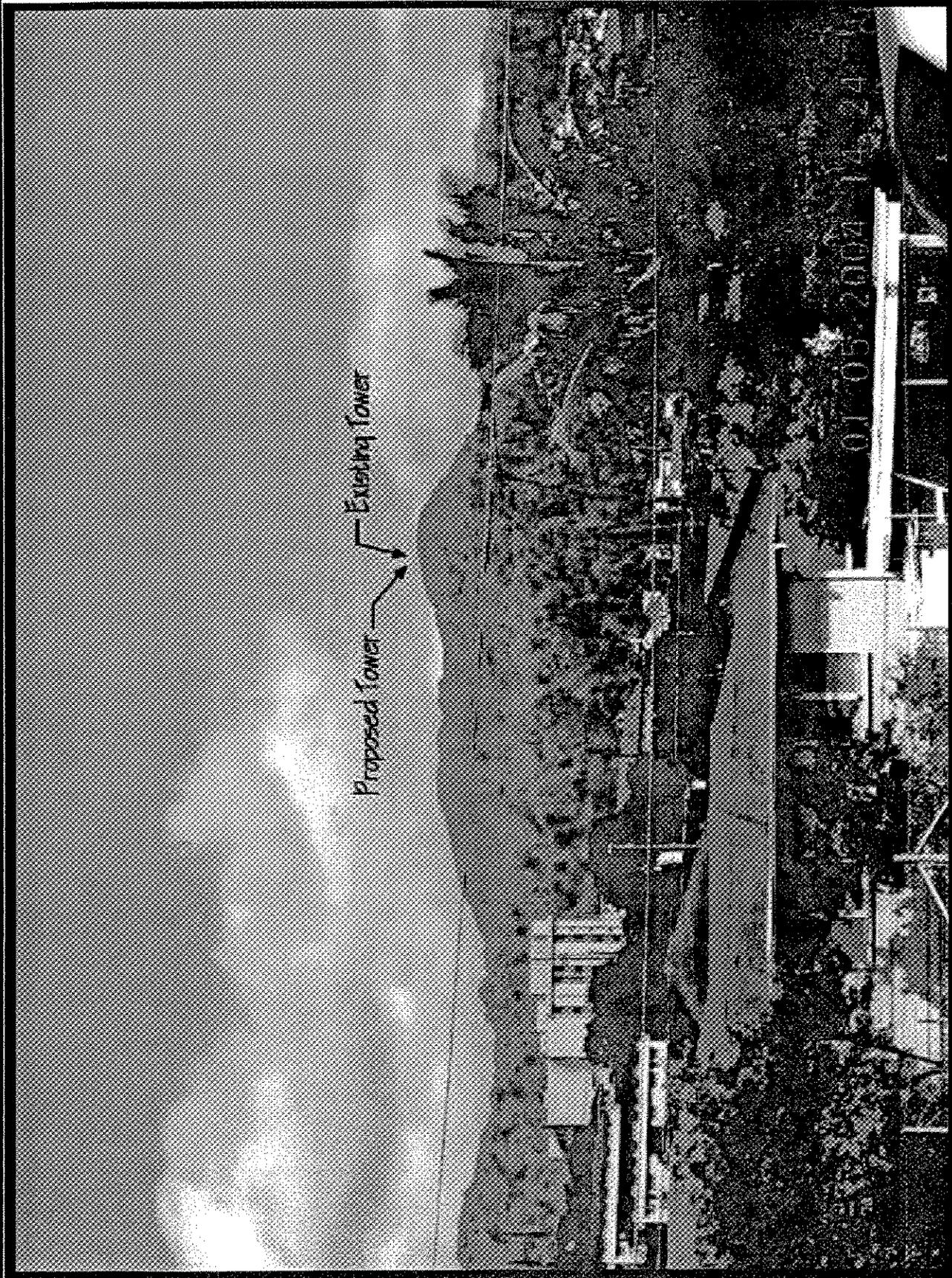


Figure 12

Existing View of Project Site from Liliha Area

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii

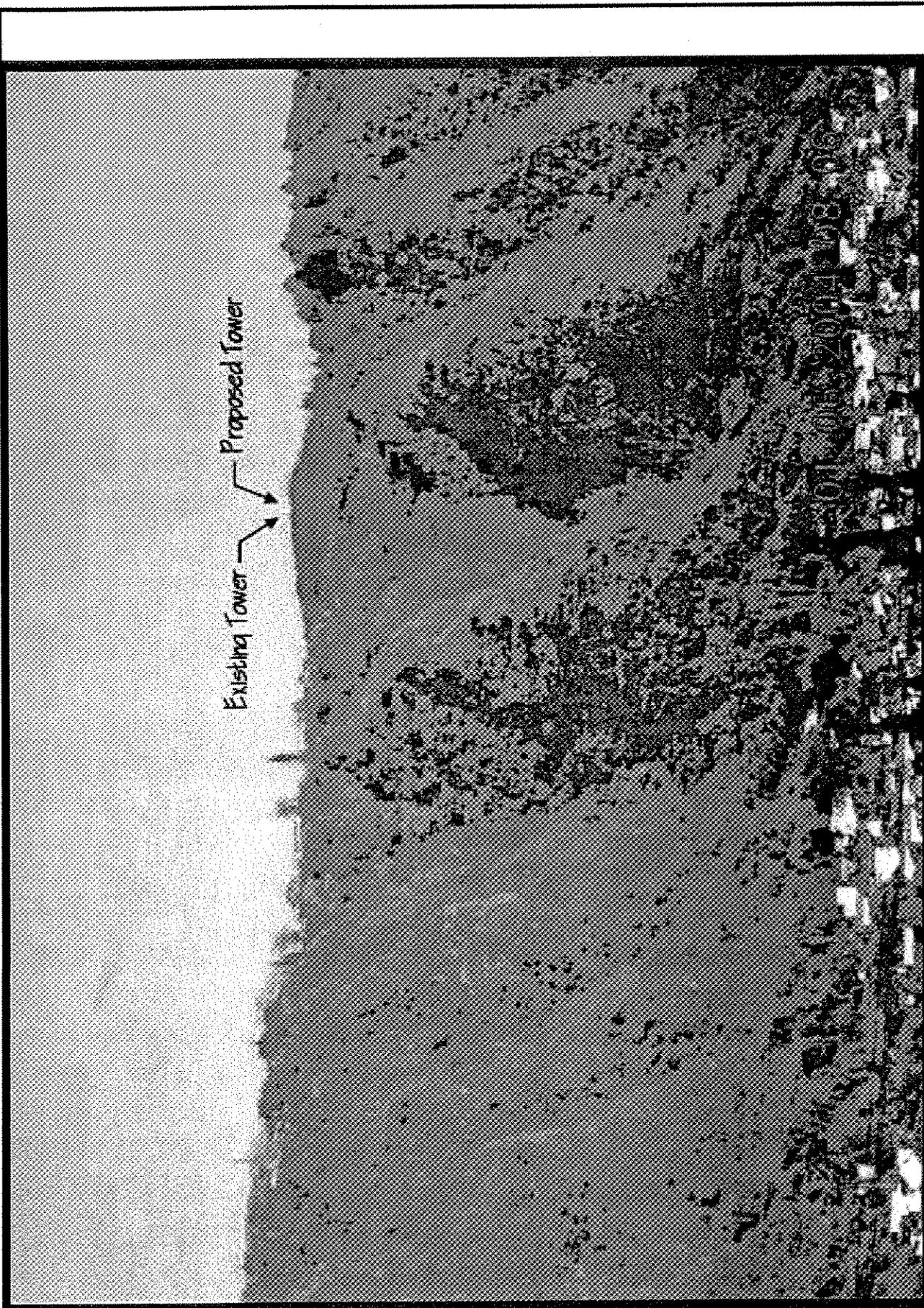
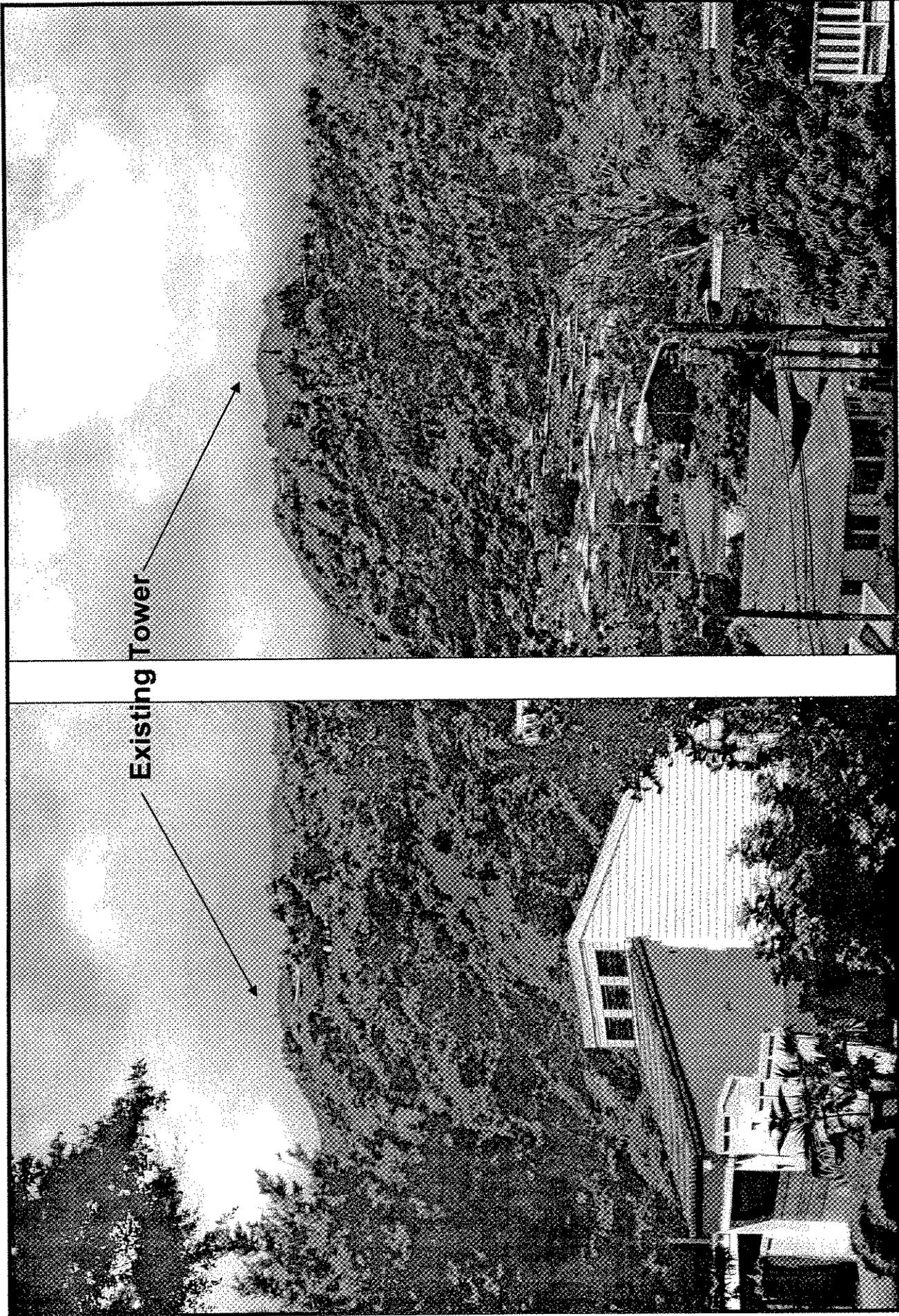


Figure 13

Existing View of Project Site from Upper Manoa Valley

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii



Existing Tower

Figure 14

Existing View of Project Site from Pacific Heights (left) and Punchbowl (right)

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii

3. RELATIONSHIP TO EXISTING PLANS, POLICIES AND CONTROLS

Overview

State and County policy, land use plans and controls are established to guide development in a manner that enhances the overall environment of Hawaii, and ensures that long-term social, economic, environmental and land use needs are met. The proposed project is in accordance with State and County land use plans and policies, as discussed below.

3.1 State Land Use District

The State Land Use Commission classifies all lands in the State of Hawaii into one of four land use designations: Urban, Rural, Agricultural or Conservation. Land uses in the State Conservation District are regulated by the State of Hawaii through relevant statutes, rules and regulations. Hawaii Administrative Rules Title 13 Department of Land and Natural Resources Subtitle 1, Administration, Chapter 5, Conservation District, Subchapter 3, Identified Uses and Required Permits identifies land uses in the subzones and their required permits.

Chapter 13-5 divides the Conservation District into subzones and provides for identified land uses in each subzone. The project site is located in the Conservation District, Resource Subzone. The proposed use falls under identified land use "P-6 (D-2) ...and communication systems and other such land uses which are undertaken by non-governmental entities which benefit the public and are consistent with the purpose of the conservation district."

The proposed project will be reviewed by the State Department of Land and Natural Resources (DLNR). This environmental assessment supports a Conservation District Use Application (CDUA) which describes how the proposed project conforms with the standards set forth in Chapter 13-5. Final action on the Conservation District Use Application must be taken by the State of Hawaii Board of Land and Natural Resources before any development can occur.

3.2 City and County of Honolulu General Plan

The current 1992 revised edition of the General Plan for the City and County of Honolulu was adopted in 1991. The Plan is a comprehensive statement of objectives and policies for the County's future development. The proposed project is consistent with the *Transportation and Utilities, Objective C*, "Maintain a high level of service for all utilities", *Policy 3* "Plan for the timely and orderly expansion of utility systems". Although, Hawaii Public Radio is not a public utility, the Hawaii Public Radio tower project will provide increased coverage to serve the general public at large and will contribute to the overall public safety of Oahu's communities.

3.3 Primary Urban Center Development Plan

The Primary Urban Center Development Plan was adopted by Ordinance 04-14 in June 2004. It serves as the policy guide for future development within Honolulu's Primary Urban Center. The proposed project is consistent with the PUC Development Plan Chapter 4 Infrastructure and Public Facilities, Section 4.4 Telecommunications Facilities, Policy 4.4.2 which states, "Minimize the visual impacts and potential health hazard of new facilities."

The HPR tower and related equipment building have been designed and sited so that there should not be an adverse impact to public views. The height of the proposed HPR tower will be the same height as the existing Verizon transmitter tower. However, the HPR tower is located further mauka of and set back away from the front of the ridge. The project site for the HPR tower and equipment building will be about 65 feet lower than the Verizon transmitter site. This means that the proposed HPR tower, and especially the equipment building, will be buffered from view. It is anticipated that the HPR 12-foot high equipment building will not be visible due to its placement and because the surrounding trees and vegetation will block views.

3.4 City and County of Honolulu Zoning

The City and County of Honolulu zoning designation for the project site is P-1, Restricted Preservation. According to the City and County of Honolulu's Land Use Ordinance (LUO), within the P-1 restricted preservation district, all uses, structures and development standards shall be governed by the appropriate state agencies. The project site is not located with the Special Management Area (SMA).

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4. ALTERNATIVES TO THE PROPOSED ACTION

4.1 No Action Alternative

The No Action alternative would mean that Hawaii Public Radio would not be able to provide improved service to the general public and would not be able to expand its service area and reach more of the general public. The existing transmission facility located on Waiiwailinui Ridge is remotely located and is only accessible via helicopter, making maintenance of the existing facility challenging. The existing facility and range of service area are considered inadequate. Based on these factors, the No Action alternative is not considered a viable alternative.

4.2 Alternative Sites

Following a search for potential sites, HPR had attempted to relocate its transmitter to an existing Verizon tower atop Tantalus. However, after a couple of years of contact with Verizon's mainland offices, Verizon stated that they would not allow co-location of the HPR transmitter on the existing Verizon transmitter tower on Tantalus. A copy of the Verizon statement is included in Appendix A.

Search for Alternative Solutions and Sites

For over two years, Hawaii Public Radio worked with engineers, conducted studies, and considered a range of possibilities. HPR contacted the owners of other towers and requested to co-locate (some of which were extremely large mainland broadcast corporations). Those owners were under no obligation to have HPR co-locate. Either those owners declined or asked exorbitant rent that would have significantly overburden HPR's limited non-profit budget; rent for just one station was on the order of the combined budget of all of HPR's other stations.

HPR also evaluated placing KIPO on the same tower as KHPR at Wiliwilinui Ridge, which is located on State land and is in the Forest Reserve. However, there is no room for additional transmission on the Wiliwilinui Ridge tower (owned by a California company) where KHPR 88.1 FM and a number of other station broadcasters are presently located. Additionally, the Wiliwilinui Ridge tower is only accessible by helicopter, making construction and maintenance difficult and extremely expensive.

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HPR also contacted the local authorities of Verizon for over two years to request to co-locate on the Verizon Tantalus tower. Finally, after a definitive response was not forthcoming from Verizon's Honolulu offices, HPR was informed in the fall of 2003 by a California office that "Verizon will not be able to accommodate your request to attach to a Verizon facility in Tantalus, Hawaii."

For approximately 15 years, Hawaii Public Radio has diligently sought out solutions to and alternative locations for the KIPO situation.

4.3 Preferred Alternative

After a search for potential sites, the proposed Tantalus site is the preferred alternative because it can service 92% of Oahu's population. A similar type of facility – the Verizon transmitter and receiver towers - is already located near the proposed Tantalus site. The proposed site is in close proximity to urban Honolulu and can be easily accessed via the existing concrete access road. The proposed location and ease of access to the project site facilitates timely and fast-response maintenance.

A lease agreement for use of the state-owned land to construct the HPR facility would need to be reached between the State of Hawaii and Hawaii Public Radio. The proposed design will have no significant long term impacts on the natural environment. The Tantalus site is the preferred alternative because of its ideal centralized location, and the site is already developed with an existing access road, and a similar facility is also located in the vicinity.

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5. NECESSARY PERMITS AND APPROVALS

5.1 City and County of Honolulu

The following permits are required from the City and County of Honolulu.

Permit or Approval	Authority
Building Permit	Department of Planning and Permitting
Grading, Grubbing and Stockpiling Permit	Department of Planning and Permitting

5.2 State of Hawaii

Permit or Approval	Authority
Conservation District Use Permit	Board of Land and Natural Resources

5.3 Federal Agencies

Permit or Approval	Authority
FCC Construction Permit and License	Federal Communications Commission

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6. CONSULTED PARTIES

6.1 Pre-Assessment Consultation

State Department of Land and Natural Resources
City and County of Honolulu Department of Planning and Permitting

6.2 Draft EA Distribution List

The following is a list of agencies and organizations to be consulted during the public review and comment period.

State Agencies

Department of Accounting and General Services
Information and Communication Services Division
Department of Health
Department of Land and Natural Resources
Oahu Board Member
Division of Forestry and Wildlife
Division of Conservation and Resource Enforcement
Historic Preservation Office
Oahu District Land Office
Engineering
Hawaii State Library – Main Branch - King Street location
Hawaii State Library – Manoa Public Library
Office of Environmental Quality Control
Office of Hawaiian Affairs

City and County of Honolulu Agencies

Department of Planning and Permitting
Maikiki-Tantalus Neighborhood Board No. 10
Manoa Neighborhood Board No. 7

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6.3 Presentations Made

Maikiki-Tantalus Neighborhood Board No. 10
Tantalus Community Association

6.4 Comments Received on the Draft EA

Comment letters received and response letters are in Appendix C

State Agencies

Department of Land and Natural Resources
 Division of Forestry and Wildlife
 Historic Preservation Office
 Oahu District Land Office
 Engineering
Office of Environmental Quality Control
Office of Hawaiian Affairs

City and County of Honolulu Agencies

Department of Planning and Permitting

6.5 Public Hearing

A public hearing was held on January 25, 2005 by the DLNR Office of Conservation and Coastal Lands (OCCL). A copy of written testimony received by DLNR OCCL is in Appendix D.

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7. FINDINGS AND DETERMINATION

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 a significant impact on the environment. The Rules establish "significance criteria" for making the determination. The relationship of the proposed project to the thirteen criteria is provided below.

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

The proposed project will not result in a loss of natural or cultural resources. The proposed project will attempt to create minimum disturbance to the vegetation beyond the project site boundaries. There are no known threatened or endangered species of plants or wildlife that inhabit the project site. The subject property does not contain any known natural or cultural resources. The area surrounding three sides of the subject property has been previously disturbed and developed by the existing concrete access road that services the 2 existing Verizon towers. The proposed project does not impede access to forest resources.

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

The proposed project site is vacant and surrounded on three sides by the existing concrete access road. The location of the project site will not impede use of the access road. The proposed project will not impede use of or access to public hiking trails in the area. The proposed radio transmission facility is an identified land use in the Conservation District, Resources Subzone. The proposed project does not curtail beneficial uses of 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 proposed project has been planned and designed in conformance with the environmental policies, goals and guidelines as expressed in Chapter 344, HRS. The

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

proposed project will not involve activities that would significantly adversely affect natural resources of the project area.

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

The proposed Hawaii Public Radio Tower will generally benefit the community through the provision of its radio services. The proposed project will not affect long term economic welfare, social welfare or cultural practices. There will be some short-term construction employment benefits. Long-term changes in employment as a result of the project are not anticipated.

5. Substantially affects public health;

There is no significant public health concern related to the proposed construction or operation of the Hawaii Public Radio tower. The Federal Communications Commission must license the facility before it can become operational. Factors affecting public health such as air quality, noise levels, and water quality are anticipated to either be impacted only in the short-term during construction or not at all. The short-term impacts to noise and air quality as a result of construction are not anticipated to be significant and will be limited to the construction phase. Potential impacts will be mitigated according to Department of Health regulations.

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

Due to the nature of the proposed project, there are no significant secondary or indirect impacts anticipated, such as population changes or effects on public facilities.

7. Involves a substantial degradation of environmental quality;

Impacts are anticipated to be minimal to air quality, noise levels, natural resources, and land use associated with construction on the 2,625 square foot site. Mitigation measures will be employed as practicable to minimize potential effects from project activities. The

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

short-term impacts to noise and air quality as a result of construction are not anticipated to be significant and will be limited to the construction phase. Potential impacts will be mitigated according to Department of Health regulations. The proposed project does not involve substantial degradation of environmental quality.

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

The proposed project does not involve a commitment for a larger action on the project site. The project represents a facility upgrade for Hawaii Public Radio. No further action would be necessary at the site once the equipment building and radio tower are constructed.

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

There is no known rare, threatened, or endangered plant or animal species or significant habitats on the subject property. The proposed project tower will not have lights mounted on the tower. While bird strikes are possible, according to a DLNR biologist the overall potential for bird strikes should be low and not present a significant threat. Since there will be no lights mounted on the tower, birds should not be distracted or disoriented in flight at night. The proposed project is not anticipated to have any adverse impacts to plant or animal species.

10. **Detrimentially affects air or water quality or ambient noise levels;**

Impacts to air and noise quality associated with construction activities will be temporary. Dust control measures will be implemented as needed to minimize impacts. Work will be in conformance with the air pollution control standards contained in Hawaii Administrative Rules (HAR), Title 11, Chapter 59 "Ambient Air Quality Standards", and Chapter 60 "Air Pollution Control". Noise will be minimized by requiring contractors to adhere to applicable State and County regulations. Work will be limited to daylight working hours only. Construction activities will comply with Hawaii Administrative Rules, Chapter 11-46 "Community Noise Control" as administered by the State Department of Health. No impacts to water quality are anticipated.

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

- 11. Affects 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;**

The project site is not located near coastal waters. The site is depicted as Zone X (areas determined to be outside the 500 year flood plain). Based on the project site's elevation and lack of proximity to any surface water resources, flooding is not anticipated to be an issue.

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

Public views of the Tantalus summit are visible from along the southwestern and southern parts of Oahu. However, closer to the summit and the project site, especially driving along Tantalus Drive and Round Top Drive, the intervening terrain and mountain slopes obstruct views of the project site and summit area.

The proposed HPR transmitter tower and related equipment building have been sited to reduce potential visual impacts. The proposed HPR tower would reach the same height as the Verizon transmitter tower – elevation of 2,060 feet above mean sea level. However, the HPR tower is located about 300 feet to 400 feet further mauka of and set back away from the front of the ridge. The project site for the HPR tower and equipment building will be about 65 feet lower than the Verizon transmitter site. This means that the proposed HPR tower, and especially the equipment building, will be buffered from view. It is anticipated that the HPR 12-foot high equipment building will not be visible due to its placement and because the surrounding trees and vegetation will block views.

Photographs were taken of the project site to illustrate viewing conditions from various vantage points. The photos show the existing Verizon transmitter tower and illustrate that it is relatively difficult to see given the distance between public viewing areas and the summit, the scale of a tower structure relative to the mass of the ridge, the transparent nature of a tower structure and that the mountain areas are very heavily vegetated.

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

13. Requires substantial energy consumption.

Construction of the project will not require significant use of electricity. Once completed, the Hawaii Public Radio facility will operate on 15.4 kW of energy.

7.1 Findings and Reasons Supporting Anticipated Determination

In accordance with the provisions set forth in Chapter 343, HRS, and the significance criteria in Section 11-200-12 of HAR, Title 11, Chapter 200, it is anticipated that the project will have no significant adverse impacts to air quality, water quality, noise levels, social welfare, historic sites, or wildlife habitat. Anticipated impacts will be temporary and will not significantly adversely impact the environmental quality of the area. Therefore, it is anticipated that an Environmental Impact Statement (EIS) will not be required, and that a Finding of No Significant Impact (FONSI) will be issued for this project.

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

8. REFERENCES

City and County of Honolulu. 1992 Revised Edition. General Plan.

City and County of Honolulu. 2004. Primary Urban Center Development Plan.

Federal Emergency Management Agency. Flood Insurance Rate Map Community Panel Number 360. November 20, 2002.

General Radiotelephone Operator, Robert Leembruggen, FCC License Number PG-12-18641

Sterling, Elspeth and Catherine Summers. *Sites of Oahu*. Bishop Museum Press, Honolulu, Hawaii.

University of Hawaii Press. 1998. *Atlas of Hawaii, Third Edition*. 1998

U.S. Department of Agriculture. 1973. *Soil Survey of the Islands of Hawaii, State of Hawaii, United States Department of Agriculture, Soil Conservation Service*.

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

APPENDIX A

Robert Leembruggen

From: sean.r.mortland@verizon.com
Sent: Tuesday, October 14, 2003 1:58 PM
To: engineer@hawaiipublicradio.org
Subject: Verizon tower at Tantalus, HI

Robert,

Per our discussion, Verizon will not be able to accommodate your request to attach to a Verizon facility in Tantalus, Hawaii. If you have any questions, please do not hesitate to call me.

Sincerely,

Sean Mortland
Transaction Manager
GLOBAL CORPORATE SERVICES - VERIZON ACCOUNT
CB RICHARD ELLIS
112 S. Lakeview Canyon Road, CA501CW
Thousand Oaks, CA 91362
Tel (805) 372-6887
Fax (805) 379-1454
email: sean.r.mortland@verizon.com

CB Richard Ellis provides transaction management brokerage services for Verizon; however, CB Richard Ellis has no authority to enter into binding agreements on behalf of Verizon. No agreement concerning the subject matter of this correspondence shall be binding on Verizon unless and until a written contract is signed by a duly authorized representative of Verizon.

Appendix A

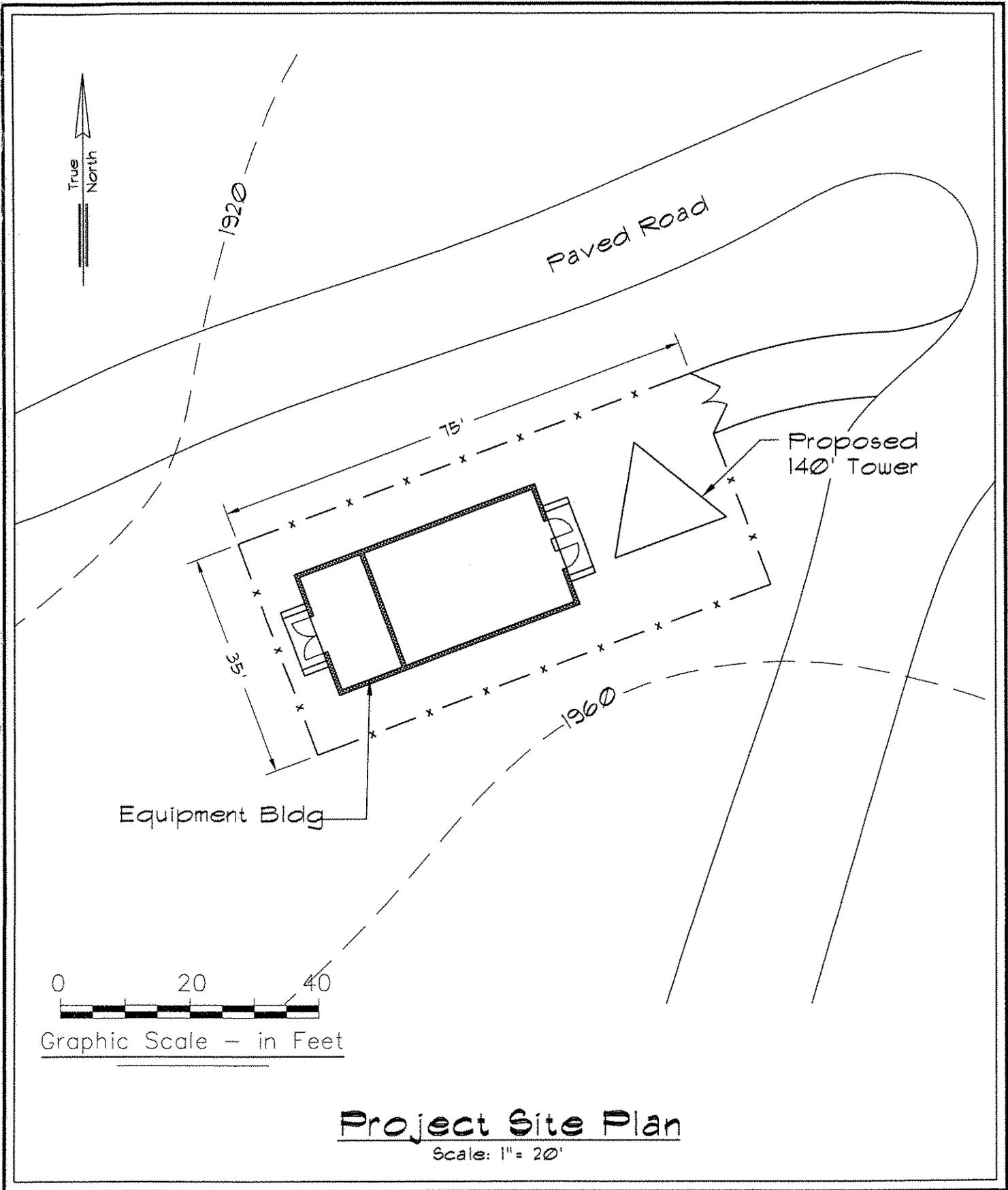
Communication from Verizon

TMK 2-5-019: 005 Tantalus, Honolulu, Oahu, Hawaii

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

APPENDIX B



Project Site Plan

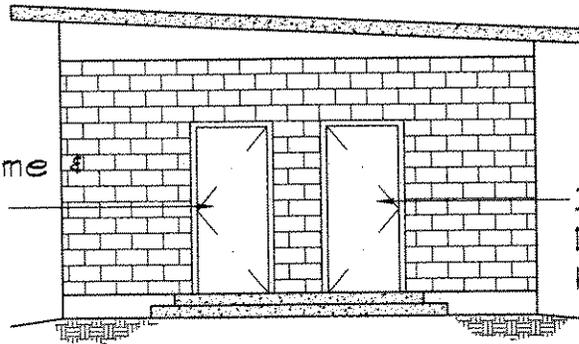
Scale: 1" = 20'

Project:
 Hawaii Public Radio - Tantalus
 Honolulu, Oahu, Hawaii



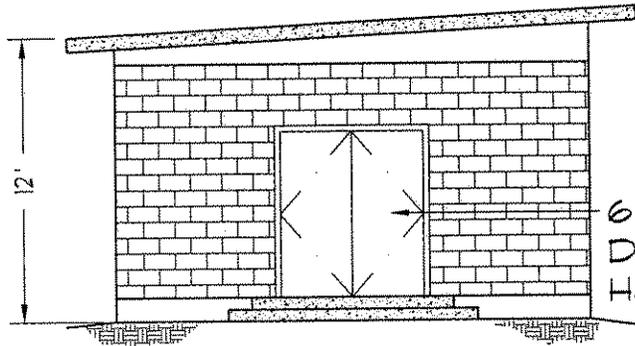
**HAWAII
 ENGINEERING
 GROUP, INC.**

3070 HM
Door, Frame &
Hardware



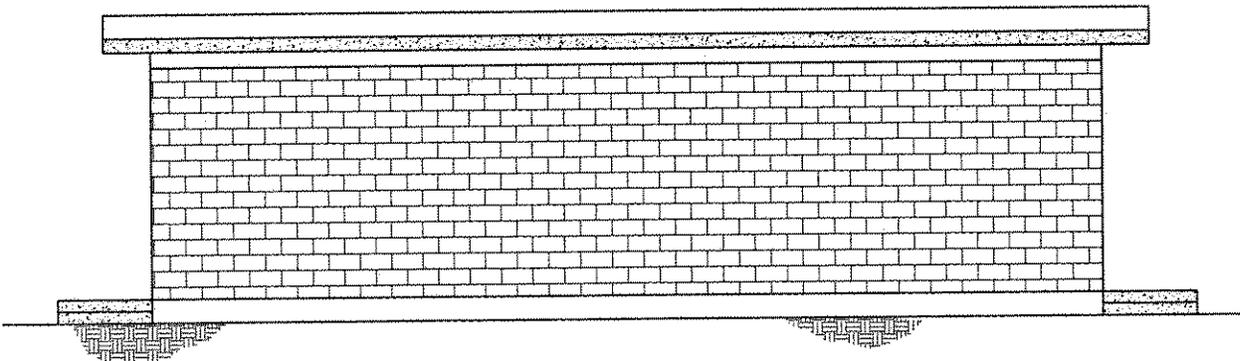
3070 HM
Door, Frame &
Hardware

East Elevation



6070 HM
Door, Frame &
Hardware

West Elevation



North Elevation



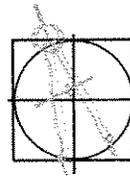
Graphic Scale — in Feet

Building Elevations

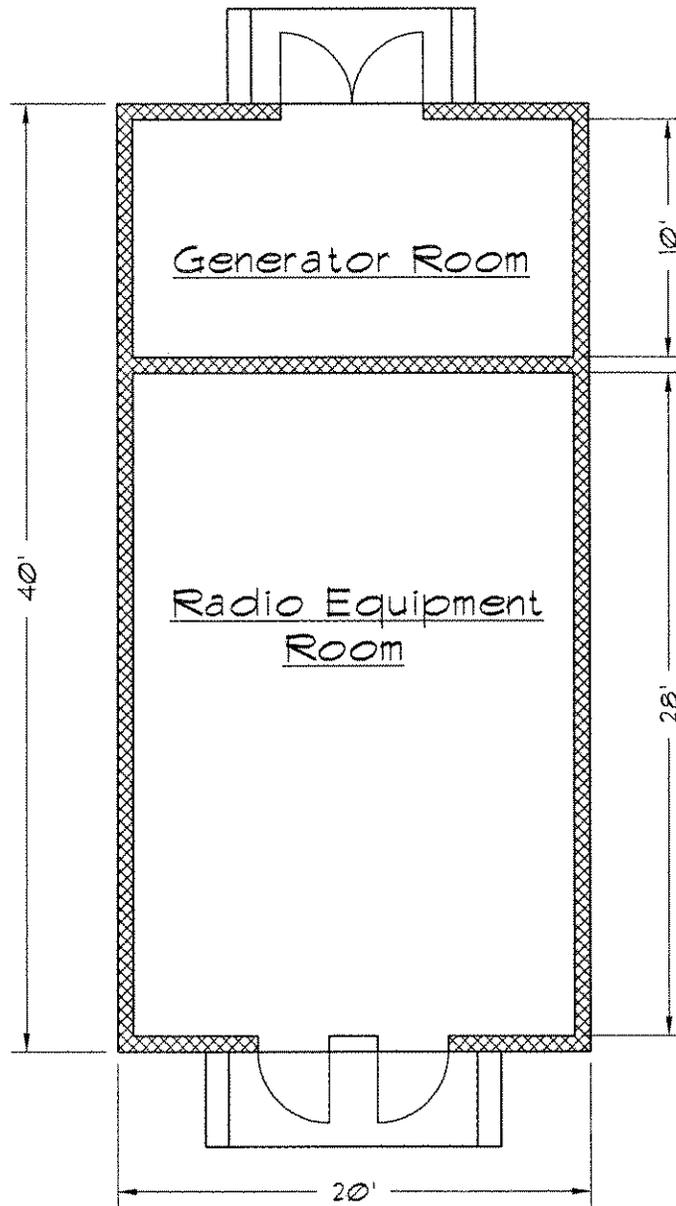
Scale: 1/8" = 1'-0"

Project:

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Honolulu, Oahu, Hawaii



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GROUP, INC.

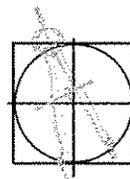


Graphic Scale - in Feet

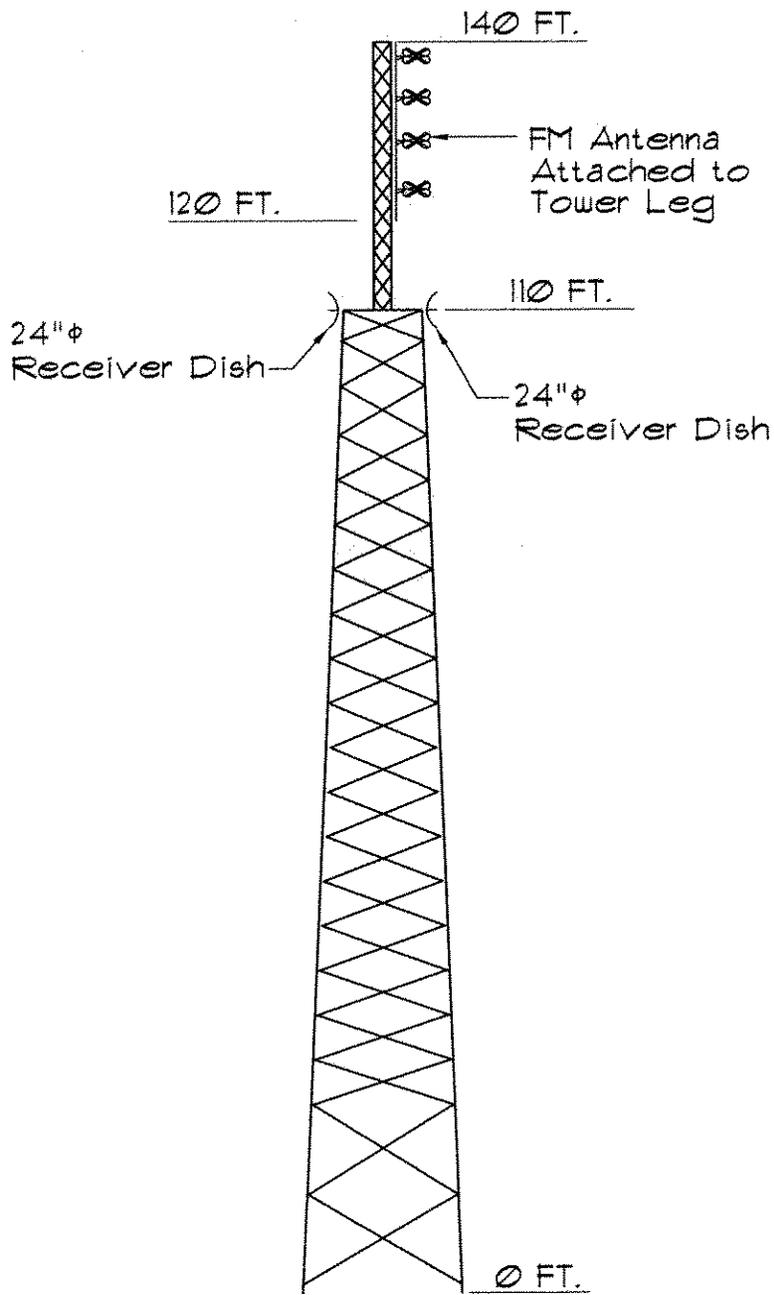
Building Floor Plan

Scale: 1/8" = 1'-0"

Project:
 Hawaii Public Radio - Tantalus
 Honolulu, Oahu, Hawaii

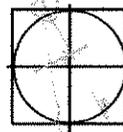


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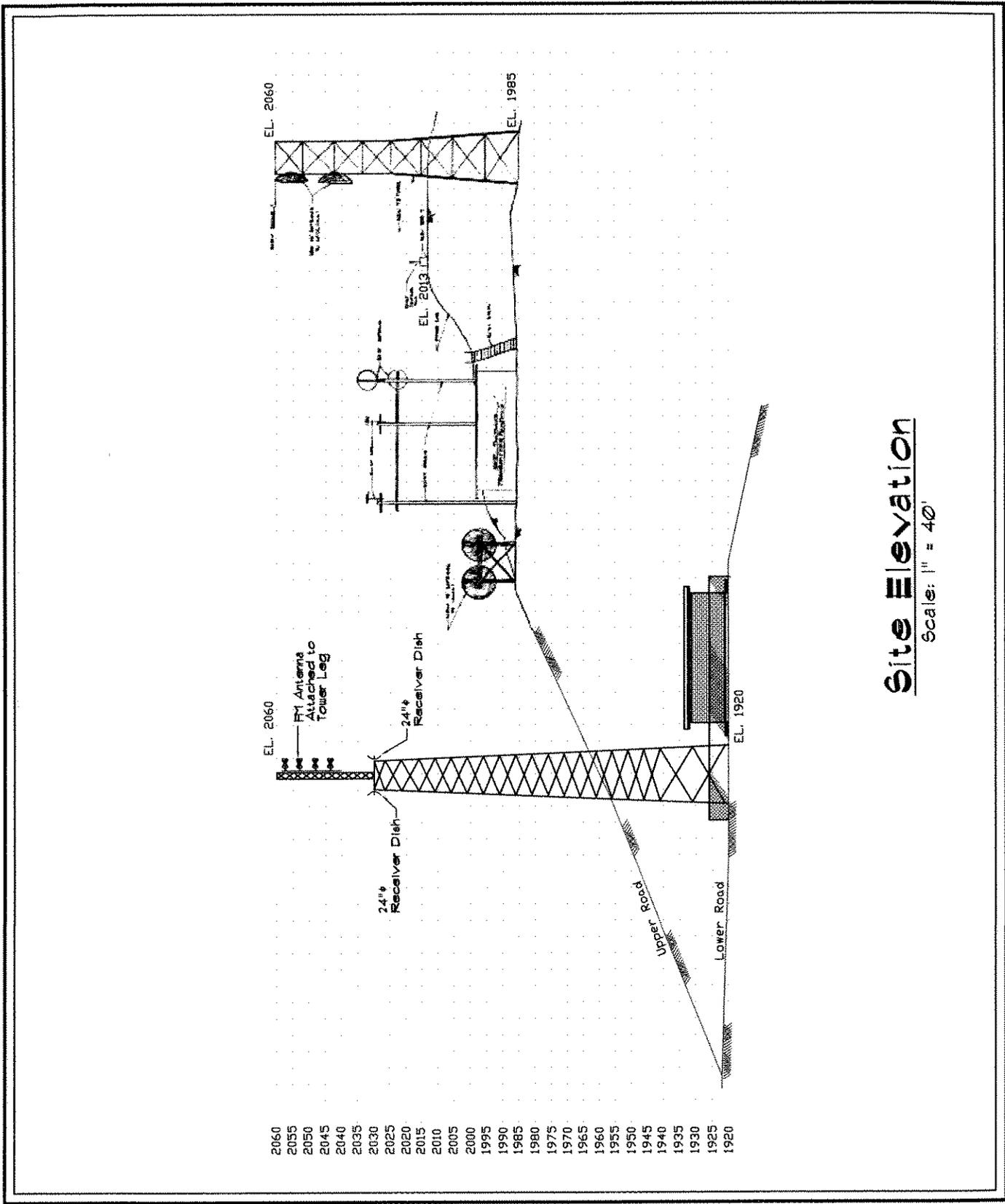


Tower Elevation
 Scale: 1" = 20'

Project:
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Project:
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FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

APPENDIX C



ANALYTICAL PLANNING CONSULTANTS, INC.
928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

January 24, 2005

Genevieve Salmonson
Director
State of Hawaii
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Dear Ms. Salmonson:

**Subject: Draft Environmental Assessment
Hawaii Public Radio Transmission Tower
Puu Ohia, Tantalus, Honolulu, Oahu
TMK: (1) 2-5-019: 005
Response to Comment Letter**

Thank you for your letter dated November 23, 2004. The following responds to the comments provided on the Draft Environmental Assessment for the subject property.

1. The Final Environmental Assessment will be printed double-sided.
2. The Final EA will elaborate further on alternatives.
3. The Final EA will include a letter from the State Historic Preservation Division stating that they believe that no archaeological properties will be affected, and that they did not identify any cultural properties for this area.
4. The Final EA will address the future use of the existing tower on Wiliwilimui Ridge.

Sincerely,

Donald Clegg
Donald Clegg, President

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

225 SOUTH BERETANIA STREET
STATE HQ
HONOLULU, HAWAII 96813
TELEPHONE: (808) 536-6695
FACSIMILE: (808) 596-1553
E-mail: oeqp@hawaii.state.hi.us

November 23, 2004

Sam Lemmo
Department of Land and Natural Resources
Office of Conservation & Coastal Lands
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Tiger Mills

Dear Mr. Lemmo:

Subject: Draft Environmental Assessment (EA), Hawaii Public Radio Transmission Tower

We have the following comments to offer:

Two-sided pages: In order to reduce bulk and save on paper, please print on both sides of the pages in the final document.

Pre-consultation contacts: In the final EA list state agencies, county agencies and community organizations contacted in the pre-consultation phase. Did you receive any correspondence other than that from Richard Leemthruuggen? If so, include copies in the final EA.

Alternatives: In the final EA discuss alternate sites considered and the reasons they were rejected.
Cultural impacts assessment: Give a brief description of the process you followed to reach your conclusion of lack of impacts to current cultural practices.

Existing tower: Will the existing tower on Wiliwilimui Ridge continue to be used? If not, will it be removed? If it will be removed, when will this occur?

If you have any questions, call Nancy Heinrich at 586-4185.

Sincerely,

Genevieve Salmonson
GENEVIEVE SALMONSON
Director

c: Don Clegg

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DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

GENEVIEVE SALMONSON
DIRECTOR



ANALYTICAL PLANNING CONSULTANTS, INC.

928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

January 24, 2005

Eric T. Hirano, Chief Engineer
State of Hawaii
Department of Land & Natural Resources
Engineering Division
PO Box 621
Honolulu, HI 96809

Dear Mr. Hirano:

**Subject: Draft Environmental Assessment
Hawaii Public Radio Transmission Tower
Puu Ohia, Tantalus, Honolulu, Oahu
TMK: (1) 2-5-019: 005
Response to Comment Letter**

Thank you for your letter dated November 24, 2004. We acknowledge that your office confirms that the project site is located in the Flood Zone X in accordance with the Flood Insurance Rate Map (FIRM).

Sincerely,

Donald Clegg
Donald Clegg, President

**DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION**

LAINAV

Ref: OCCL:TM
File No.: OA 3207

COMMENTS

- (X) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone X. The National Flood Insurance Program does not have any regulations for development within Zone X.
 - () Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone.
 - () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is _____.
 - () Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol T'yu-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.
- Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:
- () Mr. Robert Sumimoto at (808) 523-4254 or Mr. Mario Sio Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.
 - () Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
 - () Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
 - () Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

- () The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- () The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

() Additional Comments: _____

() Other: _____

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at 587-0229.

Signed: *Eric T. Hirano*
ERIC T. HIRANO, CHIEF ENGINEER

Date: *1/29/05*



January 24, 2005

Mr. Henry Eng, Director
Department of Planning & Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Dear Mr. Eng:

**Subject: Draft Environmental Assessment
Hawaii Public Radio Transmission Tower
Pu'u Ohia, Tantalus, Honolulu, Oahu
TMK: (1) 2-5-019: 005
Response to Comment Letter**

Thank you for your letter dated December 10, 2004. The following responds to your office's comments provided on the Draft Environmental Assessment for the subject property.

1. We acknowledge that the project site is located in the P-1 zoning district.
2. Should the proposed project proceed, details regarding grading, grubbing and stockpiling will be developed and the appropriate permits will be applied for with the City and County of Honolulu.

Thank you for providing your comments on the Draft Environmental Assessment. Please contact me if you have questions or require further information.

Sincerely,

Donald Clegg
Donald Clegg, President

JEREMY HARRIS
MAYOR



December 10, 2004

Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Lemmo:

Conservation District Use Application (CDUA), File No. OA-3207,
Hawaii Public Radio Facilities, Pu'u Ohia, Tantalus, Honolulu, Oahu

We have reviewed the subject CDUA application and Draft Environmental Assessment (DEA) and offer the following comments.

1. We confirm that the project would be located on land currently zoned P-1 Restricted Preservation District. Section 21-3-40-1(a) of the Land Use Ordinance states: "Within the P-1 restricted preservation district, all uses, structures and development standards shall be governed by the appropriate state agencies."
2. We concur with Section 5 of the DEA that the project requires a building permit since it is a private project on state land. The project may require a grading, grubbing and stockpiling permit regardless of the zoning district. However, the DEA lacks sufficient information about the quantity of soil to be graded, grubbed or stockpiled. Therefore, the Department of Planning and Permitting (DPP) cannot determine if a grading permit will be required until more accurate information is submitted to the DPP.

Thank you for the opportunity to comment on this matter, should you have any questions, please contact Tim Hata of our staff at 527-6070.

Sincerely yours,

Eric G. Crispin
ERIC G. CRISPIN, AIA
Director of Planning and Permitting

EGC:js

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ERIC G. CRISPIN, AIA
DIRECTOR

BARBARA KIM STANTON
DEPUTY DIRECTOR

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ANALYTICAL PLANNING CONSULTANTS, INC.
928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

PHONE (808) 536-5695
FAX: (808) 599-1553

January 24, 2005

Melanie A. Chinen, Administrator
Historic Preservation Division
State of Hawaii
Department of Land & Natural Resources
Kakuhikewa Building, Room 555
601 Kamokila Boulevard
Kapolei, HI 96707

Dear Ms. Chinen:

**Subject: Draft Environmental Assessment
Hawaii Public Radio Transmission Tower
Puu Ohia, Tantalus, Honolulu, Oahu
TMK: (1) 2-5-019: 005
Response to Comment Letter**

Thank you for your letter dated December 22, 2004. The following responds to your office's comments provided on the Draft Environmental Assessment for the subject property.

1. Archaeology Comments. We acknowledge that your records shows that there are no known significant archeological sites at this location and that your office believes that no archeological properties will be affected by the proposed actions.
2. History and Culture Comments. We acknowledge that your office's historic research has not identified any cultural properties for this area.

Sincerely,

Donald Clegg
Donald Clegg, President



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIKEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707



December 22, 2004

MEMORANDUM

Log No: 2004.3659
Doc No: 0412EJ15

TO: Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

FROM: Melanie A. Chinen, Administrator
Historic Preservation

SUBJECT: Chapter 6E-42 Historic Preservation Review - Conservation District Use Permit Application for Hawaii Public Radio Facilities on State Lands at Tantalus O'ahu [CDUA OA-3207] Makiki, Kona, O'ahu
TMK: (1) 2-5-019:005

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STATE OF HAWAII

Thank you for the opportunity to comment on the proposed CDUA application for the Hawaii Public Radio Facilities at Tantalus, O'ahu. The proposed radio facility and tower will be constructed on state lands near existing transmitter buildings and towers. Access to the site is by an existing concrete road that services the existing towers. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the project areas. Members of our Archaeology and History and Culture Branches conducted the review.

Archaeology Comments

A review of our records shows that there are no known significant archaeological sites at this location nor have these types of sites been identified during construction of the adjacent towers and facilities. Thus, we believe that no archaeological properties will be affected by these actions.

History and Culture Comments

Historic research has not identified any cultural properties for this area.

Should you have any questions about archaeology, please feel free to call Sara Collins at 692-8026 or Elaine Jourdan at 692-8027. Should you have any questions about cultural matters, please feel free to contact Nathan Napoka at 587-0192.

STUART YOUNG
UNIVERSITY OF CALIFORNIA, BERKELEY
CONSULTANTS IN ARCHITECTURE, PLANNING
AND ENVIRONMENTAL SCIENCE
1001 CALIFORNIA AVENUE, SUITE 100
BERKELEY, CALIFORNIA 94704
TEL: (415) 848-1000
FAX: (415) 848-1001
WWW: SYOUNG.COM

01/13/2005 10:30 FAX 000010024

Sam J. Lemmo
January 13, 2005
Page 2

whether unlit towers pose a greater or lesser risk of bird impacts without supporting data. Aside from these comments, OHA has no objections to the proposed tower and notes that Hawaii Public Radio does provide a valuable service to the community at large.

If you have any questions or concerns, please contact Kai Markell, Policy Advocate, at 594-1945 or kaim@oha.org. Once again, thank you for your patience during our review and assessment of this important matter.

'O wai iho nō,

Clyde W. Nāmu'o
Administrator

PHONE (808) 594-1888



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPIOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

FAX (808) 594-1885

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STATE OF HAWAII

January 13, 2005

Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
Department of Land and Natural Resources
State of Hawaii
P.O. Box 621
Honolulu, Hawaii 96809

Re: Request for Comments, Conservation District Use Application OA-3207, Board Permit, Hawaii Public Radio Facilities

Dear Mr. Lemmo:

The Office of Hawaiian Affairs (OHA) is in receipt of your request for consultation regarding the proposed Hawaii Public Radio Facilities on State of Hawai'i land consisting of approximately 235,408 acres within the State Land Use Conservation District, Resource subzone. According to the submitted materials, the project consists of one 140-foot tall tower and an 800 square foot concrete block equipment building measuring 12-feet tall. Thank you for your patience during our review of this proposed project. OHA offers comments and concerns in the area of native fauna.

Native Fauna

According to the Draft Environmental Assessment (DEA) submitted to OHA, information obtained from a Department of Land and Natural Resources biologist, native birds, which may be found in the project area, include 'Apapane, 'Amakihi, and Puae. Although there is some discussion regarding whether bird strikes are likely to occur, there is no specific information such as data on the frequency of bird strikes in other areas with similar non-lit towers or whether any deceased birds have been found associated with the adjacent Verizon tower. It is also unclear



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

PETER J. YOUNG
MANAGER OF LAND AND NATURAL RESOURCES
COMMISSIONER OF WATER RESOURCES MANAGEMENT
DAN DAVIDSON
DEPUTY COMMISSIONER
MARK W. J. JEN
DEPUTY COMMISSIONER
ANALYTICAL RESOURCES
BUREAU OF FORESTRY
TIMOTHY J. HARRIS
COMMISSIONER OF WATER RESOURCES MANAGEMENT
CONSERVATION AND RESTORATION DIVISION
TIMOTHY J. HARRIS
MINISTRY AND WILDLIFE
HAWAIIAN ISLAND RESERVE COMMISSION
STATE PARKS

MEMORANDUM

TO: SAMUEL J. LEMMO, Administrator
Office of Conservation and Coastal Lands

FROM: PAUL J. CONRY, Administrator
Division of Forestry and Wildlife
Paul Conry

SUBJECT: Comments on CDUA OA-3207

DATE: December 14, 2004

The Division of Forestry and Wildlife has reviewed the proposal from Hawaii Public Radio to site new radio transmission facilities in Honolulu Watershed Forest Reserve. The Division opposes the proposal because:

1. It does not represent appropriate use of forest reserve lands.
2. The proposal is not essential or critical for public safety.
3. The proposal represents new commercial development of an undisturbed site (additional road segment and building footprint) that is not consistent with Chapter 183, Hawaii Revised Statutes.
4. The Division believes suitable alternative sites may exist that would not necessarily require additional disturbance of Forest Reserve or Conservation District lands.

Please contact me should you have further questions regarding this matter.

PHONE (BLD): (808) 536-5095
FAX: (808) 599-1353



ANALYTICAL PLANNING CONSULTANTS, INC.
928 NUUANU AVENUE, SUITE 502 • HONOLULU, HI 96817

February 2, 2005

Clyde W. Namuo
Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, HI 96813

Dear Mr. Namuo:

**Subject: Draft Environmental Assessment
Hawaii Public Radio Transmission Tower
Puu Ohia, Tantalus, Honolulu, Oahu
TMK: (1) 2-5-019: 005
Response to Comment Letter**

Thank you for your letter dated January 13, 2005. The following responds to your office's comments provided on the Draft Environmental Assessment for the subject property.

1. The Department of Land and Natural Resources, Division of Forestry and Wildlife was consulted regarding your letter's discussion of bird strikes. According to a DLNR biologist, the native birds mentioned in your letter are extremely unlikely to hit the tower because those birds do not fly at night. Also, it is expected that the Pueo has excellent night vision and that a night strike would not be likely. The biologist added that typically birds that may be a concern for striking towers include Petrels and Newell Shearwaters, both of which are rare on Oahu and are not found in the project area.
2. Your comment acknowledging Hawaii Public Radio's valuable service to the community at large is greatly appreciated.

Sincerely,

Donald Clegg
Donald Clegg, President



February 8, 2005

FM transmission is primarily line of sight. The Tantalus location is ideal. Being centrally located and at a high elevation, it provides for FM coverage for 92 percent of Oahu's population. Virtually all similar locations are in the Forest Reserve or on lands that would be Forest Reserve, if they were owned by the State.

Accessibility and minimizing disturbance of the surrounding ecosystem were important considerations in site selection. The proposed site, adjacent to the existing road on State land that services the two Verizon towers, was chosen because it is centrally located at a high elevation and minimizes disturbance of the Forest Reserve by using an existing road for the same existing purpose; to access towers.

The Forest Reserve is a valuable public resource. The need to protect it and support its purpose to preserve the forest, plants, animals and watershed areas is recognized. At the same time, Hawaii Public Radio has been a valuable public resource for the past 24 years. HPR's mission is "to educate, inform and entertain by providing services to Hawaii, the nation and the international community that would not otherwise be available." The minimal disturbance of the relatively small site is more than balanced by the cultural and community Island-wide benefits provided by Hawaii Public Radio.

Critical for Public Safety

Hawaii Public Radio participates in all Emergency Broadcast events which provide critical information for overall public safety.

Hawaii Public Radio is not Commercial Development

Hawaii Public Radio (HPR) is a Hawaii 501(c) 3 private non-profit organization; it is not a commercial enterprise. HPR is a locally-based non-profit organization, which has an all-volunteer Board of Directors (23 members). HPR's revenues for programming expenses are provided primarily by Hawaii on-air pledge campaigns, gifts from individuals in the form of membership, and program sponsorships, called underwriting. HPR's budgeted operating income sources for Fiscal Year 2004-2005 are:

57.8%	Gifts from Hawaii individual listeners (membership)
18.7%	Gifts from local Hawaii businesses (program underwriting)
8.0%	Corporation for Public Broadcasting
8.1%	Special events and concerts in their Atherton Studio in Honolulu
2.8%	Audio services, including reading services for the blind in Hawaii
2.5%	Used car donations in Hawaii
2.0%	Foundation support
100%	Total Operating Budget

Project Site was likely previously disturbed

Although seemingly "undisturbed", the approximately 2,625 square foot project site is surrounded on 3 sides by the existing road on state land that accesses the Verizon towers and equipment buildings. The project site would likely have been disturbed when the road was originally constructed. The vegetation growth on the project site does not

Mr. Paul J. Conry, Administrator
State of Hawaii
Department of Land & Natural Resources
Division of Forestry and Wildlife
1151 Punchbowl Street
Honolulu, HI 96813

Dear Mr. Conry:

**Subject: Draft Environmental Assessment
Hawaii Public Radio Transmission Tower
Puu Ohia, Tantalus, Honolulu, Oahu
TMK: (1) 2-5-019: 005
Response to Comment Letter**

Thank you for your letter dated December 14, 2004. The following responds to your office's comments provided on the Draft Environmental Assessment for the subject property.

1. **Appropriate Use** A transmission tower, like the proposed project, is not a prohibited activity per "Subchapter 2 - Public Use" of the *Hawaii Administrative Rules, Title 13, Department of Land and Natural Resources, Subtitle 5, Forestry and Wildlife, Part 1 Forestry, Chapter 10.4 Rules Regulating Activities within Forest Reserve*.

The existing two Verizon towers (transmission tower and receiver tower) are in very close proximity to the project site and are in the Forest Reserve on state land.

The existing tower that supports the transmission antenna for Hawaii Public Radio's station KHPR 88.1 FM is located on State land at Wiliwilini Ridge, which is in the Forest Reserve (TMK: 3-6-4: por.004).

The proposed project is minimal in scope and is a stationary structure and use. Once the 2,625 square foot site has been prepared and the tower has been constructed, there should be no future disturbance of Forest Reserve land. It is noted that permitted activities in the Forest Reserve, such as commercial harvest, hiking, camping, special use permits for meetings, weddings, concerts, shows, other community events/activities, and scientific collection of plants and animals, would seem to have a continuous and on-going impact on or disturbance of the Forest Reserve.

HPR's limited non-profit budget; rent for just one station was on the order of the combined budget of all of HPR's other stations.

HPR also evaluated placing KIPO on the same tower as KHPR at Wiliwilinui Ridge, which is located on State land and is in the Forest Reserve. However, there is no room for additional transmission on the Wiliwilinui Ridge tower (owned by a California company) where KHPR 88.1 FM and a number of other station broadcasters are presently located. Additionally, the Wiliwilinui Ridge tower is only accessible by helicopter, making construction and maintenance difficult and extremely expensive.

HPR also contacted the local authorities of Verizon for over two years to request to co-locate on the Verizon Tantalus tower. Finally, after a definitive response was not forthcoming from Verizon's Honolulu offices, HPR was informed in the fall of 2003 by a California office that "Verizon will not be able to accommodate your request to attach to a Verizon facility in Tantalus, Hawaii."

For approximately 15 years, Hawaii Public Radio has diligently sought out solutions to and alternative locations for the KIPO situation.

We appreciate the opportunity to respond to your comments. Should you have any questions or comments, please contact me at 536-5695. Your comment letter and this response letter will be included in the Final Environmental Assessment.

Sincerely,



Donald Clegg, President

appear to be "old growth". Currently, vegetation along the road, including the 3 sides of the project site, is supposed to be routinely cut back as part of overall road maintenance.

4. **Exhaustive Search for Alternative Sites and Solutions**

For the past 14 years, Hawaii Public Radio has diligently searched and spent a great deal of time, effort and money to fix the problems associated with the present location of KIPO's 89.3 FM transmitter antenna on Palehua Ridge, only to realize that KIPO would have to be rebuilt at a new location.

Background of KIPO at its Present Location

KIPO first went on the air in 1989. The KIPO transmitter (approved and licensed by the Federal Communications Commission (FCC)) was designed and constructed as a 100,000 watt station that would reach all of Oahu. When it first went "live", it had a very far reaching signal.

Approximately 6 hours after KIPO's first transmission, the FCC called to alert the station's engineers that the new station was interfering with two local monitoring stations. One of these was operated by the Federal Aviation Administration, the other by the FCC itself. Both of those monitoring stations performed (and continue to perform) critically important functions with their arrays of highly sensitive receivers and antennas.

Due to an unfortunate combination of circumstances, the high powered signal at KIPO 89.3 FM was causing a lot of disturbance with those receivers. The HPR engineers were asked to decrease broadcast power until the interference was eliminated. The engineers immediately complied and the power level was reduced to only 3,000 watts; the power level that was acceptable so as not to interfere with the monitoring stations. Today, KIPO continues to operate at only one-thirteenth of its originally FCC-licensed power. A significant portion of Oahu cannot receive the KIPO signal, including almost all of Windward Oahu and much of East Honolulu.

Over the next 15 years, HPR diligently searched to fix the KIPO problem in its existing location at Palehua Ridge. Specially-designed antennas, notch filters and screening devices of various types have all been tried and all were unsuccessful. Finally, HPR recognized that KIPO's present location could not be "fixed". HPR realized that it would have to search for another location and KIPO would have to be rebuilt. Constructing a new tower and equipment building was akin to a last resort because it would a very long and expensive process.

Search for Alternative Solutions and Sites

For over two years, Hawaii Public Radio worked with engineers, conducted studies, and considered a range of possibilities. HPR contacted the owners of other towers and requested to co-locate (some of which were extremely large mainland broadcast corporations). Those owners were under no obligation to have HPR co-locate. Either those owners declined or asked exorbitant rent that would have significantly overburden

FINAL ENVIRONMENTAL ASSESSMENT

Hawaii Public Radio ~ Proposed Radio Facilities ~ Tantalus, Honolulu, Oahu, Hawaii

APPENDIX D

1/25/05

My name is Juli Kimura Walters. I am a landscape architect by profession and I have been a resident of Tantalus for the past 35 years. I'm offering testimony in favor of locating a new Hawaii Public Radio tower and transmitter on Tantalus.

KIPO is the news and information channel of Hawaii Public Radio, and as such, it is the only radio station on Oahu that delivers relatively unbiased news and information to the public, free of advertising. Ideally, KIPO should be the most easily available and accessible source of news and information in the state. However, in its present location, the areas that it serves are spotty at best. All of Windward Oahu, Hawaii Kai, and many of the valleys are not able to receive KIPO.

As a listener and supporter of Hawaii Public Radio, it has been a continuing frustration to me that the only place where I can listen to KIPO is in my car. Many of my friends have expressed the same frustration. I feel that KIPO, as part of Hawaii Public Radio, should be available to every radio listener in the State of Hawaii. This will be a future goal for the station, but for now, the objective is only to have the station reach most of Oahu.

As a landscape architect, land planner and advocate for the environment, I am convinced that the new tower will have minimal impact on our environment. As indicated in the Environmental Assessment report, the main structure of the proposed tower will be well below the elevation of the existing Verizon tower, and it will be screened by existing topography as well as vegetation.

I have personally visited the site twice in order to see for myself that the tower can be installed with a minimum of clearing and grading. This can be achieved easily since the land area involved is small, only 2,625 square feet and is fairly level. The actual land area of the tower itself will be less than 150 sf. Impact to the site will be minimal, as the site is already surrounded by a concrete road on 3 sides.

I sincerely hope that you will approve the site on Tantalus for the relocation of KIPO's tower and transmitter.

January 25, 2004
Testimony in favor of KIPO Broadcast Tower
Presented to the Department of Land and Natural Resources
by Carolann Biederman, 44-391 Nilu St. #4, Kaneohe, HI

I am a dedicated listener and volunteer at Hawaii Public Radio. Soon after I arrived in Honolulu in 1988 from Boston, Mass., I located the local public radio station and happily tuned in KHPR to get my fill of news and music programming.

My work in Boston as a jazz concert producer was greatly enhanced by the variety of excellent radio shows on both commercial and public stations in the Boston area.

When I moved to Honolulu and shifted my career focus to the nonprofit sector, I was encouraged that the local public radio station carried some of the national shows I had come to rely on for my daily information, though none of the jazz programming, which I really missed.

At first living in Waikiki, I was able to pick up the signal fairly easily, but when I moved to the Windward side later in 1988, the only place I could get HPR was in the car ... and for a number of years, that did not change.

It was far easier to tune in the commercial stations. The pop stations were lively, and the Hawaiian stations were very interesting to me, as the programming contributed to my understanding and enjoyment of my new home, Hawaiian music and culture. Listening to the songs coupled with the comments of the local deejays helped me to make informed choices in the purchase of music and in my support of local clubs and restaurants that featured music.

I really missed hearing jazz on the air, so it was exciting news to hear that Hawaii Public Radio was launching a new station, KIPO, dedicated to jazz, blues and news in late 1989. I wanted to get more involved. I volunteered at the station and began to work with a group of like-minded folks.

Our volunteer group looked at ways to use the new Atherton Performing Arts Studio, which in turn would bring new listeners to KIPO. We organized and managed the first performances in the studios. It was 1990, and we helped the small staff by offering our hands-on time and energy to get things going. Today, the Atherton Studio produces many outstanding events and offers a superbly equipped, intimate rental space, to the community. (Though it's probably a secret to the many who don't listen to the station!)

KIPO, when it launched, had an impressive roster of well-informed, entertaining and professional local hosts who covered the gamut of jazz, pop, international and rhythm-and-blues styles. The on-air hosts opened listeners to many new international artists and directed my attention and support to local musicians and events.

Sixteen years later, this kind of locally produced programming continues to be vitally important to local listeners as well as to visitors.

These days, my home radio only picks up the signal if I tweak it and turn it upside down. Despite the frustrations of trying to tune in, and knowing how many other people in the community are missing out on the jazz and other inspiring shows, I have remained a loyal listener.

Wherever you turn on KIPO - in the car, at the office and at home -the signal quality varies depending on where you are. The low power and location of the transmitter are the challenges. The new location will allow for better projection and coverage to most of Oahu and also permit KIPO to broadcast at higher power. I am waiting for the day when the signal broadcast will get strong enough for everyone to hear it at home and in the car.

The value of Hawaii Public Radio and KIPO in particular is that you cannot hear this exceptional programming anywhere else. The locally produced jazz shows are world class. The national syndicated shows are meaningful. It is creative, it is inspiring, and it is commercial-free. I am happy to contribute financially each year to do my part and ensure it stays on the air and has the funding it needs to maintain and expand its signal.

While it is commercial-free, the underwriters – businesses and corporations – get my positive attention because they too are supporting an entity that provides sophisticated entertainment, critically clear news, thought-provoking commentary, and a community of caring individuals.

KIPO deserves a much wider audience. To accomplish this simple goal, it is critical that its radio signal gets as strong as possible to reach more of Hawaii's people especially the young people who have little access to this range of music. It has been an important source of information and inspiration for me for the past 16 years, and I'm know I am one of many who feel the same way.

Thank you for your time.

My name is Maureen Schaeffer - retired teacher. I've worked for over forty years teaching the children of Honolulu. Naturally, I care deeply about the health of the cultural, artistic and political life of my community, hence my devotion to Public Radio.

Perhaps if I tell you a little about my perspective you will see why I think it's vital that KIPO expand its range to benefit the whole community.

I spend several months each year in Europe visiting relatives and friends of all ages. It is quite clear that Europeans are better informed about world news, sometimes even US news, than we are. They certainly hear more points of view.

If we want to hear more points of view in Honolulu, a lucky few can tune in to KIPO, where award-winning NPR news programs like "Talk of the Nation" and "All Things Considered" are complemented by broadcasts of respected news organizations like the BBC and CBC →

My name is Donald Mair. I live at 51-176 Kaaawa Park Lane, Kaaawa, Hawaii (District of Koolauloa). I work for Aloha United Way and am a member of the board of directors of Hawaii Public Radio.

I live in an area of Oahu that does not receive or receives a very poor broadcast from KIPO. A transmitter at the site under consideration on Tantalus would provide coverage to all of Oahu.

Why do I believe this is important? I enjoy listening to music, particularly jazz and blues music. In the evening, usually after 8:00 pm, jazz and blues music programs are broadcast. These programs originate in the station and are hosted by island residents. The hosts are informed and often talk about and with local jazz musicians and where they perform. The programs are interesting and entertaining. (If we could hear them.)

During the daytime programming, the listener receives the most current national news broadcast in Hawaii. The programming during the daytime also includes many lively, informative, and educational programs about the issues of the day with a variety of opinion and views. Sometimes listeners may call in and participate. I do not know of any radio station broadcasting in Hawaii that offers such in-depth coverage on matters of importance to all residents of this island.

Of special interest are the series of programs that originate at KIPO and are broadcast from 5:00 pm during weekdays. On Monday, there is a program called "Local Shorts". It includes short stories and plays by island artists, including interesting stories in "pigeon English". On Tuesday, another program called "Talk of the Islands", features the host interviewing elected officials and others in the news. It is stimulating and informative. On Wednesday, I think the program is called "Think Tech Hawaii" and explores what is happening in Hawaii in the high tech area. On Thursday, another program has a town meeting atmosphere. Important issues relating to health, traffic problems and many other matters are discussed by local experts in the particular field under consideration. These experts are prodded by the host, the other participants and callers to the program. In short, nowhere on radio in Honolulu can you get such a real understanding about what is happening in our community.

I urge you to recommend that the site on Tantalus for the KIPO transmitter be approved, so that all of the residents on Oahu, including myself and the people who live in Koolauloa, can receive its stimulating cultural, educational and informative programs. Thank you.

Testimony from **Carol S.Y. Kellett** regarding Hawaii Public Radio's application to build a transmitter for KIPO at the Department of Land and Natural Resources on January 25, 2005, 6:00 P.M., Kalanimoku Building, Honolulu, Hawaii.

1/25/05

Good evening. My name is Carol Kellett and I am a member of Hawaii Public Radio. Thank you for allowing me to testify on behalf of Hawaii Public Radio's application to build a new transmitter for KIPO on Tantalus.

As you know, KIPO is currently transmitting at 3,000 watts, well below its original strength. KIPO can only be heard on approximately half of Oahu thereby depriving North and West shore Oahu residents and neighbor island HPR members and listeners from outstanding programming that can't be heard anywhere else in the State.

KIPO broadcasts local, national, and international programming that is beneficial to the entire State of Hawaii. Its programming includes underrepresented music that can be found nowhere else on the AM or FM radio dial – local, national, and international jazz presented by Don Gordon and Jeff Ilardi. KIPO also airs public radio programming found nowhere else (including KHPR) such as *Fresh Air with Terry Gross*, *Marketplace*, *Splendid Table*, *This American Life*, and locally produced shows such as *Think Tech Hawaii* and *Talk of the Islands*. But the biggest benefit to the community is the diversity that KIPO brings to the public.

I am a librarian at Hamilton Library at the University of Hawaii at Manoa and am adjunct faculty in the Library and Information Science program at UHM where I teach a class to future librarians on information technology. I regularly use information heard on KIPO in my activities as both librarian and teacher. My LIS students have told me that they have learned new things they've heard about on KIPO and have passed it on to their students, friends, and family.

By approving HPR's application for a new transmitter, it will allow KIPO (and HPR) to provide its unique programming to the entire State of Hawaii so everyone can benefit from it – not just a small segment of the current population.

Thank you very much for allowing me to provide testimony this evening.

ANDREW K. BAKER
268 Aikahi Place ■ Kailua, Hawaii 96734
Home: (808) 254-8701
E-mail: arkl.baker@verizon.net

January 25, 2005

Mr. Sam Lemmo
Administrator
Department, Land, Natural Resources
Office of Conservation and Coastal Lands
State of Hawaii
PO Box 621
Honolulu, HI 96809

Dear Sir/Madam:

Thank you for the opportunity to speak regarding the proposed site for a KIPO transmitter.

This discussion is about choices. Unfortunately the competitive nature of commercial radio has led to less choice, not more. The current landscape on the commercial radio dial in Honolulu is very limiting. Ironically Honolulu probably has more radio stations per capita than any other market in the United States. Yet these commercial enterprises have fallen into a pattern of sophomoric banter and repetitive play lists by the who's who of the bubble gum genre in an effort to increase their audience.

Fortunately a choice does exist at 89.3 on the FM dial. KIPO provides thoughtful, intelligent and downright entertaining programming for listeners such as myself. Since I live on the Windward side of the island I am forced to listen to KIPO via the Internet – a problematic proposition – in of itself. The lack of transmitting power leaves my part of the island in the dark when it comes to our listening pleasure.

Having to deal with Internet issues such as bandwidth, or lack there-of, has forced me to seek out my own solution to catch the programming that I depend on from KIPO. I now listen to the public radio station out of Boise, Idaho on my computer. Listening to the daily weather reports from the frozen tundra of Idaho reminds me of why I choose to live in Hawaii on a daily basis.

Hawaii Public Radio is a community supported and funded operation. Many of its loyal supporters live on the windward side of the island and look forward to its unique programming on a daily basis. However, for many years now, we have not been able to enjoy the entire fruit of our financial support. Please allow us the additional choice of KIPO on the RADIO dial.

Thank you for the opportunity to voice my support for the proposed transmitter site and I humbly ask for your support and approval of the proposal before you.



Andrew K. Baker

January 21, 2005

Mr. Sam Lemmo, Administrator
DLNR—Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Lemmo:

I am writing in support of Hawaii Public Radio's application to build a transmitter for KIPO.

I am told that engineering studies have concluded that the proposed site will allow KIPO to provide broadcast coverage to all of Oahu, whereas, it is estimated that current coverage omits 40% of the Island's potential audience.

Why should this matter?

The term "unique" is overused and most often misapplied, and for that reason I seldom have use for it. But in the context of DLNR deliberations I believe it is accurate to describe KIPO as this community's unique provider of a service necessary to a people who aspire to participate in rational self-governance.

To the best of my knowledge, no other broadcaster provides Oahu's citizens with the breadth and depth of both locally-hosted public affairs programming and national and international news coverage and analysis. Each week locally-hosted, call-in programming includes

- Think-Tech Hawaii
- Town Square
- & Talk of the Island;

and every day at noon KIPO offers Oahu listeners a broad and clear window on the world—"All Things Considered"—in addition to local and worldwide news coverage throughout the day.

If, in our more cynical moments, we are tempted to disparage American democracy as a system in which millions of know-nothing voters make decisions about complex issues based upon 30-second political campaign ads on TV, then surely the antidote is a locally-based public information resource that stimulates thought and dialogue regarding the issues of our times, *and that is widely available* to persons who want to be plugged into the business of responsible citizenship.

My thanks to DLNR for its role in making responsible citizenship a real possibility in our community.

Sincerely,

Steve Bartlett
Branch Co-Manager

Walt Wrzesniewski
47-387 Lulani Street
Kaneohe, HI 96744-4716

25 January 2005

Hawai'i Department of Land and Natural Resources
Attn: Mr Sam Lemmo, Administrator
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, HI 96809

Dear Sir:

Thank you for allowing my testimony regarding KIPO's request for use of public lands for a new transmitter site. I'm honored to do so.

On Wednesday, January 12th, driving from Kaimuki to Kahalu'u, I listened to "Tech Nation" a weekly show on KIPO I always try to hear. That day, the host interviewed Mr Frans Johansson, author of the book, "The Medici Effect." Mr Johansson described what conditions are best to create and support innovation—in everything—not just science but in food, music, education, etc. He described the importance of cross-disciplinary and cross-cultural perspectives. He articulated the value of diversity in breakthrough innovations, to improve our lives. His discoveries, I thought, were PERFECT for Hawai'i. The interview inspired me enough to buy the book; and, on June 21st, I'm scheduled to use that book to deliver a workshop on innovation for Coast Guard leaders.

That show was followed by "Think Tech, Hawai'i," a weekly program produced here on Oahu. The topic was "Bio-Engineering in Hawai'i," but I couldn't listen to it because I had reached the Windward Side where KIPO has a very poor signal. My wife and I do some investing, and we're both concerned about GMOs and other possible threats to our health and food supply. That's why I really wanted to hear this show. On the Windward Side, though, it's hard to receive KIPO in my car, and not a single radio in my home can tune it in.

Radio programs like these are so valuable, I actually try to plan my workday so I can be in the car at 4:00pm. I can barely hear KIPO on my Sand Island office radio, and Kahalu'u is even worse.

KIPO is so beneficial for my life and career as a resident of Hawai'i. There's no other place to hear this quality and diversity of programming. I get 98% of my news from public radio. "Fresh Air," may just be the best interview show anywhere. Nowhere can I tickle my English Language funny bone—and improve my vocabulary—like I can listening to "My Word" and "Says You." And for learning the unvarnished truth, more and more a rarity these days, I depend on shows like "On The Media," "Counterspin," and Hawai'i Public Radio's own "Talk of the Islands." "Kanikapila Sunday" is one of the very best Hawaiian Music shows, and it's great that if I have a question about Hawaiian Music, I can just e-mail Derrick Malama who is always helpful. HPR's Arts and Cultural Reporter, Noe Tanigawa, broadcasts reports about all facets of Arts and Culture in Hawai'i—including their impact on the community. These and other resources are why KIPO is essential to my life and, I'm sure, to the lives of many people living in our State. My wife and I contribute \$40 each month for the privilege of listening to KHPR and KIPO. We'd give more if we could.

For all these reasons, please approve KIPO's request for a new, improved transmitter site. I believe it is definitely in the public's interest. And, by the way, on last Wednesday's Tech Nation, the topic was threats to homeland security, particularly ship containers. As a member of the public and an employee of the Department of Homeland Security, I found this program not only fascinating, but vital.

Mahalo a Nui Loa and Malama Pono,

January 23, 2005

As an avid listener of KIPO, I would like to express my strong support for KIPO's application to install a transmitter on Tantalus.

KIPO is an important source for local, national and international news and information. KIPO's commercial free format offers unique insight and perspective not found on the vast majority of commercial radio and television networks.

In order to improve its services, KIPO's current transmission needs improvement. There are many areas on Oahu that cannot receive KIPO's broadcast. As a result, intermittent reception can often result when driving across Oahu. Many intended listeners are unable to receive KIPO from home or the workplace.

It is my hope that an important community resource like KIPO be available to all on Oahu on a reliable basis. The proposed transmitter would certainly be an important step toward this goal.

Respectfully submitted,
Russell Chan
742 Maluniu Ave.
Kailua, HI 96734

Phillip B. Olsen
999 Wilder Avenue, Apt. 505
Honolulu, Hawaii 96822
Tel. (808) 521-2630, Cellular (808) 271-3692
philolsen@hawaii.rr.com
January 17, 2005

Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96813

SUBJECT: In support of KIPO Hawaii Public Radio's Request for a Tantalus Transmitter Site

To whom it may concern:

I am a retired educator and former University of Hawaii administrator and a frequent listener to Hawaii Public Radio fine music.

It gives me considerable pleasure to recommend approval by the Department of Land and Natural Resources of HPR's request for a new transmitter site on Tantalus.

Much of KIPO's outstanding programming is lost to many Oahu listeners due to the inappropriate location of that station's current transmitter. Fine music and other HPR programs frequently are ruined with poor signal strength and terrain obstructions because the KIPO transmitter is poorly located.

Please give those of us who love HPR's superior programs a better chance to receive the KIPO transmission from a new and improved Tantalus location, where the broadcasts will be heard clearly and without distortion by the large population eager to tune in.

DLNR should make the transmitter site atop Tantalus available to HPR's KIPO because it will be the best and highest use of the small parcel of State land needed for this worthy purpose.

Very truly yours,


Phillip B. Olsen

Philip H. Kinnicutt
341 Iliaina Street
Kailua, Oahu, Hawaii 96734-1807
Phil_Kinnicutt@alumni.williams.edu
808-254-4534

January 25, 2005

Mr. Sam Lemmo
Administrator
DLNR – Office of Conservation & Coastal Lands
P.O. Box 621
Honolulu, HI 96809

Dear Mr. Lemmo:

Thank you for the opportunity to provide testimony on behalf of Hawai'i Public Radio this evening.

I have been an avid fan of Hawai'i Public Radio since the day it first went on the air many years ago. Although I am a music lover, my primary reason for keeping KHPR and KIPO in the number one and two pre-set positions on my car radio and in my in-home audio system is HPR's comprehensive local, national and international news coverage.

I would be lost without Morning Edition, All Things Considered and both the Saturday and Sunday Weekend Edition shows, and I know there are thousands of other listeners on O'ahu and throughout the State of Hawai'i who feel the same way I do.

Hawai'i Public Radio's news and public affairs programming is unique. No other radio station in Hawai'i even comes close. The problem, however, is that one of its key stations, namely KIPO, cannot be heard throughout the entire geographic area it is supposed to serve on O'ahu. There is a particular problem on the windward side of the island where I live and it is my understanding that there are several other dead zones as well.

News and information is vitally important to our society and is critical in times of crisis. I feel it would definitely be in the public interest to allow HPR to relocate its antenna in such a way that the KIPO signal would be able to be heard by a larger segment of the population.

Thank you for your attention.

Sincerely yours,

/sig/

Phil Kinnicutt

1/25/05

Good Evening,

Two years ago, when I was researching places to move, I took into account the quality of the public radio available. Since moving here, I have been overjoyed by KIPO.

KIPO provides a source of news and in-depth stories, which is unlike any other radio station available in Hawaii.

The programming on KIPO inspires, provokes thought and creativity, and has elevated my life on a daily basis.

Here in Hawaii, we are living at the end of the world. KIPO brings the world to us. KIPO provides world news from the UK, a different perspective from Canada, and cultural programming from New York and Chicago. These programs have also influenced local programming with shows like aloha shorts. I know more about the world I live in because of public radio.

Currently, I do not get reception of KIPO in my house on the radio. Because I have access to a high-speed Internet connection, I can listen at my computer, but many people in Hawaii do not have this access. Some people have to sit in their car and listen. There is a term for people that are listening to stories in their cars and cannot get out ago inside to listen, driveway listeners.

Public Radio listeners are more thoughtful and more informed, but in order to listen, you need reception.

Thank you

Rita L. Smith

25 January 2005

To: Department of Land and Natural Resources
From: Konrad E. Hayashi, MD, MPH & TM
Camp HM Smith, Hawaii 96861

Subject: Hearing to Permit KIPO Transmitter Placement and Operation

Dear Members of the Department,

I strongly urge you to support Hawaii Public Radio's request for permission to use the proposed site so their signal can reach Oahu's citizens and visitors.

The current limitation on their broadcast signal, 3,000 watts, is notably weak, and deprives many community members of the opportunity to hear excellent programming and the best news presented on the radio spectrum. Even the high school station, where I participated in radio broadcasts as a student, was permitted to broadcast with 15,000 watts.

It is a disappointment when I drive up to Camp Smith and cannot receive KIPO at work. My wife is also disappointed when she cannot receive the station downtown at work.

KIPO presents top quality news. Not faux news, not news light, and not news that is homogenized to the lowest common denominator, or lower.

My wife and I are thankful for the contribution that Hawaii Public Radio makes to our community's strength and awareness. We appreciate how they promote linkages within our communities as well as airing multiple viewpoints. It is also good that we have two viable non-commercial stations.

We both listen to KIPO daily. The only time I've missed listening for more than a few weeks was while I was in Kuwait and Iraq. Even the new transmitter location wouldn't have helped that.

Hawaii Public Radio's role as a good community citizen extends to their providing useful information on disaster and emergency preparedness, as well as periodically providing test of emergency warning. Their new transmitter location will increase the public's potential access to emergency warnings of natural and human-generated disasters.

In summary, KIPO is truly the jewel in the radio dial's crown, and I ask you to solidly support their permit application.

I submit this testimony strictly as a private citizen.

Sincerely,
Konrad E. Hayashi

XS-200 -

Thank you for the opportunity to address the DLNR Board.

I am Jeff Ashmore and have been a member of the Board of Directors of Hawaii Public Radio for 20 years.

The Organization's basic mission, as you are probably aware, is to provide radio programming in demand not otherwise available.

HPR began with a single station, KHPR, but we soon recognized that the demand for our programming was too much for one signal.

Accordingly, we launched a new station, KIPO, with the intention of covering most of the island with additional programming.

This expansion was ^{Very} important to fulfilling our mission.

To the Board's and Membership's great disappointment, KIPO has reached only a small fraction of the intended audience due to a variety of technical issues.

We have wrestled with KIPO's deficiencies for over 15 years and now we have a solution that will benefit virtually the entire island.

The increased signal coverage offers many new possibilities.

My favorite is the ability for Hawaii Public Radio to host island-wide, call-in forums on local current events.

This debate medium is not now available.

I trust you will be able to approve the new, proposed KIPO site; doing so will ^{benefit} ~~enrich~~ most of the island's communities with quality news, educational and cultural radio programming. *A large segment of the community's population*