



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT

DEC 28 1999

'99 DEC 28 P12:20

REF:PB:LT

OFFICE OF ENVIRONMENTAL QUALITY CONTROL  
File No.: OA-2971

Ms. Genevieve Salmonson, Director  
Office of Environmental Quality Control  
235 South Beretania, Room 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Conservation District Use Permit Application (CDUA)  
OA-2971 for the Construction of an ESMR Antenna  
Facility; TMK: 4-4-12: 01 por. Lot B, Puu Papaa Ridge,  
Kaneohe, Oahu

We have reviewed the final environmental assessment (EA) and are  
issuing a Finding of No Significant Impact (FONSI) for the  
proposed action. Please publish this determination in the  
January 8, 2000 publication of the OEQC bulletin. ✓

The final EA includes the comments received during the public  
comment period that ended on September 22, 1999 and the  
Applicant's responses to those comments. Additionally, NEXTEL  
has decided to use a 130' high antenna monopole over the lattice  
tower.

Enclosed are four copies of the final EA, a completed OEQC  
publication form. If you have any questions, please contact  
Lauren Tanaka at 587-0385, Planning Branch of the Land Division.

Aloha,

Dean Y. Uchida, Administrator

Enclosures

165

2000-01-08-DA-FA-

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Final Environmental Assessment

For

Project: (Nextel Puu Papaa  
ESMR Antenna Site)  
Puu Papaa, Kaneohe, Oahu, Hawaii

TMK: (1) 4-4-012-001, portion of lot B

Applicant: Nextel Communications  
3375 Koapaka Street, Suite D155  
Honolulu, Hawaii 96819

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

December, 1999

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PART 1 – PROJECT SUMMARY

1. A. PROJECT DATA

Project Name: Nextel Puu Papaa ESMR Antenna Site

Applicant: Nextel Communications  
3375 Koapaka Street, Suite D155  
Honolulu, HI 96819

Approving Agency: Department of Land and Natural Resources  
State of Hawaii  
1151 Punchbowl Street, Rm. 220  
Honolulu, HI 96813

Use Requested: Public Utility Communications Use (Telecommunications antenna  
and equipment shelter)

Project Location: 44-258 Kaneohe Bay Drive  
Puu Papaa, Kaneohe, Oahu, Hawaii

TMK: (1) 4-4-012-001, portion of lot B

Zoning District: P-1  
Preservation Use, Koolaupoko Development Plan Land Use Map

State Land Use: Conservation District

SMA: The project is not located within a designated Special  
Management Area (SMA)

Flood Zone: FIRM zone D

Zoning Lot Area: 4-4-012-001: 6,857,477 sq. ft. (157.426 acres)  
Lot B portion only: 13,072 sq. ft.

Nextel Site Area: 1,120 sq. ft. lease area (within portion of Lot B)

Land Fee Owner: KAOPA Limited Partnership, and  
Virginia KAOPA Baldwin Land Trust  
1199 Auloa Road  
Kailua, HI 96734-4606

1. B. AGENCIES AND CITIZEN GROUPS CONSULTED / CONTACTED

Department of Land and Natural Resources  
Land Division  
State of Hawaii  
1151 Punchbowl Street, Rm. 220  
Honolulu, Hawaii 96813

Department of Land and Natural Resources  
Historic Preservation Office  
State of Hawaii  
601 Kamokila Street, Suite 555  
Kapolei, HI 96707

Office of Environmental Quality Control  
State of Hawaii  
235 South Beretania, Rm. 702  
Honolulu HI 96813

Office of Planning  
State of Hawaii  
235 South Beretania, 6th floor  
Honolulu, HI

State of Hawaii  
Dept of Health  
Environmental Planning Office  
919 Ala Moana Boulevard, Third Floor  
Honolulu, HI 96813

City and County of Honolulu  
Dept. Planning and Permitting  
Coastal Land Branch  
650 South King Street, 7th floor  
Honolulu, HI 96813

City and County of Honolulu  
Dept of Planning  
City and County of Honolulu  
650 South King Street, 9th floor  
Honolulu, HI 96813

GTE Hawaiian Tel  
1177 Bishop Street  
Honolulu, Hawaii 96813

Kaneohe Neighborhood Board No 30  
c/o Kaneohe Satellite City Hall  
46-024 Kamehameha Highway  
Kaneohe, HI 96744

Kailua Neighborhood Board No. 31  
c/o Neighborhood Board Commission  
City Hall (Honolulu Hale) Rm. 400  
Honolulu, HI 96813

The Outdoor Circle  
1314 S. King Street, Suite 306  
Honolulu, HI

The Nature Conservancy  
1116 Smith Street, Suite 201  
Honolulu, HI 96817

Sierra Club Hawaii Chapter  
P.O. Box 2577  
Honolulu, HI 96803

Life of the Land  
1111 Bishop Street, Suite 503  
Honolulu, HI 96813

Hawaii's 1000 Friends  
305 Hahani Street, Suite 282  
Kailua, HI 96734



PART 2 – GENERAL DESCRIPTION OF THE PROJECT

## 2. A. TECHNICAL CHARACTERISTICS

### DESCRIPTION OF PROPOSED USE.

Nextel Communications desires to construct a new Enhanced Specialized Mobile Radio (ESMR) antenna facility at Puu Papaa, Kaneohe, Hawaii. The proposed ESMR facility will be located on the Puu Papaa ridge which is occupied by numerous existing telecommunications antenna facilities. The proposed Nextel site will be situated on a portion of the ridge somewhat below and to the southwest of the existing Hawaiian Telephone antenna site at the top of the ridge.

ESMR, represents a new digital generation of wireless communications which operates in the 800 megahertz range. The Nextel ESMR site will serve the general public, as well as businesses and government agencies, by offering convenient, portable and essential mobile radio service.

The proposed Nextel ESMR antenna facility will include the following:

#### Antenna monopole:

A 130 foot height antenna monopole with an antenna platform mount at its top will be required for this project. The monopole would present a more slender visual profile than a lattice tower.

Ground level of the monopole (the pole's foundation) will be at approximately 456.0 feet elevation above sea level. The top of the 130 foot height pole will be at approximately 586.0 feet elevation above sea level. The summit of Puu Papaa near the existing Hawaiian Telephone site is at approximately 540.0 feet elevation. The top of the Nextel monopole will therefore be approximately 46 feet above the summit. This antenna height will be required for proper radio signaling for this site.

#### Antennas:

A total of 9 panel type coverage antennas (3 antennas each at 3 sectors) will be installed at the top of the tower. Each panel antenna is approximately 6'-0" high X 8" wide X 3" deep. Also, 2 small GPS (Global Positioning System) antennas and 1 small test mobile antenna will be installed. These auxiliary antennas are about 4 inches in diameter and no more than a foot in height.

#### Equipment building:

A prefabricated equipment building will be installed adjacent to the antenna tower. The building is approximately 11'-6" wide X 15'-0" long X 11'-0" high. Coaxial cables will run from the equipment building, along a short length of cable tray, and up the tower to the antennas.

The proposed ESMR installation will be an unmanned, unoccupied facility. The site will be serviced intermittently by maintenance personnel.

#### DESCRIPTION OF SITE AREA.

The Puu Papaa is a prominent ridge situated between the Kailua and Kaneohe communities. It is occupied by numerous existing telecommunications facilities, including those of Hawaiian Telephone, GTE Wireless of the Pacific, Sprint PCS, VoiceStream, Hawaiian Wireless, Pager One, and others. The existing antennas are of all types and configurations, including whips, panels and microwave dishes, which are mounted to utility poles, monopoles, and lattice type towers.

A single narrow access road leads from Kaneohe Bay Drive near the H-3 overpass, to the top of the hill. The access road and the hillside is fenced off and restricted to the public. The proposed Nextel site is situated on steeply sloping and rocky terrain at a bend in the access road near the existing Page One site.

The Nextel site is situated somewhat below the Puu Papaa summit, in a portion of "lot B" of TMK parcel 4-4-012-001. The existing antenna sites at the summit are situated in TMK parcel 4-4-012-002.

The proposed project does not fall within any designated Special Management Area (SMA).

#### PROJECT'S PUBLIC BENEFIT.

The proposed antenna facility will allow Nextel to provide ESMR service to the Kaneohe and Kailua neighborhoods and surrounding areas. ESMR service can potentially enhance emergency response for police, fire and paramedic services, and provide secondary communication services to the public and government in the event of a natural disaster.

#### PROJECT SCHEDULE.

Assuming that all zoning and permitting approvals are secured, the applicant is currently planning for an January, 2000 project start date, with the completion to follow in about 1 month.

2. B. ECONOMIC CHARACTERISTICS

ECONOMIC CHARACTERISTICS.

The proposed project will not have a significant impact on the immediate community or on the statewide economy. Construction of this project however, will foster jobs in the construction, telecommunications industry and related trades. Provision of ESMR service can increase the level of communications in the community, which can have a positive effect on productivity and the economy.

2. C. SOCIAL CHARACTERISTICS

SOCIAL CHARACTERISTICS.

The proposed project will not have a negative social impact on the community.

The proposed ESMR project can contribute to the social well-being of the immediate community and the state at large, by fostering better wireless communications among citizens, agencies and organizations. Wireless telephones are often used for personal convenience, safety and during emergency situations.

## 2. D. ENVIRONMENTAL CHARACTERISTICS

### ENVIRONMENTAL CHARACTERISTICS.

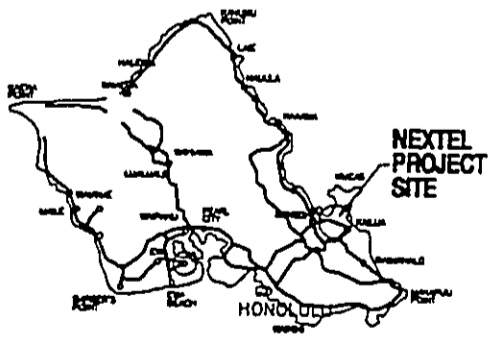
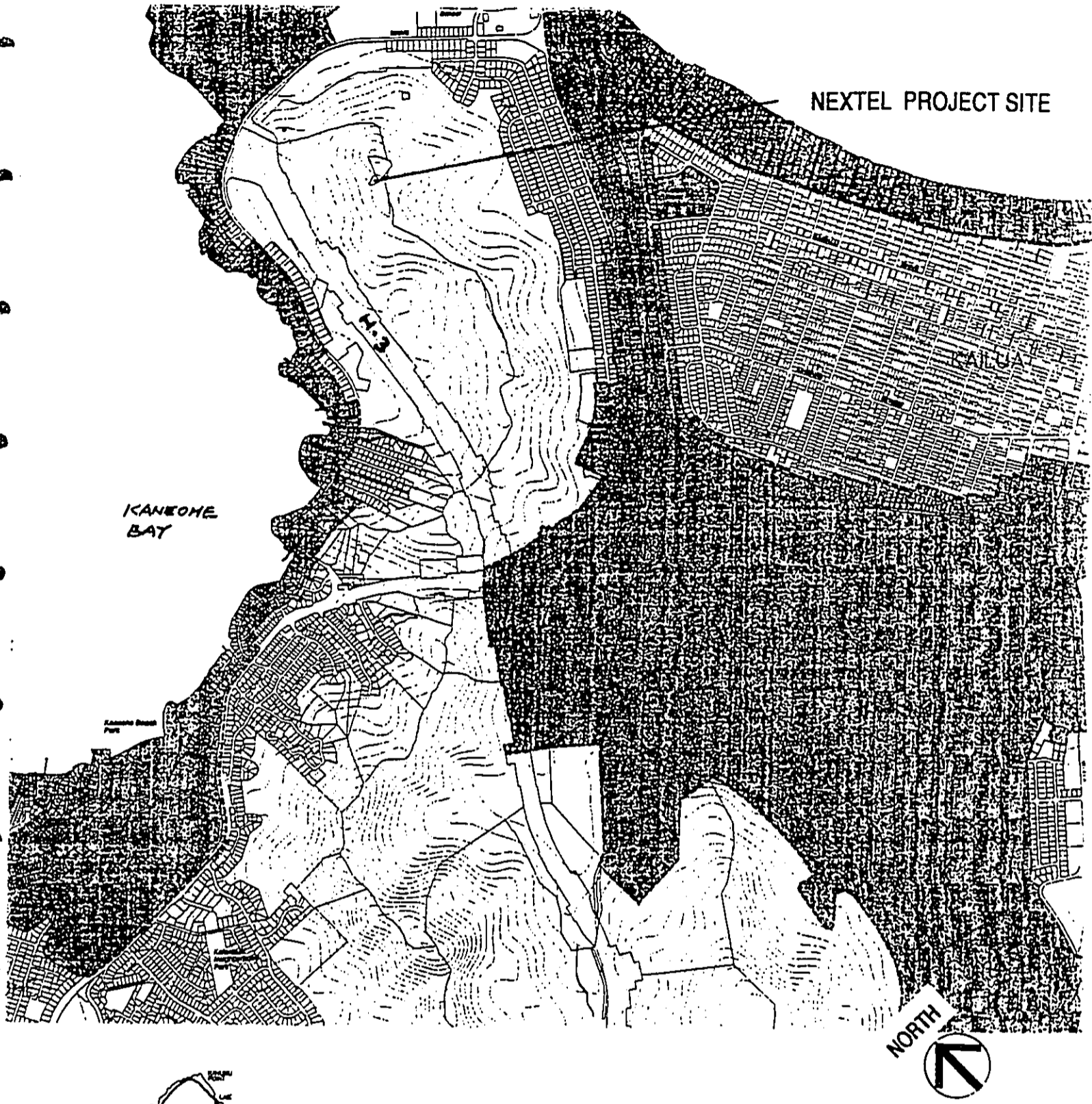
The proposed project will not have an adverse impact on the surrounding area. The Puu Papaa ridge is already occupied by numerous telecommunications antenna facilities. The area is not on the Historic Register, and does not lie in a Special Management Area. The Nextel site will be directly off an existing access road. There are no known endangered plants or animals in the area.

**SHORT TERM CONSTRUCTION OPERATIONS.** The actual construction operations on the project site will be of relatively small scale and of short duration. The Nextel site is on steeply sloping and rocky terrain, covered with brush. To minimize any required grading, the antenna monopole will be probably be secured to drilled pier foundations. A deep hole is drilled into the ground, reinforced with steel bars, then filled with concrete. The monopole is then bolted to the foundation. The general existing slope and drainage patterns will not be significantly altered.

**EFFECT ON THE VISUAL ENVIRONMENT - VISIBILITY OF THE MONOPOLE.** Puu Papaa is a prominent ridge. The proposed 130 foot height antenna pole will extend approximately 46 feet above the summit high point, and will be seen from many vantage points within the Kailua and Kaneohe neighborhoods. Telecommunications antennas by their nature and function must be elevated above the areas serviced.

The proposed Nextel monopole will have a visual impact. However the top of the tower will not extend above the level of the highest existing antenna on Puu Papaa.

PART 3 – PROJECT DRAWINGS

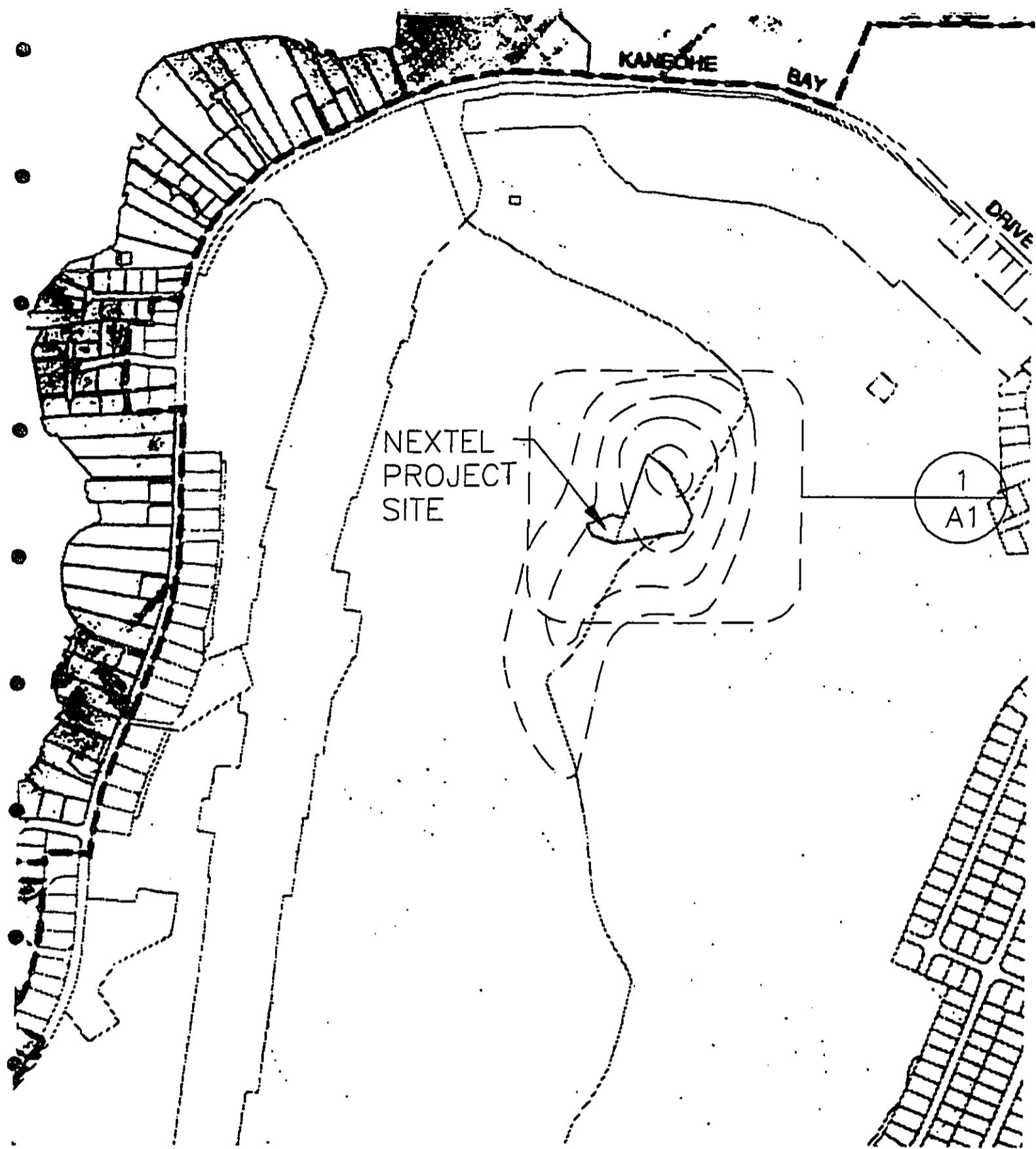


VICINITY MAP

NEXTEL PUU PAPAA  
ESMR SITE EXHIBIT A







3  
A1
**VICINITY PLAN**  
 NO SCALE



**NEXTEL PUU PAPA/ ESMR SITE**  
**EXHIBIT B**

**PROPOSED NEW NEXTEL ANTENNA POLE**

GRND. - 456.0  
 TOP POLE - 586.0  
 TOP ANT. - 586.0



(EXISTING) ANTENNA TOWER "H"  
 GRND. - 455.7  
 TOP TOWER - 555.2  
 TOP ANT. - 573.2

(EXISTING) MICROWAVE TOWER "G"  
 GRND - 518.7  
 TOP TOWER - 569.2  
 TOP ANT. - 579.0

(EXISTING) ANTENNA POLE "A"  
 GRND - 536.5  
 TOP POLE - 576.6  
 TOP ANT. - 586.9

ANTENNA POLE "B"  
 ANTENNA POLE "C"

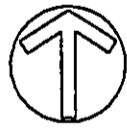
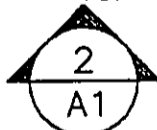
(EXISTING) ANTENNA POLE "D"  
 GRND - 542.5  
 TOP POLE - 572.6  
 TOP ANT. - 579.3

(EXISTING) ANTENNA POLE "E"  
 GRND - 515.6  
 TOP POLE - 561.5  
 TOP ANT. - 562.2

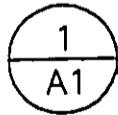
(EXISTING) ANTENNA POLE "I"  
 GRND - 488.1  
 TOP POLE - 511.3  
 TOP ANT. - 521.4

(EXISTING) ANTENNA POLE "J"  
 GRND - 489.8  
 TOP POLE - 509.7  
 TOP ANT. - 520.9

(EXISTING) ANTENNA POLE "F"  
 GRND - 461.9  
 TOP POLE - 527.3  
 TOP ANT. - 535.6  
 NORTH



**SITE PLAN (ALTERNATIVE MONOPOLE)**



1" - 60'

TOPOGRAPHIC SURVEY  
 PROPOSED CELLULAR SITE  
 PORTION PAPAA RADIO STATION SITE  
 AT ANAHI AND MALAE, KANEHE, KOOLAPOKO, OAHU, HAWAII  
 SCALE 1" = 20 FT.  
 MARCH 17, 1998  
 REVISED MARCH 23, 1998

**NEXTEL PUU PAPAA ESMR SITE**

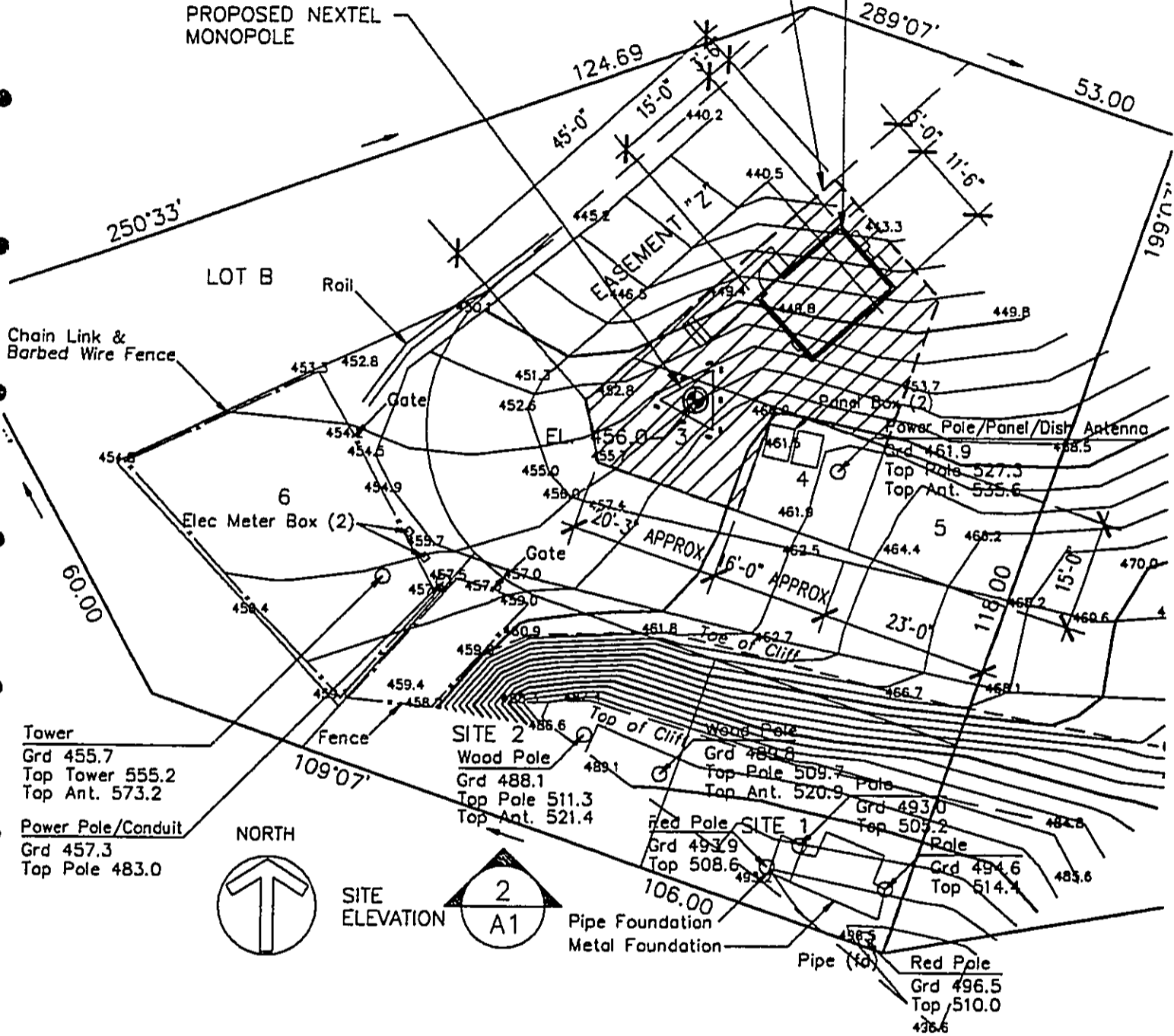
**EXHIBIT C - 1**



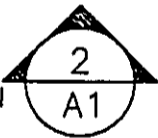
PROPOSED NEXTEL  
LEASE AREA (HATCHED)  
1120 S.F. APPROX.

PROPOSED NEXTEL  
EQUIPMENT  
SHELTER

PROPOSED NEXTEL  
MONOPOLE

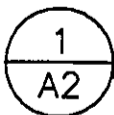


SITE  
ELEVATION



Pipe Foundation  
Metal Foundation

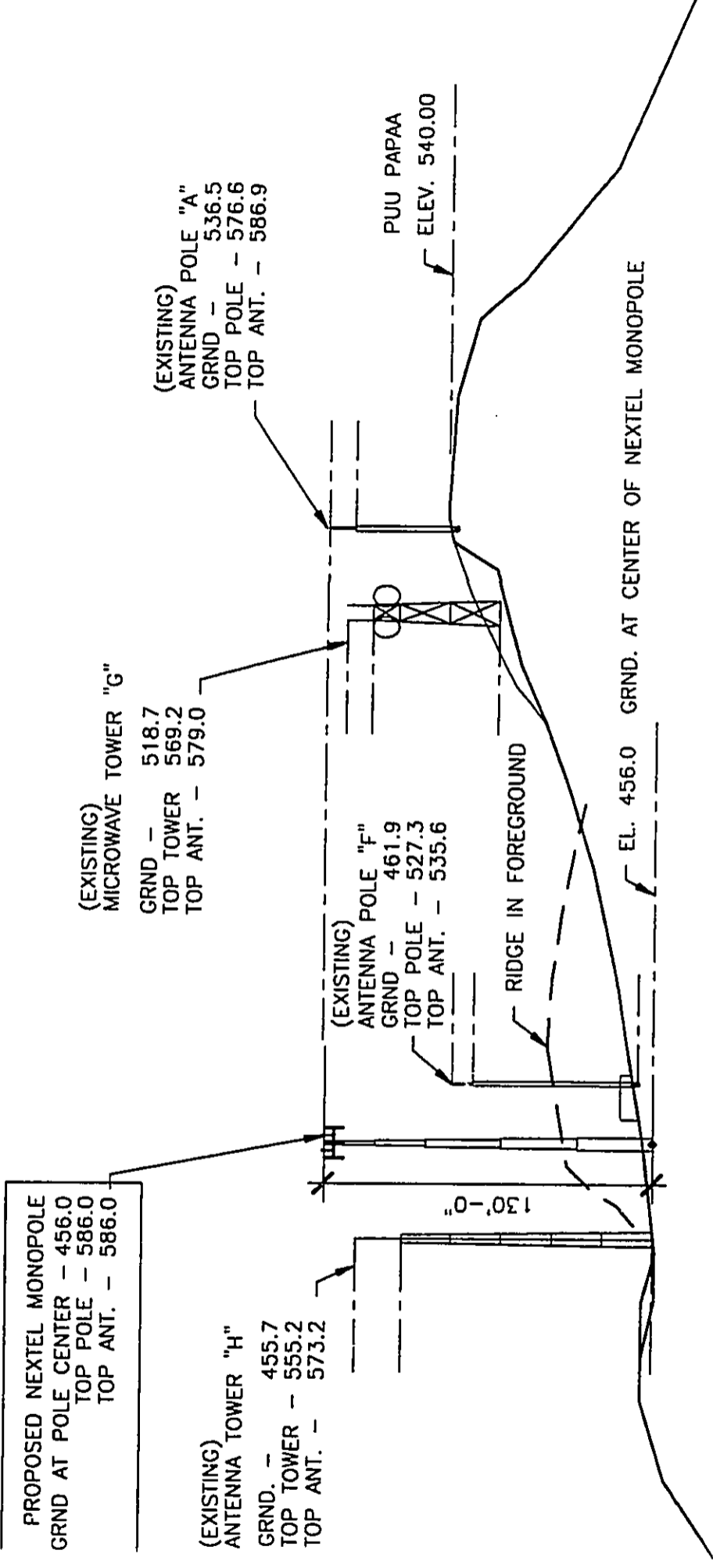
**DETAIL SITE PLAN (ALTERNATIVE MONOPOLE)**



1" = 20'

**NEXTEL PUU PAPAA  
ESMR SITE**

**EXHIBIT D-1**



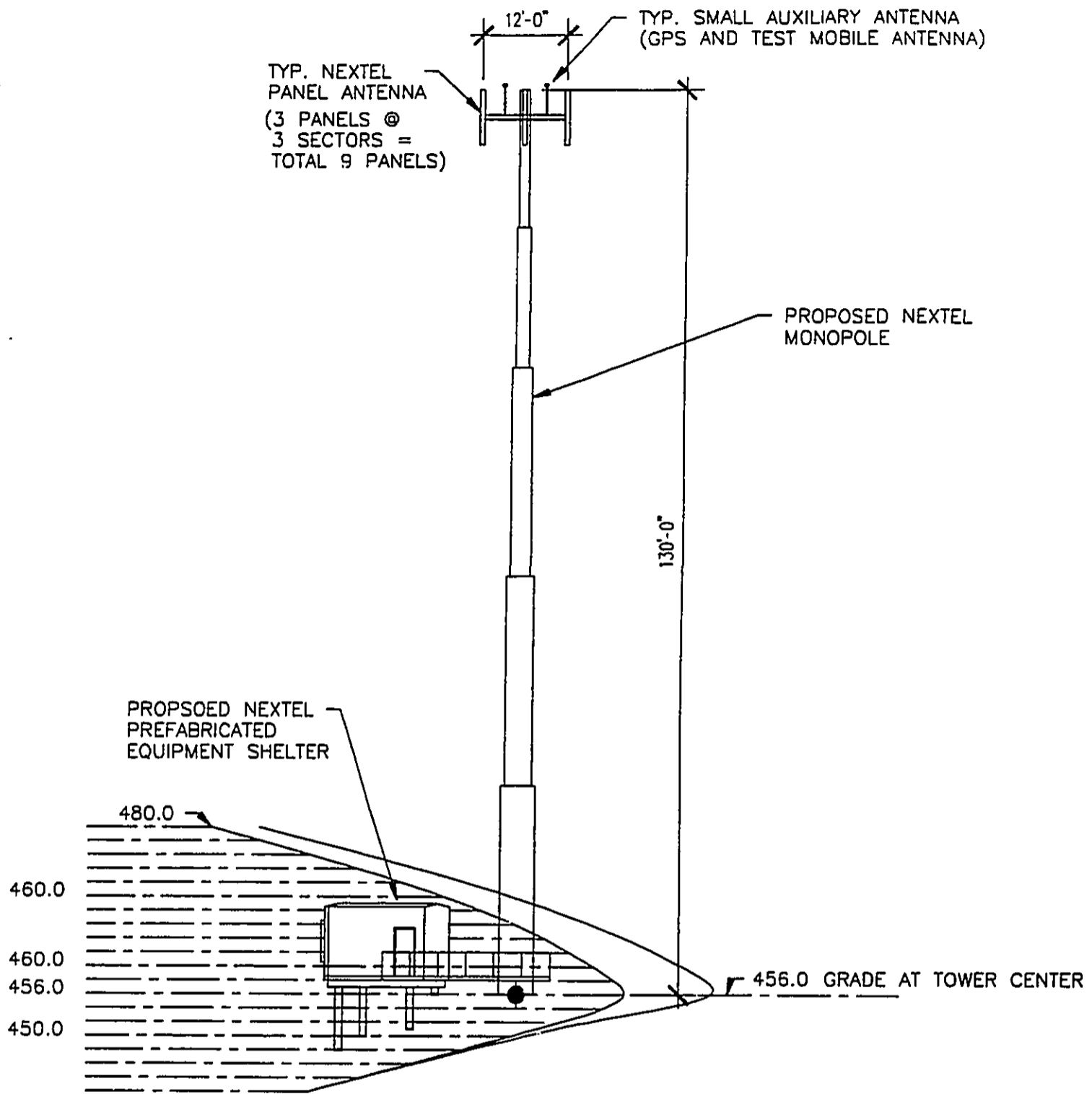
NOTE: ELEVATIONS NOTED ARE APPROXIMATE ONLY  
 AND ARE BASED ON AVAILABLE INFORMATION

**SITE ELEVATION (ALTERNATIVE MONOPOLE)**

**NEXTEL PUU PAPAA  
 ESMR SITE  
 EXHIBIT E-1**

2  
 A1

1" = 60'  
 (LOOKING NORTH)



2  
A2

**DETAIL ELEVATION (ALTERNATIVE MONOPOLE)**

1" = 20'-0"

(LOOKING SOUTHEAST)

**NEXTEL PUU PAPAA  
ESMR SITE  
EXHIBIT F-1**

PART 4 – SUMMARY DESCRIPTION OF THE AFFECTED  
ENVIRONMENT

#### 4. A. DESCRIPTION OF THE PROJECT ENVIRONMENT

##### PROJECT TMK PARCEL TMK: 4-4-012-001, portion of lot B.

The project site is within a portion of lot B, which has an area of 13,072 sq. ft. Lot B is a part of TMK parcel 4-4-012-001, which has a total area of 6,857,477 sq. ft.

The proposed Nextel site (lease area) will be approximately 1,120 sq. ft. The Nextel lease area is situated on sloping terrain approximately 450.0 to 460.0 feet elevation above sea level.

The lot B area has approximately 4 existing antenna facilities. The highest existing antenna in lot B appears to be a guyed lattice tower, with the antenna top 117 feet above adjacent grade, or 573.2 feet elevation above sea level. (This antenna is labeled "ANTENNA TOWER H" on the project drawings.)

##### ADJACENT PARCEL TMK: 4-4-012-002.

The access road continues uphill to the Puu Papaa summit in the adjacent TMK parcel 4-4-012-2, where the bulk of the existing telecommunications sites occur. Parcel 2 has a lot area of 76,041 sq. ft., and has zoning designations similar to parcel 1.

The high point of the summit is at the 540.0 foot elevation. The highest existing antenna in parcel 2 appears to be an antenna monopole, with the top of the antenna at 586.9 feet elevation above sea level. (This antenna is labeled "ANTENNA POLE A" on the project drawings.) There is also an existing lattice tower with whips and large microwave dishes (Labeled "MICROWAVE TOWER G" on the drawings).

There appears to be at least 6 antenna facilities and numerous power poles and beacons on parcel 2.

#### 4. B. SHORT TERM CONSTRUCTION EFFECTS ON ENVIRONMENT.

##### DESCRIPTION OF CONSTRUCTION EFFECTS.

Construction of this project includes clearing and grading within the immediate Nextel site area.. The monopole foundation will probably utilize drilled piers to minimize the required grading. The 11'-6 X 15'-0" prefabricated equipment building will be supported on a smaller drilled pier foundation. The construction period will be approximately 1 month.

Any construction noise generated is not a factor, due to the background noise level of the H-3 highway, and the buffer distance to the nearest residential areas.

Vehicular traffic will not be significantly affected, since construction staging will be entirely on private property.

There are no residences, businesses, schools or other public facilities in close proximity to the site which could be affected by the proposed construction.

##### EROSION CONTROL.

The existing drainage patterns of the hillside will be generally retained, except in the vicinity of the pier foundations. The project soil report, when commissioned, will address erosion issues if any, as well as specific foundation design parameters.



#### 4. C. VISUAL ENVIRONMENT.

##### AFFECTED VISUAL ENVIRONMENT.

The primary environmental impact of the proposed project is the effect on the visual environment. By nature of their functional requirements, telecommunications antennas must be elevated above the areas serviced.

The applicant is sensitive to the community's concern of the visual effects of antennas in the natural environment. The prominence of Puu Papaa dictates that any antenna placed upon it will be seen from many areas. The proposed Nextel project site is one of the last lease areas available for an antenna facility. Because it is situated below the summit, a 130 foot height antenna pole will be required for proper coverage over and around the top of Puu Papaa.

The visual impact of the proposed coverage antenna is documented in the following sequence of site photographs.

An index to site photograph locations is provided in Exhibit G. A commentary of the site photographs and visual impact is as follows:

(Exhibit H) Photo 1 - Kamehameha Hwy. at Kaneohe Bay Drive. The proposed Nextel antenna pole will barely be visible from this major intersection.

(Exhibit H) Photo 2 - Telephoto shot from Photo 1 vantage point. Most of the project site photos are also taken with a 90 mm lens to better illustrate the ridge site features. The visual impact of the proposed antenna pole will be negligible from this distance.

(Exhibit I) Photo 3 - Kamehameha Hwy. at Kalaniana'ole Hwy. Puu Papaa is not visible from Castle Junction.

(Exhibit I) Photo 4 - Kaneohe Bay Drive near Hako St. The proposed antenna pole will be visible from some vantage points along Kaneohe Bay Drive.

(Exhibit J) Photo 5 - Kalaniana'ole Hwy. at Kailua Rd. The proposed antenna pole will be visible from this major intersection.

(Exhibit J) Photo 6 - Telephoto shot from Photo 5 vantage point. The visual impact of the pole will be relatively small from this distance.

(Exhibit K) Photo 7 - Mokulua Drive at scenic lookout southeast of Kailua Beach Park. Puu Papaa is a prominent feature in this vista. The proposed antenna pole will be discernible.

(Exhibit K) Photo 8 - Telephoto shot from Photo 7 vantage point. Same comment as photo 7.

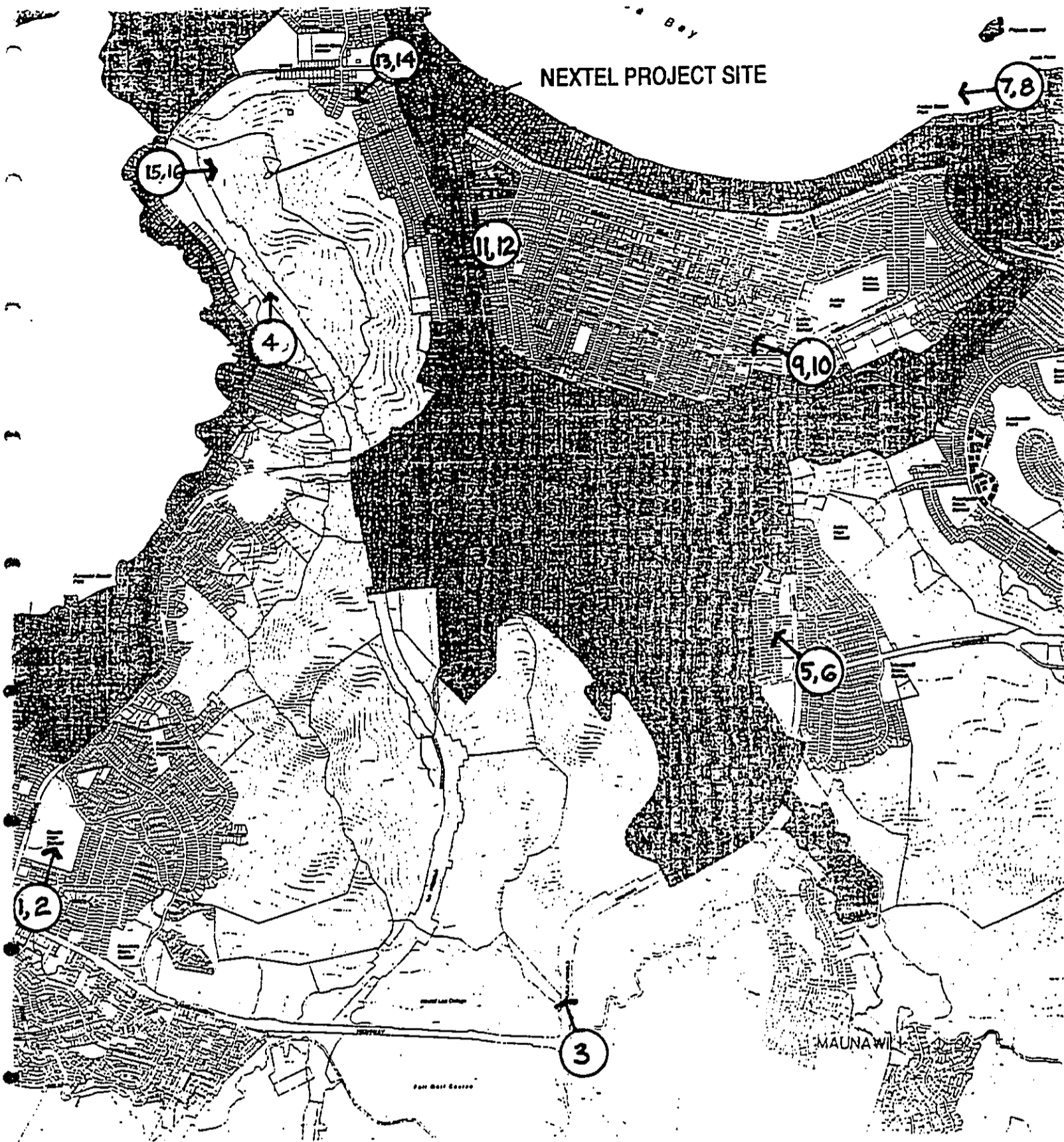
(Exhibit L) Photo 9 - Kailua Road at Kuulei Road. The proposed antenna pole will be visible or partially visible from points within Kailua town.

(Exhibit L) Photo 10 - Telephoto shot from Photo 9 vantage point. Same comment as photo 9.

(Exhibit M-1 Monopole) Photos 11 and 12 - Kainui Drive at Maluniu Drive. Views of the proposed antenna pole will be most prominent from the Kailua residential neighborhood directly east of Puu Papaa. A rendered simulation of an 130 foot height monopole has been superimposed on photo 12. The visual profile of the monopole would be somewhat slenderer than that of a lattice tower.

(Exhibit N-1 Monopole) Photos 13 and 14 - N. Kalaheo Avenue at Mokapu Road. The top of the proposed pole will just break the plane of the ridge top. A rendered simulation of an monopole has been superimposed on photo 14. The top of the monopole will just break the plane of the ridge top.

(Exhibit O-1 Monopole) Photos 15 and 16 - Kaneohe Bay Drive at H-3 onramp, near Paku Place. The proposed monopole will be entirely visible from this vantage point. The visual profile will be somewhat slenderer than that presented by a lattice tower. The equipment building will be visible; however the greater part of the equipment building will be situated below the silhouette of the ridgeline. The equipment building will be painted to blend in with the hillside.  
This represents one of the most direct views of the monopole.



NEXTEL PROJECT SITE

INDEX TO SITE PHOTOS

NEXTEL PUU PAPAA  
ESMR SITE

EXHIBIT 6

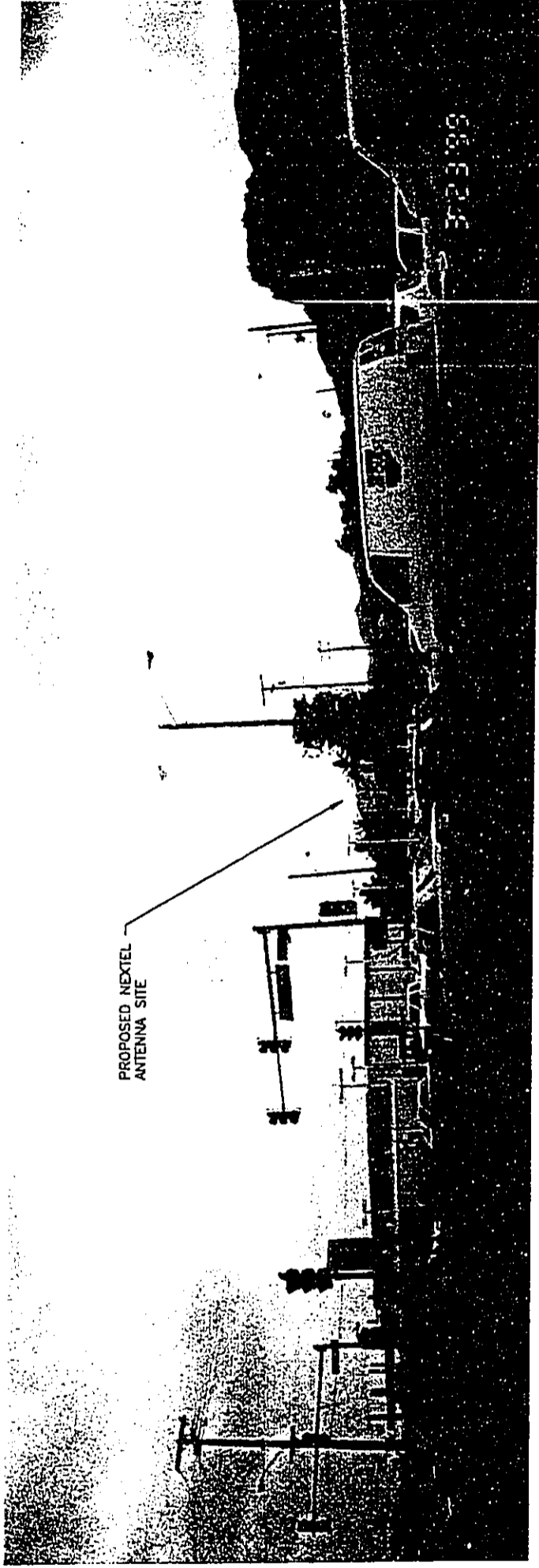


PHOTO 1 - KAMEHAME HWY AT KAMEOHE BAY DRIVE (Proposed antenna will be barely visible)

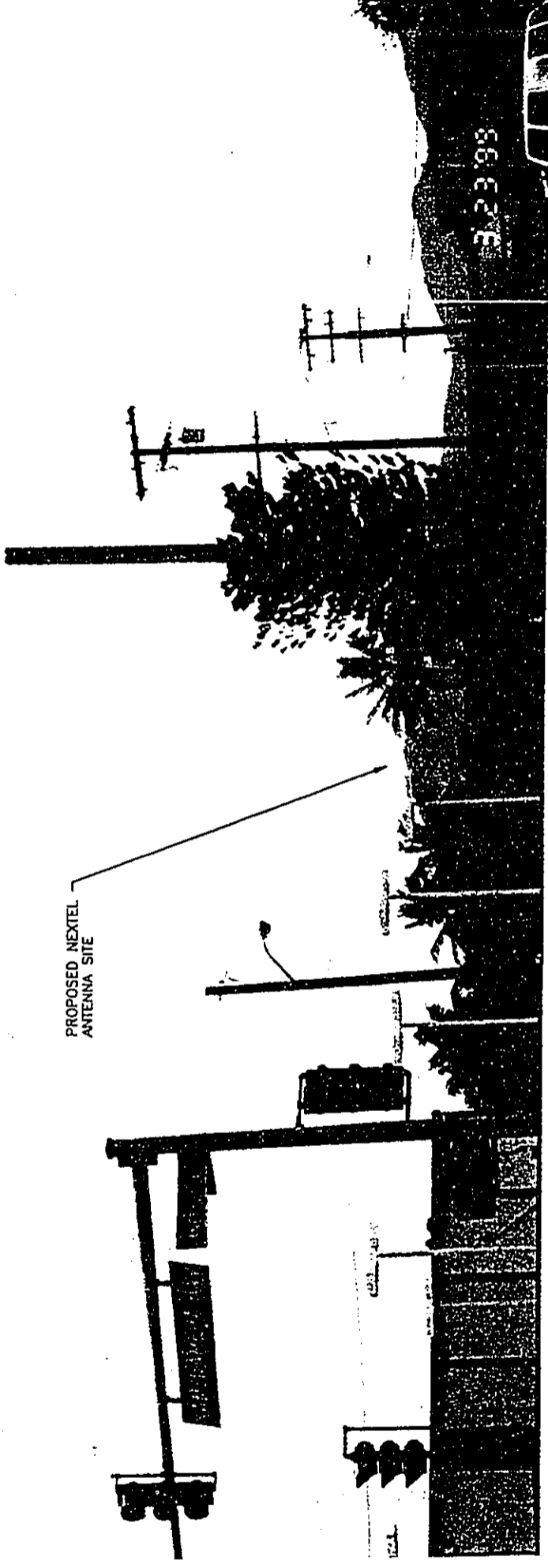


PHOTO 2 - TELEPHOTO SHOT FROM PHOTO 1 VANTAGE POINT (90 mm lens)

EXHIBIT H



PHOTO 3 - KAMEHAMEHA HWY AT KALANIANAOLE HWY (Site is not visible)

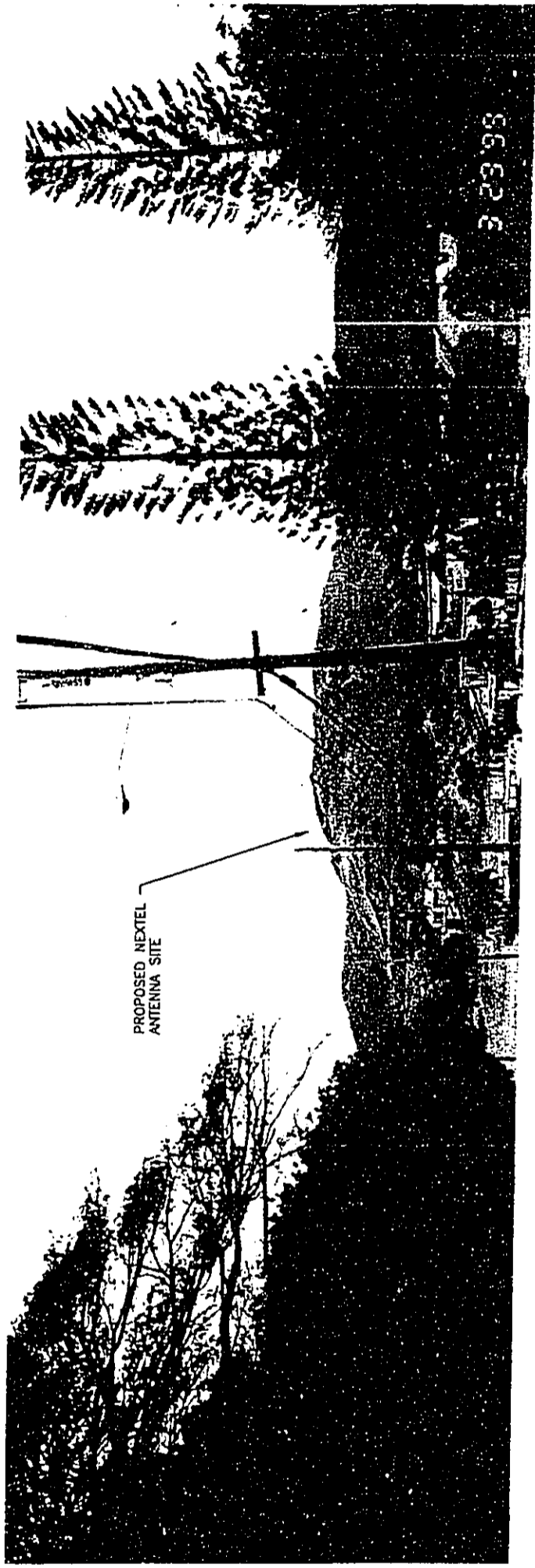


PHOTO 4 - KAMECHE BAY DRIVE NEAR HAKO ST.

EXHIBIT I

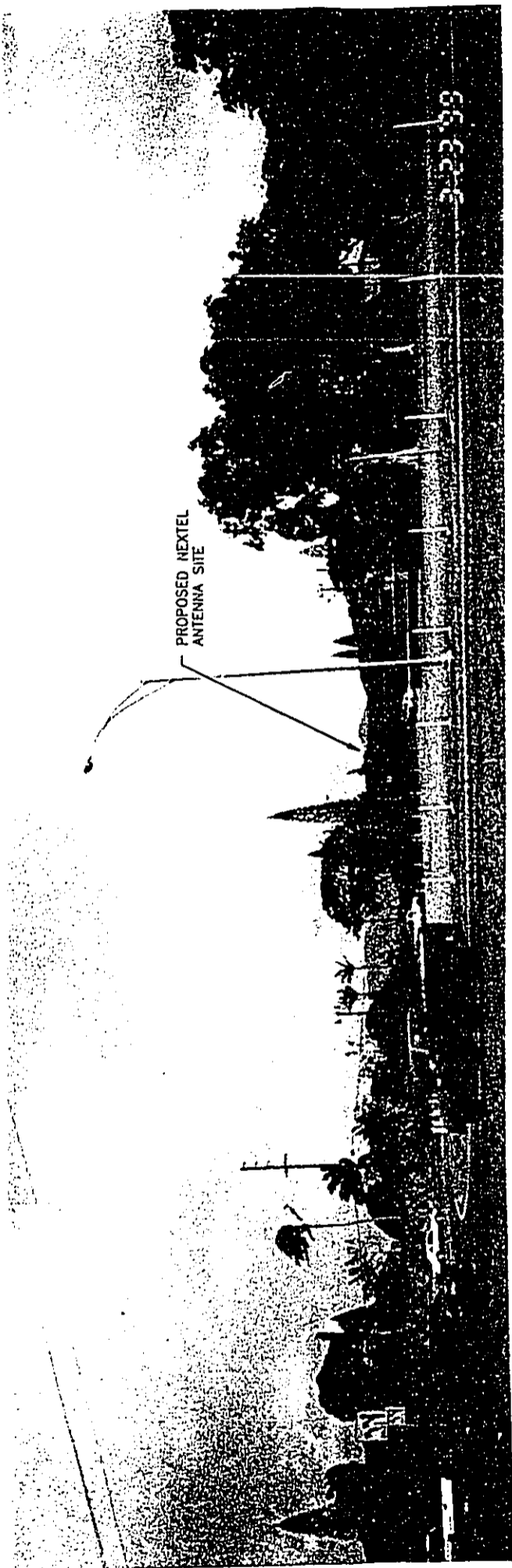


PHOTO 5 - KALAMIANACILE HWY AT KAILUA RD (Proposed Nextel antenna will be visible)

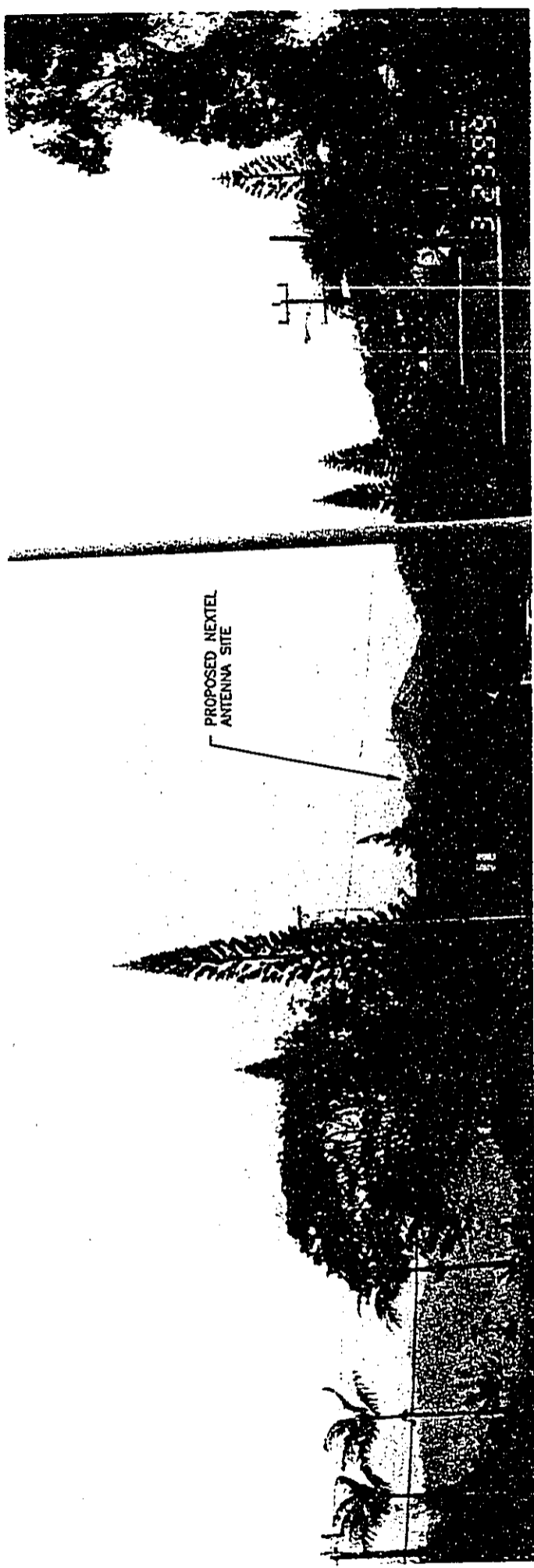


PHOTO 6 - TELEPHOTO SHOT FROM PHOTO 5 VANTAGE POINT (30 mm lens)

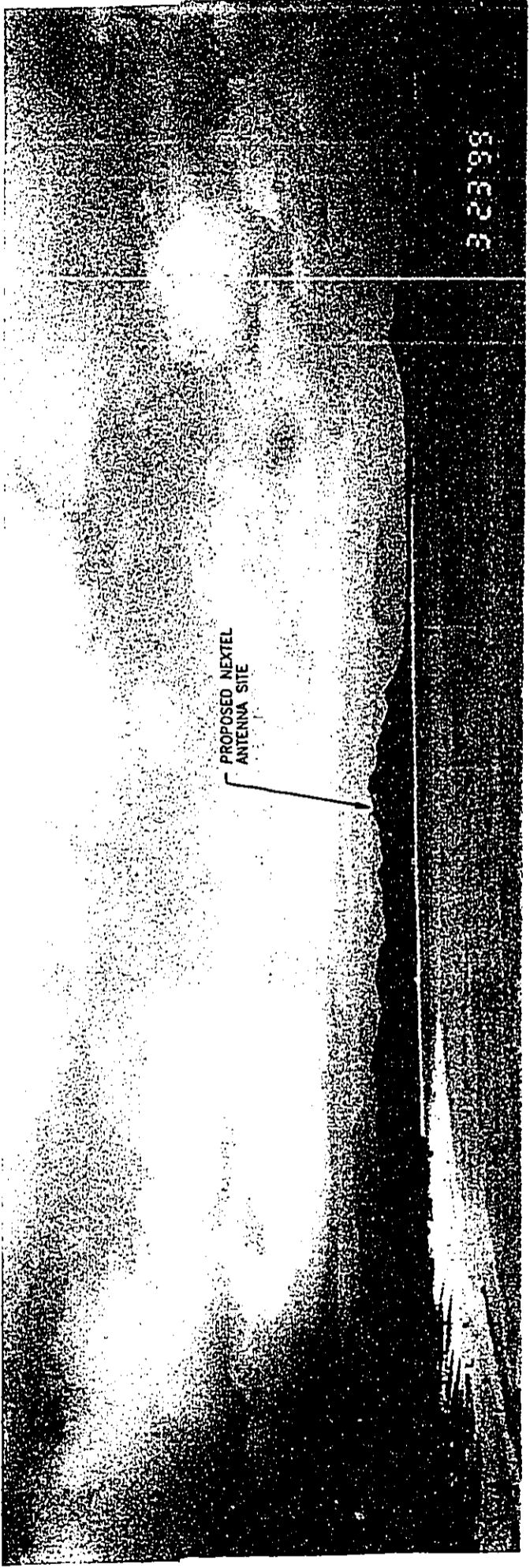


PHOTO 7 - MOKULUA DR AT SCENIC LOOKOUT EAST OF KAILUA BEACH PARK (Proposed Nextel antenna will be visible)

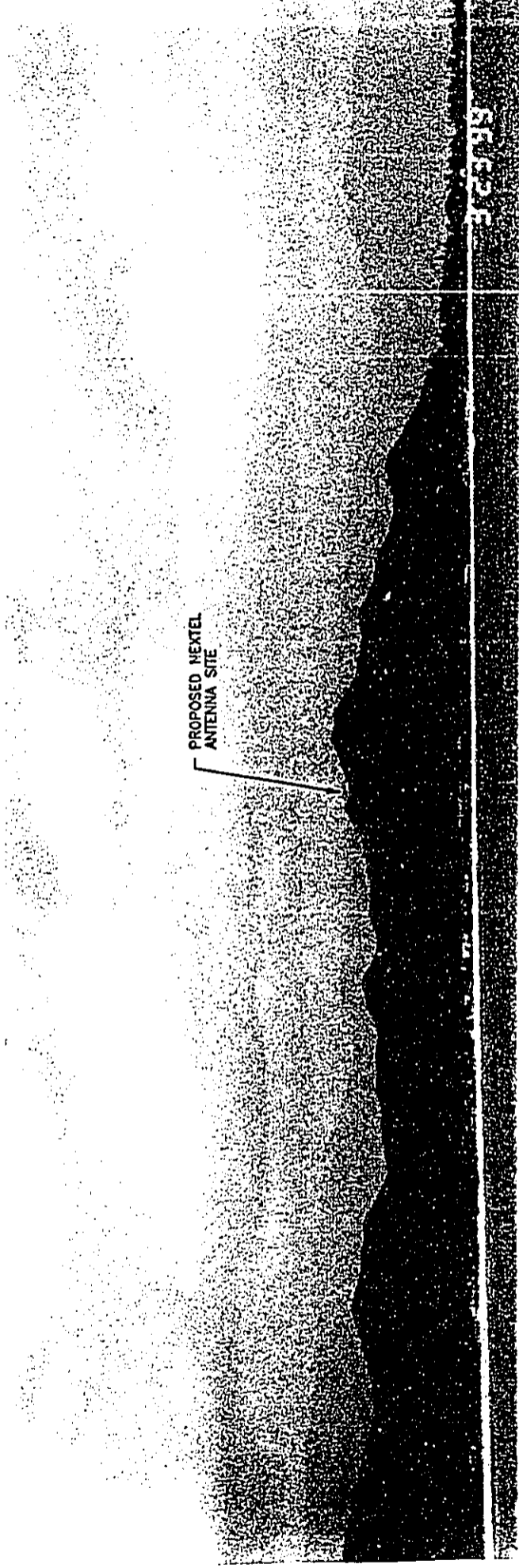


PHOTO 8 - TELEPHOTO SHOT FROM PHOTO 7 VANTAGE POINT (90 mm lens)

EXHIBIT K

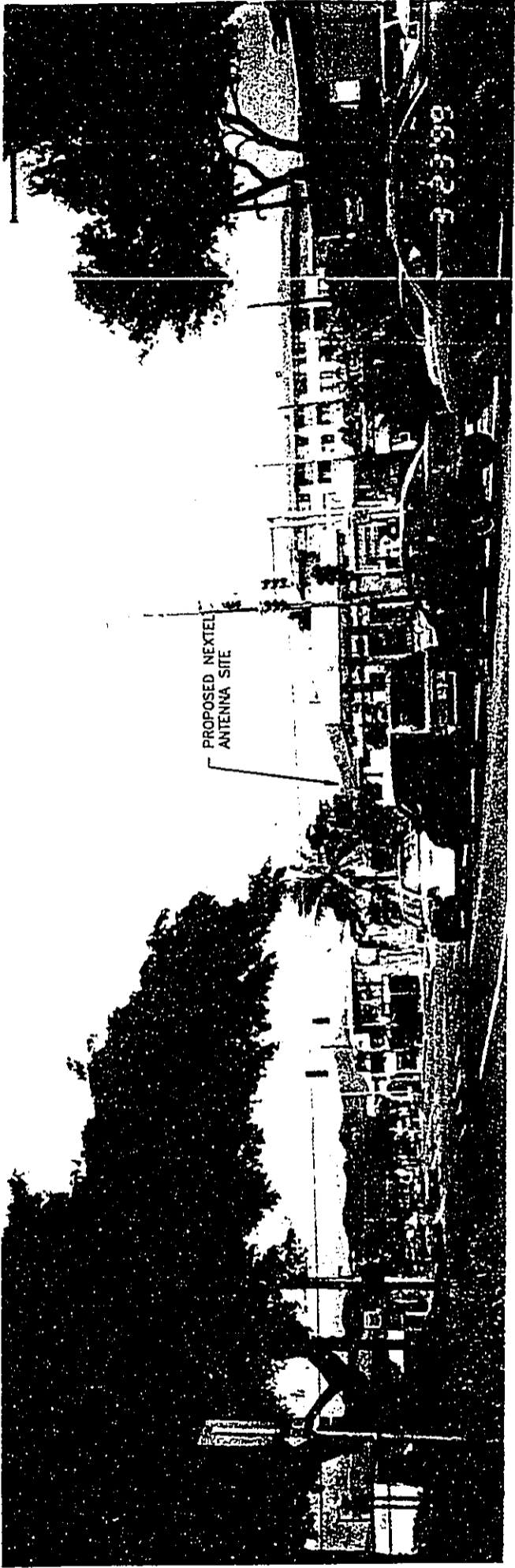


PHOTO 9 - KAILUA RD. AT KULELEI RD. (Proposed Nextel antenna will be visible)

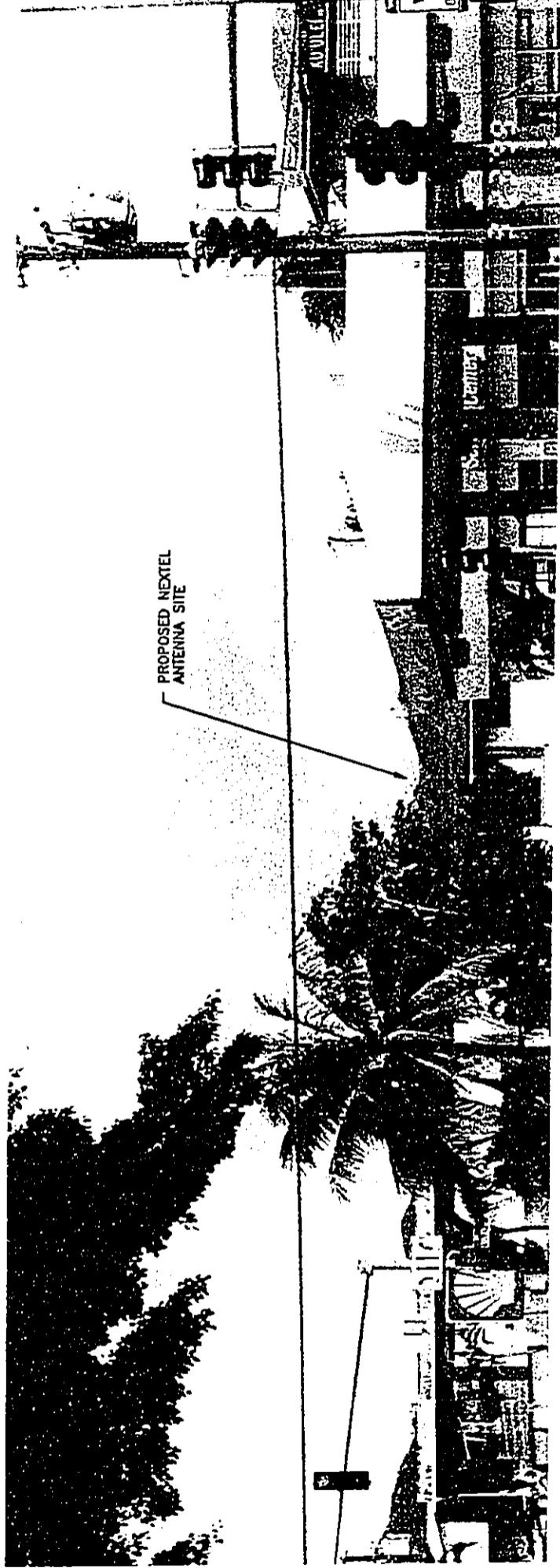


PHOTO 10 - TELEPHOTO SHOT FROM PHOTO 9 VANTAGE POINT (90 mm lens)

EXHIBIT L



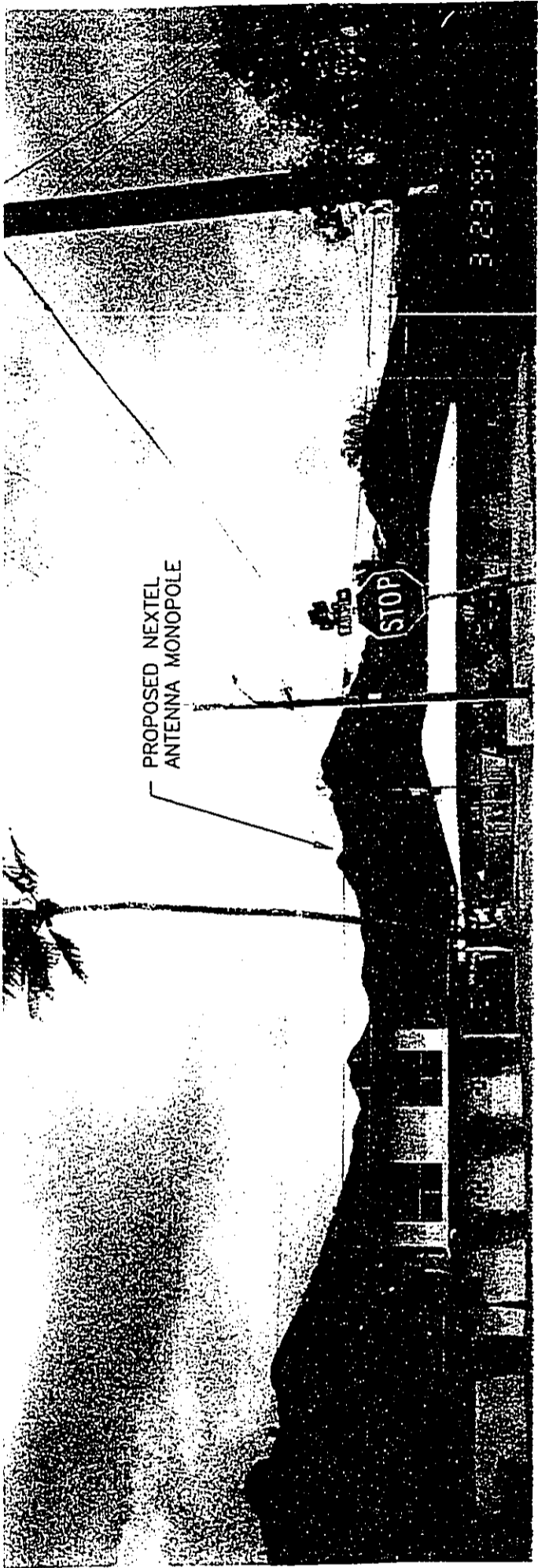


PHOTO 11 - KAINUI DRIVE AT MALUNUI DRIVE (Proposed Nextel antenna will be visible)

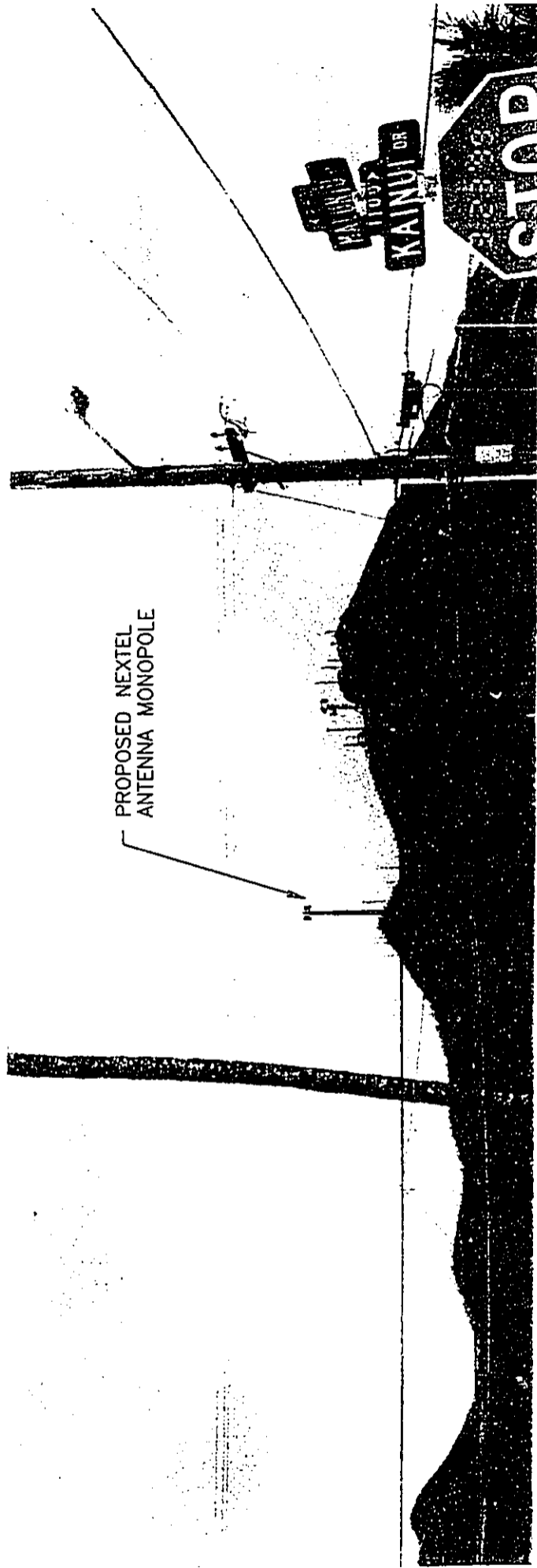


PHOTO 12 - TELEPHOTO SHOT FROM PHOTO 11 VANTAGE POINT (30 mm lens)

(ALTERNATIVE MONOPOLE)

EXHIBIT M-1

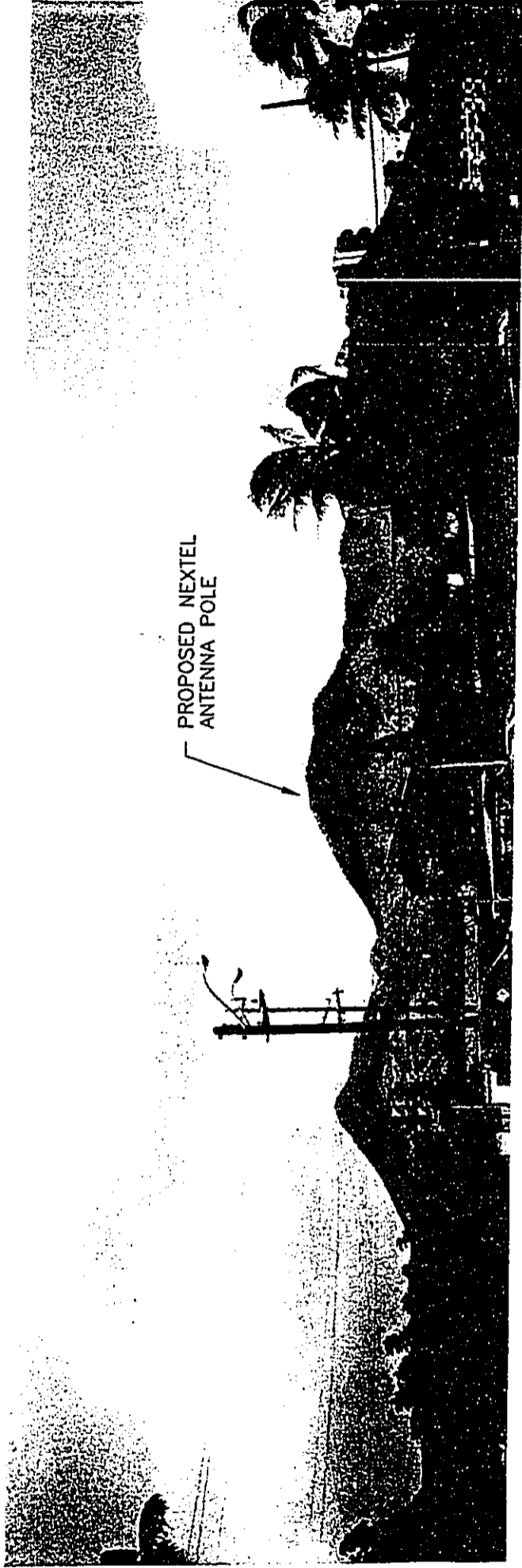


PHOTO 13 - N. KALAHIEO AVE. AT MOKAPU RD. (Proposed Nextel antenna tower will be partially visible)

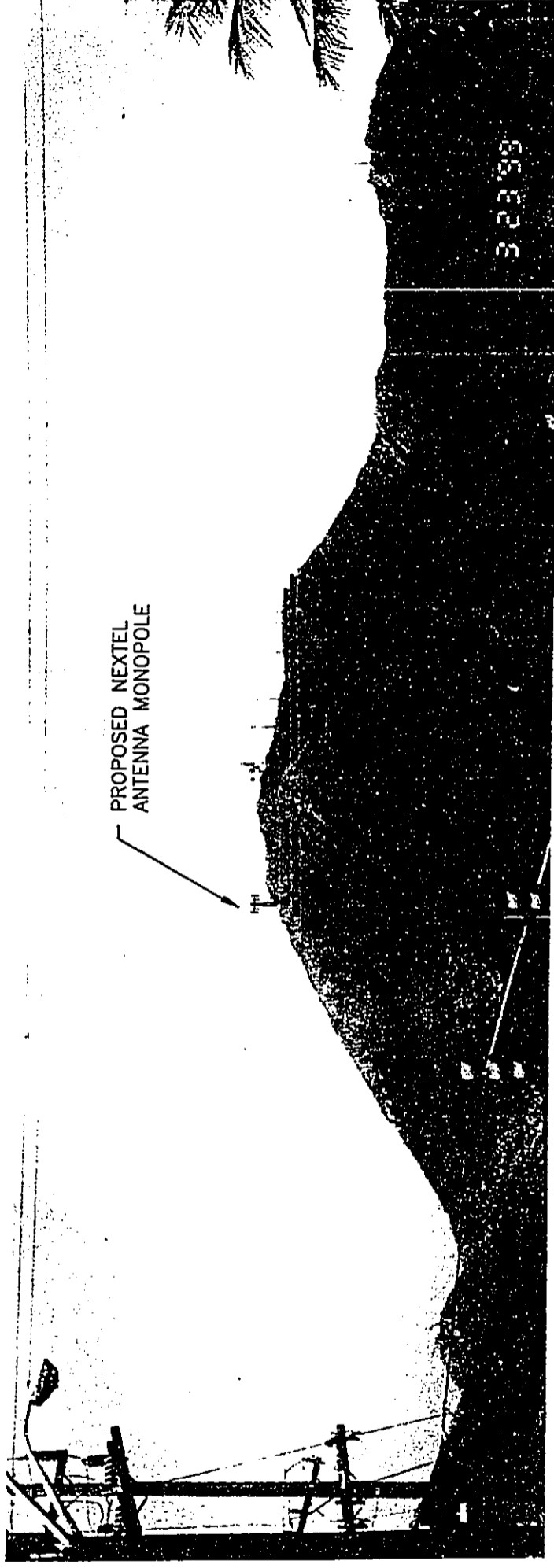


PHOTO 14 - TELEPHOTO SHOT FROM PHOTO 13 VANTAGE POINT (90 mm lens) (ALTERNATIVE MONOPOLE) EXHIBIT N - 1

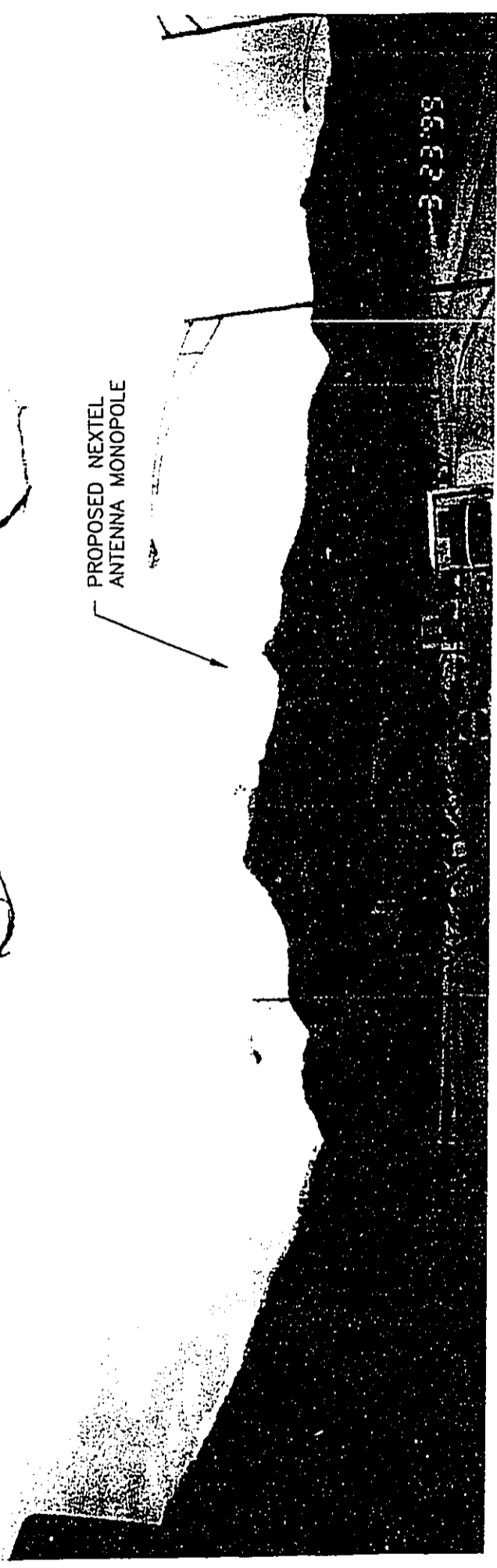


PHOTO 15 - KANEHOHE BAY DRIVE AT H-3 ONRAMP, NEAR PAKU PLACE

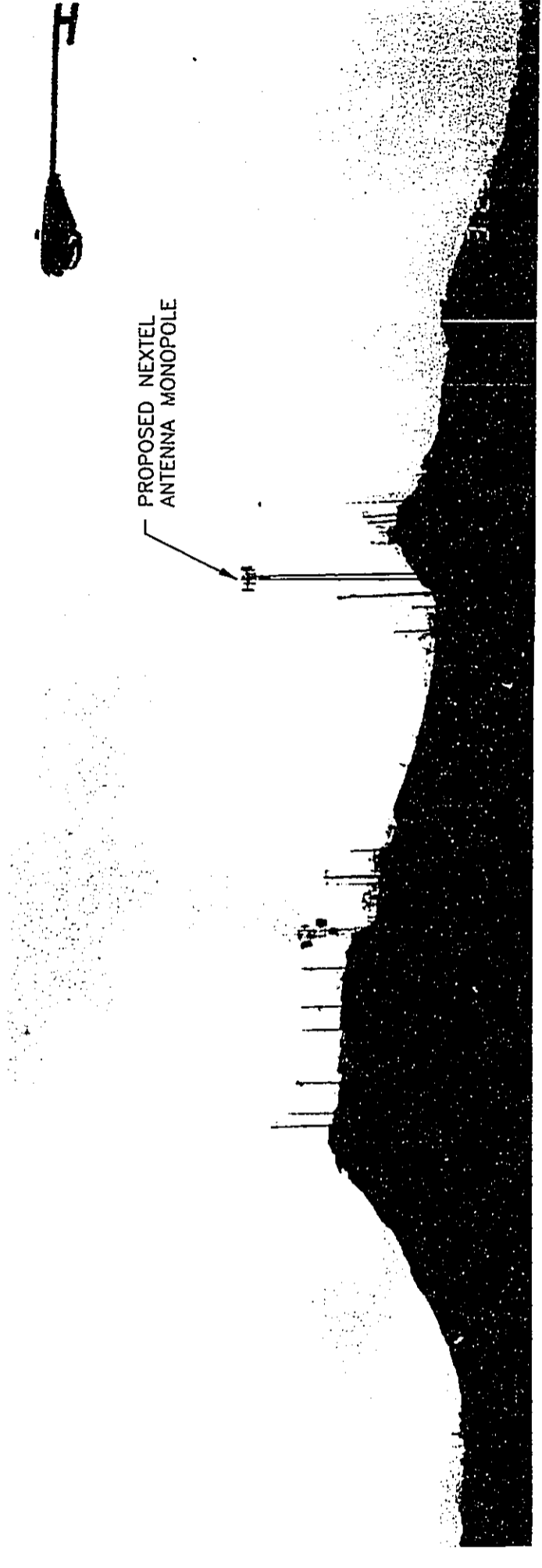


PHOTO 16 - TELEPHOTO SHOT FROM PHOTO 15 VANTAGE POINT (90 mm lens)

PART 5 – IDENTIFICATION AND SUMMARY OF IMPACTS  
AND ALTERNATIVES CONSIDERED

#### 5. A. VISUAL IMPACTS

The most significant impact of the project will be the visual impact of the proposed antenna tower. The monopole will be very visible from the Kailua residential area to the east of Puu Papaa. The monopole will also be visible from the H-3 freeway, and from some vantage points along Kaneohe Bay Drive to the west of the ridge.

The project's prefabricated equipment building will not be visible from the Kailua neighborhood. The equipment building will be visible from certain points along the H-3 and Kaneohe Bay Drive; however for the most part, the building will not be seen in silhouette above the ridge line and will be painted to blend in with the hillside.

## 5. B. ALTERNATIVES CONSIDERED

The applicant has considered numerous alternative antennna sites in the area.

### Alternative sites in low lying areas below Puu Papaa.

The prominence of Puu Papaa also contributes to a problem in developing a proper ESMR network of the area. Multiple sites may be required for alternative low lying sites in the surrounding communities, contributing to difficulties in "handing off" wireless communications around the ridge. The low lying areas around Puu Papaa are predominantly single family residential communities or occur within the SMA, with few appropriate sites for an antenna facility. The applicant has not been successful in finding workable sites below Puu Papaa.

### Co-location on existing tower on Puu Papaa.

The applicant has endeavored to negotiate a co-location of its antennas on an existing monopole or tower, with the existing wireless carriers and utilities on Puu Papaa. The applicant has been unsuccessful in pursuing a co-location due to technical difficulties or compatibility problems with the existing carriers. Most of the existing antenna poles or towers are too short, or incapable of accomodating additional antennas because of structural limitations or because of radio interference problems.

The applicant has approached GTE Hawaiian Tel, GTE Wireless of the Pacific, Sprint PCS (formerly PrimeCo), VoiceStream, and Hawaiian Wireless.

### 130 foot monopole.

The applicant has considered a 130 foot height monopole, in lieu of the proposed tri-leg lattice tower. A monopole configuration has been analyzed and designed for resistance to wind movement. A monopole would have a more slender profile than a lattice tower, and the visual impact may be significantly less.

### No build alternative.

Denial of the project will impose a severe hardship on the applicant's ability to provide the public and community residents with ESMR service. Denial of the project will result in an area of inadequate or marginal coverage in the applicant's windward Oahu network.

PART 6 – PROPOSED MITIGATION MEASURES

#### 6. A. PROPOSED MITIGATION MEASURES - VISUAL IMPACTS

The proposed Nextel site's lower position relative to the ridge high point requires that the proposed antenna pole be 130 feet above its adjacent grade. The applicant recognizes that the proposed pole will have a visual impact on the surrounding community. The applicant submits the following measures and considerations toward mitigation of the visual impact:

- The proposed monopole will be installed such that the top of the pole will not extend above the elevation of the highest existing antenna on Puu Papaa.
- The proposed monopole can be painted so as much as possible to blend in with the sky.
- The proposed equipment building will be painted to blend in with the hillside.
- The proposed pole will be situated on a ridge occupied by existing antenna facilities. The pole location will be a consolidation of radio facilities in one general location. The proposed Nextel site is the last available lease area for an antenna on the ridge.
- The applicant will utilize a 130 foot height monopole in lieu of the lattice tower, which would result in a slimmer profile, with less visual impact.
- The proposed monopole will not be required to have aviation warning lights or beacons and will not be required to be painted the highly visible red and white.
- Landscaping will be utilize to minimize the visibility of the equipment building and monopole .



## 6. B. PROPOSED MITIGATION MEASURES - OTHER IMPACTS

The project will produce some relatively minor short term environmental impacts. Some construction noise may be produced at times over 1 month construction period. The noise is anticipated to be less than the background noise of the H-3 freeway and other thoroughfares that lie between the ridge top site and the surrounding neighborhoods.

If short term erosion is evident around the tower foundations, bio-textile fabrics or other measures may be introduced.

PART 7 – FINDINGS AND REASONS SUPPORTING AN  
ANTICIPATED FINDING OF NO SIGNIFICANT IMPACT

The proposed project is not expected to cause significant impacts to the environment, as addressed in the Hawaii Administrative Rules, Title 11, Chapter 200.

7.A. THE PROPOSED PROJECT WILL NOT INVOLVE AN IRREVOCABLE COMMITMENT TO LOSS OR DESTRUCTION OF ANY NATURAL OR CULTURAL RESOURCES.

- The project's telecommunications facility will be situated on a hillside occupied by existing antenna facilities. No known significant natural or cultural resource exists on the project site.

7.B. THE PROPOSED PROJECT WILL NOT CURTAIL THE RANGE OF BENEFICIAL USES OF THE ENVIRONMENT.

- The project will not significantly impact the uses and enjoyment of the natural environment. The existing telecommunications sites are fenced off and restricted to the public.

7.C. THE PROPOSED PROJECT WILL NOT CONFLICT WITH THE STATE'S LONG-TERM ENVIRONMENTAL POLICIES OR GOALS AND GUIDELINES AS EXPRESSED IN CHAPTER 344, HRS, AND ANY REVISIONS THEREOF.

- The proposed project will not conflict with the State's environmental policies and the State Plan. The project will have no significant impact on natural and cultural resources. The project will emit no noise or pollutants.

7.D. THE PROPOSED PROJECT WILL NOT ADVERSELY AFFECT THE ECONOMIC WELFARE, SOCIAL WELFARE, OR PUBLIC HEALTH OF THE COMMUNITY OR STATE.

- The proposed project will benefit the economic and social life of the community, by fostering better communications between people, businesses and social groups. Public health will not be impacted.

7.E. THE PROPOSED PROJECT WILL NOT INVOLVE SUBSTANTIAL SECONDARY IMPACTS, SUCH AS POPULATION CHANGES OR EFFECTS ON PUBLIC FACILITIES.

- The project will have no impact on population changes or shifts. It will have no impact on other public facilities.

7.F. THE PROPOSED PROJECT WILL NOT INVOLVE A SUBSTANTIAL DEGRADATION OF ENVIRONMENTAL QUALITY.

- The project will not substantially degrade the environment. It will not introduce pollutants into the environment.

7.G. THE PROPOSED PROJECT WILL NOT HAVE SIGNIFICANT CUMULATIVE IMPACTS OR INVOLVE A COMMITMENT FOR LARGER ACTIONS.

- The proposed project will not have significant cumulative detrimental impacts. The existing antenna towers at the site represent a consolidation of telecommunications facilities in one general area.

7.H. THE PROPOSED PROJECT WILL NOT SUBSTANTIALLY AFFECT ANY RARE, THREATENED OR ENDANGERED SPECIES OF FLORA OR FAUNA OR HABITAT.

- There are no known rare, threatened or endangered flora or fauna within the project site.

7.I. THE PROPOSED PROJECT WILL NOT DETRIMENTALLY AFFECT AIR OR WATER QUALITY OR AMBIENT NOISE LEVELS.

- The project will not introduce pollutants into the air, water or soil. The project will not have any impact on ambient noise levels. The project will comply with all Department of Health rules and regulations regarding noise and emissions.

7.J. THE PROPOSED PROJECT IS NOT 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 is not located in a flood plain, tsunami zone, beach or coastal area. The proposed project will be located directly adjacent to existing constructed facilities.

7.K. THE PROPOSED PROJECT WILL NOT WILL NOT SUBSTANTIALLY AFFECT SCENIC VISTAS AND VIEWPLANES IDENTIFIED IN COUNTY OR STATE PLANS OR STUDIES.

- The project will not obstruct any view planes identified by the County or State.

7.L. THE PROPOSED PROJECT WILL NOT REQUIRE SUBSTANTIAL ENERGY CONSUMPTION.

- The project's telecommunications equipment will not require substantial energy consumption.

CONSUMPTION

With relevance to the State Conservation District goals:

THE PROPOSED LAND USE IS CONSISTENT WITH THE PURPOSE OF THE CONSERVATION DISTRICT.

The proposed land use is consistent with the purpose of conserving the important natural resources of the State. One of these vital resources is the serenity and visual beauty of the natural environment. The proposed antenna will be situated on a ridge occupied by existing antenna facilities.

THE PROPOSED LAND USE IS CONSISTENT WITH THE OBJECTIVES OF THE SUBZONE OF THE LAND ON WHICH THE USE WILL OCCUR.

- The project is located in the General (G) subzone. The project is an allowable use as a Public Purpose Use, providing communications systems which will benefit the public.
- The project will benefit the general public by providing wireless communications, which can foster better personal, business and social relations.

THE PROPOSED LAND USE WILL NOT CAUSE SUBSTANTIAL ADVERSE IMPACT TO EXISTING NATURAL RESOURCES WITHIN THE SURROUNDING AREA.

- No significant natural resource will be consumed or depleted by the proposed project.

THE PROPOSED LAND USE WILL BE COMPATIBLE WITH THE LOCALITY AND SURROUNDING AREAS.

- The project telecommunications facility will be situated on a hillside already devoted to that use.

THE INTENSITY OF LAND USES IN THE CONSERVATION DISTRICT WILL NOT BE INCREASED.

- The project is an un-manned antenna facility, generating no other private, public or business use. Maintenance visits will occur twice a month. There will be no impact on water or sewer facilities.

THE PROPOSED LAND USE WILL NOT BE MATERIALLY  
DETRIMENTAL TO THE PUBLIC HEALTH, SAFETY OR WELFARE.

- The project will be situated in a fenced off ridge which is restricted to the public.

THE EXISTING PHYSICAL AND ENVIRONMENTAL ASPECTS OF THE  
LAND, SUCH AS NATURAL BEAUTY AND OPEN SPACE  
CHARACTERISTICS, WILL BE PRESERVED.

- The project's antenna will be visible and situated on a prominent ridge. However the ridge is an existing telecommunications area. The project's antenna will be consolidated in location with the existing antennas, thereby preserving the open spaces elsewhere.

THE PROPOSED LAND USE COMPLIES WITH PROVISIONS AND  
GUIDELINES CONTAINED IN CHAPTER 205A, HAWAII REVISED  
STATUTES, ENTITLED "COASTAL ZONE MANAGEMENT."

- The project is not located within a Special Management Area (SMA).

PART 8 – LIST OF PROJECT PERMITS AND APPROVALS  
REQUIRED

The proposed project will require the following permits and approvals:

- Environmental Assessment (for anticipated negative declaration)  
Department of Land and Natural Resources  
State of Hawaii
- Conservation District Use Permit  
(Board Permit or other permit as determined by DLNR)  
Department of Land and Natural Resources  
State of Hawaii
- Building Permit  
Department of Planning and Permitting  
City and County of Honolulu
- FAA approval
- FCC approval



PART 9 – COMMENTS TO THE DRAFT ENVIRONMENTAL  
ASSESSMENT

DEPARTMENT OF PLANNING AND PERMITTING  
CITY AND COUNTY OF HONOLULU450 SOUTH KING STREET • HONOLULU, HAWAII 96813  
TELEPHONE: (808) 523-4414 • FAX: (808) 527-6742JEREMY HARRIS  
MAYORJAN NAOE SULLIVAN  
DIRECTORLORETTA K C CHIEE  
DEPUTY DIRECTOR

June 10, 1999

1999/CLOG-2900 (ST)

Mr. Albert Murakami, AIA  
1765 Ala Moana Boulevard, #986  
Honolulu, Hawaii 96815

Dear Mr. Murakami:

Nextel's Enhanced Specialized Mobile Radio (ESMR)  
Site at Puu Papaa, Kaneohe  
Tax Map Key: 4-4-12: por. 2

We have reviewed the information for the above-referenced project received on April 30, 1999, and apologize for the delayed response.

Although the proposed facility would be located within the State Conservation District, where we have no jurisdiction, we would like to point out that the 1987 Coastal View Study prepared for our Department did designate Puu Papaa as an "Important Coastal Land Form" and that a 130-foot antenna tower would have negative visual impacts which warrant careful consideration. Please be advised that we will provide further comments on this project through the Conservation District Use Permit (CDUP) process.

Thank you for the opportunity to review this matter. Should you have any questions, please contact Steve Tagawa of our staff at 523-4817.

Very truly yours,

Handwritten signature of Arthur Chubbuck in cursive.

For JAN NAOE SULLIVAN  
Director of Planning  
and Permitting

JNS:am

FORM No. 5045

DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET • HONOLULU, HAWAII 96814  
TELEPHONE: (808) 522-4414 • FAX: (808) 522-6742

SEP 22 9 52 AM '99

JEREMY HARRIS  
MAYOR



JAN NAOE SULLIVAN  
DIRECTOR

2101 HIAKUA CIRCLE  
DEPUTY DIRECTOR

1999/CLOG-5345 (ST)

SEP 22 10:38  
STATE OF HAWAII

September 21, 1999

Mr. Timothy E. Johns, Director  
Department of Land and Natural Resources  
State of Hawaii  
P. O. Box 621  
Honolulu, Hawaii 96809

Attn: Lauren Tanaka

Dear Mr. Johns:

Conservation District Use Application (CDUA)  
and Draft Environmental Assessment (EA)  
Nextel Communication Antenna at Puu Papaa  
Kaneohe, Oahu, Tax Map Key 4-4-12: por. 1

We have reviewed the information for the above-referenced project received on August 13, 1999, and provide the following comments in addition to those contained in our previous letter dated June 10, 1999, (see attached):

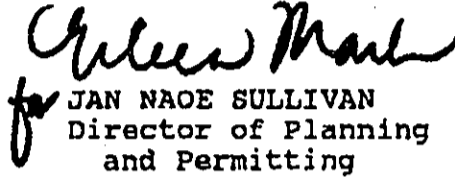
- The Development Plan Land Use Map (DPLUM) are separate land use criteria from zoning and should be appropriately reflected in the Final EA.
- The Final EA should also address whether the proposed project is consistent with County plans, especially with respect to the current Koolaupoko DP and the current effort to revise them.
- The Final EA should include consultation with the FCC, FAA and the Marine Corps Base of Hawaii (MCBH).
- Clarification should be provided on why a height of 586.0 FMSL is required for this antenna to provide proper service.

Mr. Timothy E. Johns, Director  
Page 2

- The Final EA should quantify the steepness of the proposed site.

Should you have any questions, please contact Steve Tagawa of our Land Use Approvals Branch at 523-4817.

Very truly yours,

  
for JAN NAOE SULLIVAN  
Director of Planning  
and Permitting

JNS:lg  
Attachment

cc: Blueberry/Architecture  
Office of Environmental Quality Control

DM 7600

20  
BENJAMIN J. CAYETANO  
GOVERNOR



3163  
RECEIVED  
DIVISION OF  
ENVIRONMENTAL QUALITY CONTROL  
SEP 20 3 25 PM '99

GENEVIEVE SALMONSON  
DIRECTOR

STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET  
SUITE 702  
HONOLULU, HAWAII 96813  
TELEPHONE (808) 886-4188  
FACSIMILE (808) 886-4188

September 14, 1999

RECEIVED  
SEP 20 11:54 AM '99  
STATE OF HAWAII  
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

Mr. Tim Johns, Chair  
Department of Land and Natural Resources  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Johns:

Subject: Draft Environmental Assessment for the Nextel  
Communications Antenna Facility, Oahu

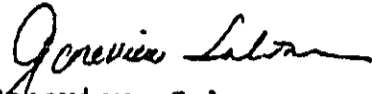
Thank you for the opportunity to review the subject document. We have the following questions and comments.

1. We understand that HECO also has plans to install a communications tower at Puu Papaa. Please consult with HECO on this matter.
2. Please provide a letter from the FAA stating that they will not be imposing any conditions (such as color of the tower and provision of warning lights) on the project.
3. If the tower is built, we recommend that the monopole alternative be selected to reduce the visual impacts.
4. If feasible, we also recommend planting trees at strategic locations to reduce the visual impacts.
5. Please describe whether the project is anticipated to pose any radio frequency radiation health hazard to the general public.
6. Please review the Honolulu Department of Planning and Permitting's 1987 Coastal View Study and summarize its findings concerning Puu Papaa in the environmental assessment.

Mr. Johns  
Page 2

Should you have any questions, please call Jeyan Thirugnanam at  
586-4185.

Sincerely,

  
Genevieve Salmonson  
Director

c: Nextel  
Blueberry Architecture

SEP 23 99 15:15 NO.006 P.07

LAND MANAGEMENT DIV. ID:808-587-0455



# LIFE OF THE LAND

*Ua Mau Ke Ea O Ka 'Aina I Ka Pono*  
Hawaii's own local Community Action Group  
Protecting our Fragile Natural & Cultural Resources  
through Research, Education, Advocacy & Litigation

September 20, 1999

Albert Murakami  
Nextel Communications  
c/o Blueberry/Architecture  
1765 Ala Moana Boulevard, #986  
Honolulu, HI 96815

Lauren Tanaka  
DI.NR  
P.O. Box 621  
Honolulu, HI 96809

re: Nextel Communications Antenna Facility Draft EA

Aloha:

O'ahu has 8-10 companies that each want to build 60-80 antennae around the island. That is, 500 to 800 antennae are planned. Another 200 companies have recently filed papers with the Public Utilities Commission so that each company can compete for various regulated rights. At the OEQC planners meeting we asked about co-location as a way to limit the number of towers. The applicant wrote an amendment to the Draft EA, which stated in part:

"The applicant is willing to co-location of future antennas of other telecommunications providers on the project's proposed antenna tower. Co-location, under appropriate circumstances, is a means of consolidating antenna sites and reducing the potential number of required antenna towers. This application, however, is not predicated on future co-location, and the applicant would entertain co-location only as it deemed appropriate and desirable by the governing and reviewing agencies."

Thus the applicant feels that "co-location" is beyond the scope of this document. Life of the Land strongly disagrees. The applicant should come before state agencies with two things in hand: (1) the full listing of planned antennae sites; and (2) a plan for "co-location"

Questions:

- How many antennae has the Applicant built in Hawaii?
- How many of these have any form of co-location?

SEP 21 9 45 AM '99  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
HONOLULU, HAWAII

How many of the Applicant's antennas are co-located on other companies antennas?

How many antenna sites does the applicant plan to build in Hawaii in the next ten (10) years?

How does this square with the rising public outrage over ugly electrical and telecommunication towers despoiling our viewplanes?

How many of these sites (current & planned) are on ridges?

How many of these sites (current & planned) are on conservation land?

Please identify the people in the community you talked with about this plan.

Please identify cultural practitioners in the area who you talked with.

Reference: Kauai tower now target of more legal action. Anthony Sommer. Honolulu Star-Bulletin. August 31, 1999.

*Henry Curtis*

Henry Curtis

Executive Director



September 20, 1999

Nextel Communications  
c/o Blueberry/Architecture  
Attn: Albert Murakami  
1765 Ala Moana Boulevard, # 986  
Honolulu, HI 96815

Re: proposed Nextel facility at Puu Papaa

Dear Sir,

Writing as a lifelong windward resident, I must oppose the proposed Nextel antenna facility at Puu Papaa. While I recognize that Puu Papaa hosts numerous telecommunications installations, the facility proposed by Nextel is significantly larger and more visually intrusive than anything else currently installed. If approved, this installation will create a precedent for additional large installations as other telecommunication providers attempt to equal the radio coverage afforded to Nextel. The end result will be a proliferation of very large, unsightly, towers that will be visible from Enchanted Lakes to Kaneohe.

The current layout of antenna facilities at Puu Papaa is already unsightly, but is somewhat mitigated by the provider's use of wooden utility poles, generally topping off at about 40' above ground level. A lattice tower 130' tall will necessarily have a base dimension of at least 12' on a side. The width of the structure is a large part of its visibility to the surrounding community. The other wooden poles on the hill are less than 3' wide. This structure will be significantly larger than anything else on the hill. Given the seasonal variation in colors, from brown in summer to green in winter, it will be impossible to paint the tower to blend with its surroundings.

The applicant argues that the proposed tower will only be as tall as the current tallest structure on the hill. This current high point, however, is achieved by an approximately 40' wooden pole placed at the summit of the hill. The placement of the much larger Nextel tower significantly lower, in the saddle of the hill, does not create the same visual impact. If this argument is valid, then a communication provider could erect a 586' tower at the Aiea Park Shopping Center, because it is only as tall as the current tallest structure on the hill. While this sounds ridiculous, it is the logical extension of the applicant's argument.

The benefit to Nextel's subscribers of improved radio coverage does not in this case outweigh the visual impact to the entire community. The height and bulk of the proposed facility will be a significantly obtrusive addition to Puu Papaa and the application for a CDUP should be denied.

Sincerely,



Eric Schatz

cc: OEQC  
Department of Land and Natural Resources

47-058 Hono Kala St. #1  
Kahala, HI 96744

SEP 22 9 47 AM '99  
HONOLULU, HI

September 8, 1999

RECEIVED  
DIVISION OF  
LAND MANAGEMENT  
SEP 14 11 05 AM '99

TO: Lauren Tanaka  
State of Hawaii  
Department of Land and Natural Resources

FROM: Norman Ishikawa

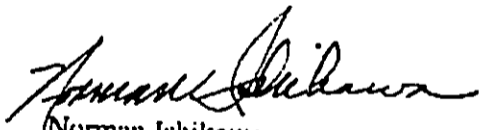
SUBJ: NEXTEL COMMUNICATIONS ANTENNA FACILITY

During a review of the Environmental Notice published by Office of Environmental Quality Control, I noted that Nextel Communications is proposing to construct an antenna facility at Puu Papaa ridge in Kaneohe, Oahu. I am writing this letter to inform you that existing communications antenna towers on Puu Papaa ridge are already causing interference with my cable television reception. In particular channels 19 and 20 are constantly being interrupted by the antenna towers transmissions. Oceanic Cable is aware of this problem.

Nextel Communications and all the other existing telecommunications facilities should be required to insure that their communications facilities will not cause interference to other type of communication systems, especially television cable receptions in the immediate surrounding neighborhood.

I live on Kainui Drive in Kailua and my back yard is the Oneawa drainage channel. I would recommend that as part of the Environmental Assessment that a survey of the neighborhood be conducted to determine the extent of the telecommunications interference during their transmissions.

I can be contacted at 263-8053 during the evenings or at 733-4300 during working hours.

  
Norman Ishikawa  
1353 Kainui Dr  
Kailua, HI 96734



## Lani-Kailua Outdoor Circle

P.O. Box 261  
Kailua, HI 96734

September 21, 1999

Lauren Tanaka  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, HI 96809

Re.; Nextel Communications proposed construction project on  
Puu Paa Ridge.  
TMK; (1) 4-4-012;001

Dear Ms. Tanaka:

Members of the Board of Directors of the Lani-Kailua Outdoor Circle have reviewed Nextel's project proposal for both the antenna tower and the alternative monopole. We have also viewed the ridge site from various locations in Kailua and Kaneohe. It is our unanimous opinion that either of these structures would be an unnecessary visual blight on an already marred view plane.

Your considered opposition to this project would be most appreciated.

Sincerely,

Holly Turl  
President

SEP 23 1999

Kailua Neighborhood Board

519 Wanaao Road  
Kailua, Hawaii 96734

Phone 263-6121

SEP 24 9 43 AM '99

September 22, 1999

Nextel Communications  
C/O Blueberry Architecture  
1965 Ala Moana Blvd. # 986  
Honolulu, Hawaii 96815

Post-It <sup>®</sup> Fax Note	7671	Date	10/9/99	# of pages	1
To	Bob Waga	From	Lanana Tanaka		
Co./Dept.	HOTEL	Co.	D. Waga		
Phone #		Phone #			
Fax #	833 10 21	Fax #			

Dear Sirs:

This is in response to your request for comments on the Draft Environmental Assessment for the communications tower at Puu Papaa, Kailua, Hawaii.

We have attached a copy of the policy that our Board uses to evaluate antenna requests. Formal Board action will follow our review of the application for a Conservation District Use Permit.

Sincerely,



Charles A. Prentiss, Chair  
Planning and Zoning Committee

cc DLNR, L. Tanaka

Enc

## **Kailua Neighborhood Board Planning and Zoning Committee**

### **Policy for Reviewing Communications Antennas**

This policy is based upon permit requirements established by the Department of Land Utilization. The minimum review criteria are as follows:

1. Requests that propose co-location (accommodating more than one provider) are preferred if they do not result in negative impacts, such as mass, height, or adverse affects on views.
2. Antennas should blend in rather than protrude.
3. No antenna should be visual in any coastal view.
4. A provider's complete system antenna plan should be provided before any single antenna is approved.
5. A copy of the visual impact analysis required by the City should be provided to the Board before any action is taken on the permit.

Charles A. Prentiss, Chair  
Planning and Zoning Committee

Fax Transmission

DATE: September 22, 1999

TO: Lauren Tanaka, D.L.N.R.

FAX: 587-0455

VOICE: 587-0385

FROM: Carolyn Heinrich, President, Kaneohe Outdoor Circle

FAX: 235-4660

VOICE: 235-4660

P.O. Box 32

KANEOHE.

96744

RE: Drall E. A. Nextel Communications Antenna Facility

SEP 23 2 03 PM '99

Lauren Tanaka  
Department of Land and Natural Resources  
P. O. Box 621  
Honolulu, Hawaii 96809

Post-it® Fax Note	7871	Date	9/23/99	# of pages	7
To	Bobs Usage	From	Lauren		
Co./Dept.	nextel	Co.	Land Dev.		
Phone #		Phone #	587-0385		
Fax #	9553467	Fax #			

Dear Ms. Tanaka:

The Kaneohe Outdoor Circle, represented as Na Leo Pohai, wishes to go on record as opposing Nextel Communication's proposed antenna on Puu Papaa. We agree that the ridge is very prominent in the landscape and viewplanes of both Kaneohe and Kailua. We do not condone the addition of any new antenna to the "numerous existing antenna facilities". In fact, every effort should be made to plan for the removal of the existing ones. How much of this equipment is still active and current, or have some of the companies left the state, leaving behind their "space trash"?

For the past several years, various telecommunications companies have sought the approval of The Outdoor Circle, (and other agencies) for many towers or antennas throughout the state. We have been supportive of those which were sensitive to our visual environment, painting them to blend with the background or initially placing them in an area that is not offensive, such as in or behind a grove of trees.

A lighted tower that is 130 foot tall, stretching 586 feet above sea level on a ridge highly visible from the communities on either side as well as to travelers on our highways is not a good neighbor!

Just two weeks ago, on September 9, The City Planning Commission approved the Koolaupoko Sustainable Communities Plan for the next 20 years. This document was prepared during two years of countless hours, energy and talent by the City, hired planners, individual residents, Community Associations, Neighborhood Boards & other organizations and government agencies. There are numerous references throughout the Plan referring to the protection of viewplanes. The "Vision Statement" embraced by all of these participants will be faxed separately.

In their proposal, Nextel states that their service may enhance emergency response for police, fire, and paramedic services. In fact, our communities are already served by large communication devices located at our police stations.

Also in question are the plans for alterations/improvements to the road going up Puu Papaa to accomplish this installation of the antenna and building?

1 of 2

Draft E. A. Nextel Communications Antenna Facility  
September 22, 1999

This project should not be approved on Conservation land in such a sensitive area. The Marine Base would be a more appropriate site, if this project is approved. Even Hawaiian Electric has withdrawn their proposal for a tower on this site.

Thank you for the opportunity to submit public comment.

Carolyn Heinrich  
President, Kaneohe Outdoor Circle

**2. THE VISION FOR KOOLAUPOKO'S FUTURE**

This chapter expresses the vision for Koolau-poko's future, discusses the key elements of the vision, and presents illustrative maps and tables.

**2.1 VISION STATEMENT**

The vision for Koolau-poko focuses on the long-term protection of community resources and the adoption of public improvement programs and development regulations that reflect a stable population with changing community needs.

**2.1.1 PROTECT COMMUNITY RESOURCES**

The Koolau-poko Sustainable Communities Plan provides a vision for preservation, conservation, and enhancement of the region's resources.

>> *Protect Natural and Scenic Resources.* Significant scenic views of ridges, upper valley slopes, shoreline areas from major public parks highways, coastal waters and hiking trails must be protected. Furthermore, access to shoreline areas and mountainous regions should be improved and provided for all to use.

*Preserve Cultural and Historical Resources.* These resources should be preserved by retaining visual landmarks and significant views, protecting access rights relating to traditional cultural practices, and preserving significant historic, cultural, and archaeological features from Koolau-poko's past.

*Preserve Agricultural Resources.* Koolau-poko contains productive and potentially productive agricultural lands that should be preserved by adopting protective regulatory policies and implementing incentives and programs to promote active agricultural use of these lands.

**2.1.2 ADAPT TO CHANGING COMMUNITY NEEDS**

This vision for Koolau-poko extends to the year 2020. This is the horizon that was used to project potential residential development capacity of the region. Between 1995 and 2020, Koolau-poko is projected to experience minimal population growth. According to projections prepared in 1995 by the Planning Department, Koolau-poko's population might be expected to increase from about 117,700 in 1995 to approximately 122,100 by 2020, or by less than one half of one percent per year. Population growth of this magnitude is not expected to generate significant demand for additional residential or commercial development in the region.

Although Koolau-poko is nearly built-out, it will be essential to improve and replace, as necessary, the district's aging infrastructure systems to increase capacity, improve operational performance or extend the useful life of facilities. Infrastructure modifications may also be made to enhance the quality of the urban or natural environment.





**SIERRA CLUB, O'AHU GROUP**

P.O. Box 2577  
 Honolulu, HI 96808  
 tel: 538.6616

Chair: Blake Oshiro  
 lukulina@lava.net  
 fax: 537.9019

*Mālama i ka Honua*

22 September 1999

Nextel Communications  
 c/o BLUEBERRY Architecture  
 Attn: Albert Murakami  
 1765 Ala Moana Blvd, #1986  
 Honolulu, HI 96815

Post-It® Fax Note	7671	Date	9/24/99	# of pages	6
To	Pub Uraja	From	Lauren Tanaka		
Co./Dept.		Co.			
Phone #		Phone #	5870385		
Fax #	9563447	Fax #			

Department of Land and Natural Resources  
 Attn: Lauren Tanaka  
 P.O. Box 621  
 Honolulu, HI 96809

The Sierra Club, Oahu Group is concerned with Nextel's proposed 130-foot tele-communications tower on Puu Papaa. Puu Papaa is already crowded with various communications equipment (although nothing as high as the proposed tower), and the collective visual impact of these structures significantly degrades the scenic views in Kailua/Kaneohe.

We offer the specific comments/questions:

- With more ridgelines and wild areas being marred by manmade structures, the resources that attract tourists to Hawaii---our largest industry is likely to be impacted. Have any economic valuation studies been completed with regards to the impacts of visual blemishes on Hawaii's scenic resources?
- The tower will be close to the Kaneohe Bay Marine Corps Airfield. Will the tower be painted in warning colors or require a red flashing warning light, resulting in further disruption of the scenic views?
- What are the views from Kaneohe vantage point looking East-Northeast?
- It is clear that further build out of this area is planned, although it is not disclosed in the EIA. Will Nextel declare future co-location of antennae or renting of the area so the cumulative impacts of the project(s) can be examined?
- The Enhanced Specialized Mobile Radio facility is said to operate in the 800 MHz range. With more and more frequency bands being used, will public uses (or meteorological uses) of the radio spectrum be impacted upon?

- It is unclear how the public at large will benefit from the Nextel's proposed antenna facility.
- The Ko'olaupoko Development Plan calls for long-term protection, preservation and enhancement of scenic resources and natural areas. Will the Nextel tower be inconsistent with the Development Plan's goals?

Too much of Hawaii's beauty is already marred by unsightly structures scattered throughout the state. This visual blight detracts from the beauty that lures tourists to Hawaii. Although the monopole alternative is less obstructive on the scenic viewplanes of the hillside, it will still appear as an industrialization of natural areas.

The Sierra Club, Oahu Group, requests that we be included on your mailing list to receive any future correspondence with regards to this project.

We appreciate the opportunity to offer these comments and look forward to your response.

Sincerely,

Blake Oshiro  
Oahu Group Chair

cc: OEQC

PART 10 – PROJECT RESPONSE TO COMMENTS

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Ms. Genevieve Salmonson  
State of Hawaii  
Office of Environmental Quality Control  
236 South Beretania St., Suite 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

Thank you for letter regarding the above referenced application.

In response to your letter dated September 14, 1999, Nextel Communications is well aware of the balance wireless carriers must be concerned with between the visual impact of their facility and the surrounding environment

Within its network engineering policy, Nextel will first pursue co-located sites within conservation and ridge top locations to reduce the number of towers, reduce the chances of cultural and environmental impacts, and seek engineering advantages of existing facilities. Nextel Communications has made a concerted effort to co-locate at this site with every carrier with existing facilities at Puu Papaa. Every carriers at this location did not allocate space nor consideration for subsequent co-location with future competing carriers. This individualistic interest has necessitated the need for each carrier to build out separate facilities on this strategic site.

Given the past, Nextel will provide for additional future carrier co-location on a feasibly safe and structurally engineered location within the area. Every consideration proposed by the State of Hawaii's Office of Environmental Quality Control will be instituted for provide minimal impact to the physical and visual environment of the location. For your information, the following are measure that will be instituted to mitigate your departments's comments:

- a. A lower profile monopole will be utilized.  
The monopole will be situated at a location that will allow 65% of the monopole to visually blend into the ridge.
- b. Recommendation to plant trees at strategic locations to reduce visual impacts.
- c. FAA determination of no hazard to aviation, thus eliminating the requirement to light or paint the proposed monopole.
- d. The site poses no health hazard to the general public due to its remoteness and limited access.

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

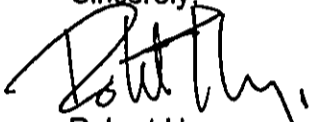
Nextel Communications has been granted permission from the Federal Aviation Agency to **delete** any warning lights/ beacon on the proposed tower and exemption from painting the tower the required red and white.

Reflecting upon the 1987 Coastal View Study, Nextel Communications endeavors to minimize the visual impact presented by the monopole affecting the visual impact to Puu Papaa (Important Coastal Land Form) within a sensible and balanced scope.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Ms. Genevieve Salmonson  
State of Hawaii  
Office of Environmental Quality Control  
236 South Beretania St., Suite 702  
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

In response to comments in your letter dated September 14, 1999, enclosed please find a copy of the Federal Aviation Agency's determination of no hazard to air navigation affecting the above referenced project.

Nextel Communications has been granted permission from the Federal Aviation Agency to delete any warning lights/ beacon on the proposed tower and exemption from painting the tower the required red and white.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,

  
Robert Urago  
Site Development Consultant  
Nextel Communications

Final

98-NX-5002.72

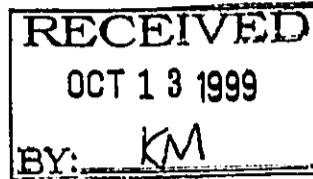
Federal Aviation Administration  
Western/Pacific Region, AWP-520  
P. O. Box 92007 WWPC  
Los Angeles, CA 90009

AERONAUTICAL STUDY  
No: 99-AWP-1496-OE

SHIPPED OCT 15 1999 JH

ISSUED DATE: 10/07/99

TROY TERAZONO (98-NX-5005.72)  
NEXTEL COMMUNICATIONS-HAWAII  
3375 KOAPAKA STREET, STE. D-155  
HONOLULU, HI 96819



**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Description: ANTENNA TOWER, 851-866 MHZ, 200 WATTS  
EXISTING TOWER OF 120' AGL  
Location: KAILUA HI  
Latitude: 21-25-21.00 NAD 83  
Longitude: 157-45-26.00  
Heights: 130 feet above ground level (AGL)  
586 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

-As a condition to this determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1J, Obstruction Marking and Lighting, Chapters 4, 8(M-Dual), & 13.

This determination expires on 05/16/01 unless:

- (a) extended, revised or terminated by the issuing office or
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case the determination expires on the date prescribed by the FCC for completion of construction or on the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is subject to review if an interested party files a petition on or before 11/06/99. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, Airspace & Rules Division, ATA-400 Federal Aviation Administration, Washington, D.C. 20591.

This determination becomes final on 11/16/99 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, frequency(ies) or use of greater power will void this determination. Any future construction or alteration, including increase in heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.


This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect to air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at 310 725-6559. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 99-AWP-1496-OE.

*fr*   
Leonard Mobley  
Manager, Airspace Branch

(DNH)

Attachment



Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Mr. Eric Schatz  
47-658 Hui Kelu St., #1  
Kahaluu, Hawaii 96744

Dear Mr. Schatz:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

In response to your letter dated September 20, 1999, I am sure as a Hawaiian Wireless site development staff member yourself, you are well aware of the balance wireless carriers must be concerned with between the visual impact of their facility and the surrounding environment .

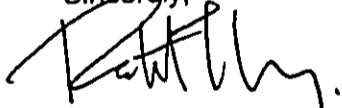
Within its network engineering policy, Nextel will first pursue co-located sites within conservation and ridge top locations to reduce the number of towers, reduce the chances of cultural and environmental impacts, and seek engineering advantages of existing facilities. Nextel Communications has made a concerted effort to co-locate at this site with every carrier with existing facilities at Puu Papaa. Every carriers at this location did not allocate space nor consideration for subsequent co-location with future competing carriers. This individualistic interest has necessitated the need for each carrier to build out separate facilities on this strategic site.

Given the past, Nextel will provide for future carrier co-location on a feasibly safe and structurally engineered location within the area. Every consideration proposed by the OEQC will be instituted for provide minimal impact to the physical and visual environment of the location.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Mr. Norman Ishikawa  
1353 Kainui Drive  
Kailua, Hawaii 96734

Dear Mr. Ishikawa:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

Thank you for your letter of concern regarding possible interference issues at the above referenced location.

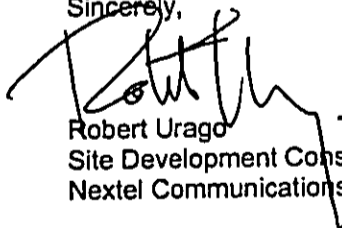
In response to your letter dated September 8, 1999, Nextel Communications had two separate conversations with the engineering and transmission departments of Oceanic Cable on December 8<sup>th</sup> and 9<sup>th</sup>, 1999. Mr. Grant Sugai and Mr. Roy Yamaki, of Oceanic Cable had the following comments:

- a. The inference on channels 19 and 20, as indicated by your letter, is an island-wide problem, possibly originating from a spectrum operated by a paging company. These Oceanic channels operated between 151 to 157 megahertz. Nextel Communications operates 806 through 869 megahertz, making interference highly unlikely.
- b. Oceanic Cable records indicates a service request has never been requested nor issued to resolve your interference issue. Mr. Sugai theorized that the problem could be resolved through your coaxial cable, connectors, or your channel box which are part of the cable company's hardware. It is advisable that you contact Oceanic's Customer Service Dept. for this check.

Please be assured that every effort is made by Nextel Communications to eliminate any interference issues should Nextel be responsible for the problem and work diligently to be a welcomed part of the communities its serves.

Should you have any questions, please contact Bob Urago at 487-0094.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Ms. Holly Turl  
Lani-Kailua Outdoor Circle  
P.O. Box 261  
Kailua, Hawaii 96734

Dear Ms. Turl:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

In response to your letter dated September 21, 1999, Nextel Communications is well aware of the balance wireless carriers must be concerned with between the visual impact of their facility and the surrounding environment .

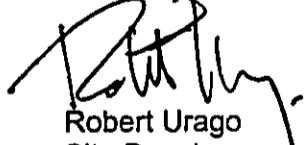
Within its network engineering policy, Nextel will first pursue co-located sites within conservation and ridge top locations to reduce the number of towers, reduce the chances of cultural and environmental impacts, and seek engineering advantages of existing facilities. Nextel Communications has made a concerted effort to co-locate at this site with every carrier with existing facilities at Puu Papaa. Every carriers at this location did not allocate space nor consideration for subsequent co-location with future competing carriers. This individualistic interest has necessitated the need for each carrier to build out separate facilities on this strategic site.

Given the past, Nextel will provide for future carrier co-location on a feasibly safe and structurally engineered location within the area. Every consideration proposed by the State of Hawaii's Office of Environmental Quality Control will be instituted for provide minimal impact to the physical and visual environment of the location.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Mr. Henry Curtis  
Life of the Land  
76 North King Street, Suite 203  
Honolulu, Hawaii 96817

Dear Mr. Curtis:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

In response to your letter dated September 20, 1999, please be advised that Nextel Communications currently has 54 antenna site in operation within the state. Of this total, 35 sites are situated on Oahu. Further, Nextel has co-located on 29 Oahu locations or 83% of its Oahu network is on co-located facilities.

On a statewide basis, 43 out of 54 site are on joint facilities. The network, as a whole, is 80% co-located with other telecommunications carriers. Nextel will continue to pursue co-location arrangements in the future due to the benefit of cost and efficiency. Within the next ten years, Nextel foresees a statewide network of approximately 90 remote sites.

Within a network engineering policy, Nextel will first pursue as many co-location types of arrangement within conservation and ridge top locations to reduce the number of towers, reduce the chances of cultural and environmental impacts, and seek engineering advantages of existing facilities. Nextel Communications has made a concerted effort to share its network plans with the related County, State, and Federal governments, affected Neighborhood Boards, and concerned community environmental groups.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,

  
Robert Urago  
Site Development Consultant  
Nextel Communications

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Mr. Blake Oshiro  
Sierra Club , Oahu Group  
P.O. Box 2577  
Honolulu, Hawaii 96803

Dear Mr. Oshiro:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

Thank you for letter regarding the above referenced application.

In response to your letter dated September 22, 1999, Nextel Communications is well aware of the balance wireless carriers must be concerned with between the visual impact of their facility and the surrounding environment

Within its network engineering policy, Nextel will first pursue co-located sites within conservation and ridge top locations to reduce the number of towers, reduce the chances of cultural and environmental impacts, and seek engineering advantages of existing facilities. Nextel Communications has made a concerted effort to co-locate at this site with every carrier with existing facilities at Puu Papaa. Every carriers at this location did not allocate space nor consideration for subsequent co-location with future competing carriers. This individualistic interest has necessitated the need for each carrier to build out separate facilities on this strategic site.

Given the past, Nextel will provide for additional future carrier co-location on a feasibly safe and structurally engineered location within the area. Every consideration proposed by the State of Hawaii's Office of Environmental Quality Control will be instituted for provide minimal impact to the physical and visual environment of the location. For your information, The OEQC have the following comments:

- a. A lower profile monopole will be utilized.  
The monopole will be situated at a location that will allow 65% of the monopole to visually blend into the ridge.
- b. Recommendation to plant trees at strategic locations to reduce visual impacts.

Nextel Communications has been granted permission from the Federal Aviation Agency to delete any warning lights/ beacon on the proposed tower and exemption from painting the tower the required red and white. Further, Nextel Communications has no plans to improve the roadway up to Puu Papaa for its proposed facility.

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

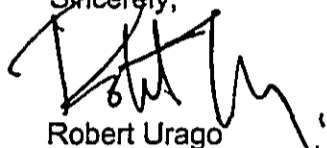
**NEXTEL**

Reflecting upon the Koolaupoko Development Plan, Nextel Communications endeavors to meet the changing community needs and protect the community resources within a sensible and balanced scope.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications

Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Ms. Carolyn Heinrich  
Kaneohe Outdoor Circle  
P.O. Box 32  
Kaneohe, Hawaii 96744

Dear Ms. Heinrich:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

Thank you for letter regarding the above referenced application.

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Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

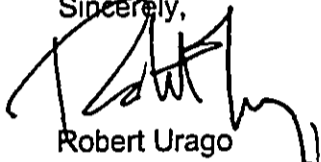
**NEXTEL**

Reflecting upon the Koolaupoko Development Plan, Nextel Communications endeavors to meet the changing community needs and protect the community resources within a sensible and balanced scope.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications



Nextel Communications  
3375 Koapaka Street, Suite D155, Honolulu, HI 96819  
808 837-4200 FAX 808 833-1621

**NEXTEL**

December 20, 1999

Mr. Charles A. Prentiss  
Kailua Neighborhood Board  
519 Wanaao Road  
Kailua, Hawaii 96734

Dear Mr. Prentiss:

Re: Nextel Communications Antenna Facility EA for Puu Papaa,  
Kaneohe, Oahu TMK: 4-4-12: POR. 2

Thank you for letter regarding the above referenced application.

In response to your letter dated September 21, 1999, Nextel Communications is well aware of the balance wireless carriers must be concerned with between the visual impact of their facility and the surrounding environment

Within its network engineering policy, Nextel will first pursue co-located sites within conservation and ridge top locations to reduce the number of towers, reduce the chances of cultural and environmental impacts, and seek engineering advantages of existing facilities. Nextel Communications has made a concerted effort to co-locate at this site with every carrier with existing facilities at Puu Papaa. Every carriers at this location did not allocate space nor consideration for subsequent co-location with future competing carriers. This individualistic interest has necessitated the need for each carrier to build out separate facilities on this strategic site.

Given the past, Nextel will provide for future carrier co-location on a feasibly safe and structurally engineered location within the area. Every consideration proposed by the State of Hawaii's Office of Environmental Quality Control will be instituted for provide minimal impact to the physical and visual environment of the location.

Should you have any questions, please contact Bob Urago at 487-0094.

Thank you.

Sincerely,



Robert Urago  
Site Development Consultant  
Nextel Communications

PART 11 - AMENDMENT

*AMENDMENT TO THE FINAL ENVIRONMENTAL ASSESSMENT*

*Nextel Puu Papaa ESMR Site*

*TMK: (1) 4-4-012-001*

*This amendment to the Final Environmental Assessment is included to clarify information already contained in the Final Environmental Assessment.*

*1. Impact of Proposed Project on Endangered Species.*

*In an August 20, 1999 telephone conversation with John Schmerfeld of the U.S. Fish and Wildlife Service, Mr. Schmerfeld indicated the following:*

*Project information in the Draft Environmental Assessment has been reviewed, and U.S. Fish and Wildlife comments have been verbally transmitted to Ms. Lauren Tanaka of the State Department of Land and Natural Resources. The U.S. Fish and Wildlife Service has no concerns about the site. No Federal Trustee resource is being impacted, including migratory birds, endangered species and sensitive habitats. Because no lights or guy wires are being used, there is no concern about protecting migratory sea birds. A review of Heritage database indicates no endangered species in the area. The site is already impacted by alien vegetation, as well as other (telecommunications) towers. The U.S. Fish and Wildlife Service believes the Department of Land and Natural Resources has taken notes of these comments.*

*2. Visual Characteristics of the Proposed Antenna Tower.*

*Color of tower: The applicant is planning to install an antenna tower with a galvanized steel finish, which appears visually as a matte gray finish. The tower can be painted so as to blend in with the sky. Currently, the applicant has received no requirement from the Federal Aviation Agency (FAA) to paint the tower in warning colors such as red and white.*

*Warning lights: Currently the applicant has received no requirement from the FAA to provide aviation warning lights on the proposed antenna tower.*

3. Interference with Television Reception.

*No RF interference Anticipated:* *Wireless telephone communications, including the applicant's Enhanced Specialized Mobile Radio (ESMR) system, normally have no impact on reception of broadcast television or commercial radio signals. ESMR operates in a different range of frequencies (800 megahertz) than that of television or radio stations. The applicant anticipates no impact on the community's reception of television or radio.*

*Lease requirement:* *The applicant's lease requirement with the land fee owner stipulates that should any radio frequency interference be realized with existing transmissions due to the lessee's installation, the lessee is obligated to fix and remove the interference.*

4. Co-location of Antennas.

*Willing to allow Co-location:* *The applicant is willing to allow co-location of future antennas of other telecommunications providers on the project's proposed antenna tower. Co-location, under appropriate circumstances, is a means of consolidating antenna sites and reducing the potential number of required antenna towers. This application, however, is not predicated on future co-location, and the applicant would entertain future co-location only as deemed appropriate and desirable by the governing and reviewing agencies.*

*Review of future Co-location:* *This application is for the proposed antenna tower and for the applicant's ESMR antennas only. Any future antennas will require full review and separate permits, as determined by the State Department of Land and Natural Resources.*

5. Applicant's Windward ESMR Network and Cumulative Impact.

*Currently the applicant's ESMR coverage of the Kaneohe/Kailua area is limited to an antenna site on a private condominium in Kailua. This existing antenna site has its antennas mounted on the building structure with little or no environmental or visual impact. Additional sites are planned for the Keolu Hills, Castle Junction and Kahaluu areas. These additional sites will involve antennas mounted to existing buildings, or mounted on new monopoles or wooden utility poles ranging from 35 feet to 60 feet in height, depending on the ultimate site selected. The applicant has no current plans for any other facility on Oahu as high as the Puu Papaa tower (130 feet), which has been dictated by radio coverage needs. The vast majority of the applicant's existing antennas are mounted on existing buildings or structures. The applicant endeavors to mount its antennas on existing structures wherever possible.*

*End of Amendment to E.A.  
Amendment Page 2*