Kaneohe PCS Cellsite

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

MICHAEL D. WILSON
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT S. COLOMA-AGARAN

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

RECEIVED
'97 JAN -9 A8:42
OFC. OF ENVIRONMENTAL QUALITY CONTROL

JAN -6 1997

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

File No.: OA-2826

MEMORANDUM

TO: Gary Gill, Director
Office of Environmental Quality Control

FROM: Dean Uchida, Administrator
Land Division

SUBJECT: Finding of No Significant Impact for a Cellular Telecommunication Facility at Kaneohe, Oahu; TMK 4-5-42: 8 (por.)

The Department of Land and Natural Resources has reviewed comments received during the 30-day comment period that began on August 23, 1996. The Department has determined that this project will not have significant environmental effect and has issued a finding of no significant impact. Please publish this notification in the next Environmental Notice.

We have enclosed a completed OEQC Bulletin Form and four copies of the final EA.

Please contact Don Horiuchi at 587-0381 if you have any questions.

Enc.

3

1997-01-23-OA-FEA-Kaneohe
PCS Cell Site

FINAL ENVIRONMENTAL ASSESSMENT

PCS CELL SITE AT KANEOHE
KANEOHE SITE T-52D

45-610 Kionaole Road, Kaneohe, Oahu, Hawaii
Tax Map Key: 4-5-42: Portion of 8

DCR Communications, Inc.
2550 M. Street, NW, Suite 200
Washington, DC, 20037

APPLICANT

Kusao & Kurahashi, Inc.
Planning and Zoning Consultants
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

AGENT

DECEMBER 1996

FINAL ENVIRONMENTAL ASSESSMENT

PCS CELL SITE AT KANEOHE
KANEOHE SITE T-52D

45-610 Kionaole Road, Kaneohe, Oahu, Hawaii
Tax Map Key: 4-5-42: Portion of 8

DCR Communications, Inc.
2550 M. Street, NW, Suite 200
Washington, DC, 20037

APPLICANT

Kusao & Kurahashi, Inc.
Planning and Zoning Consultants
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

AGENT

DECEMBER 1996

TABLE OF CONTENTS

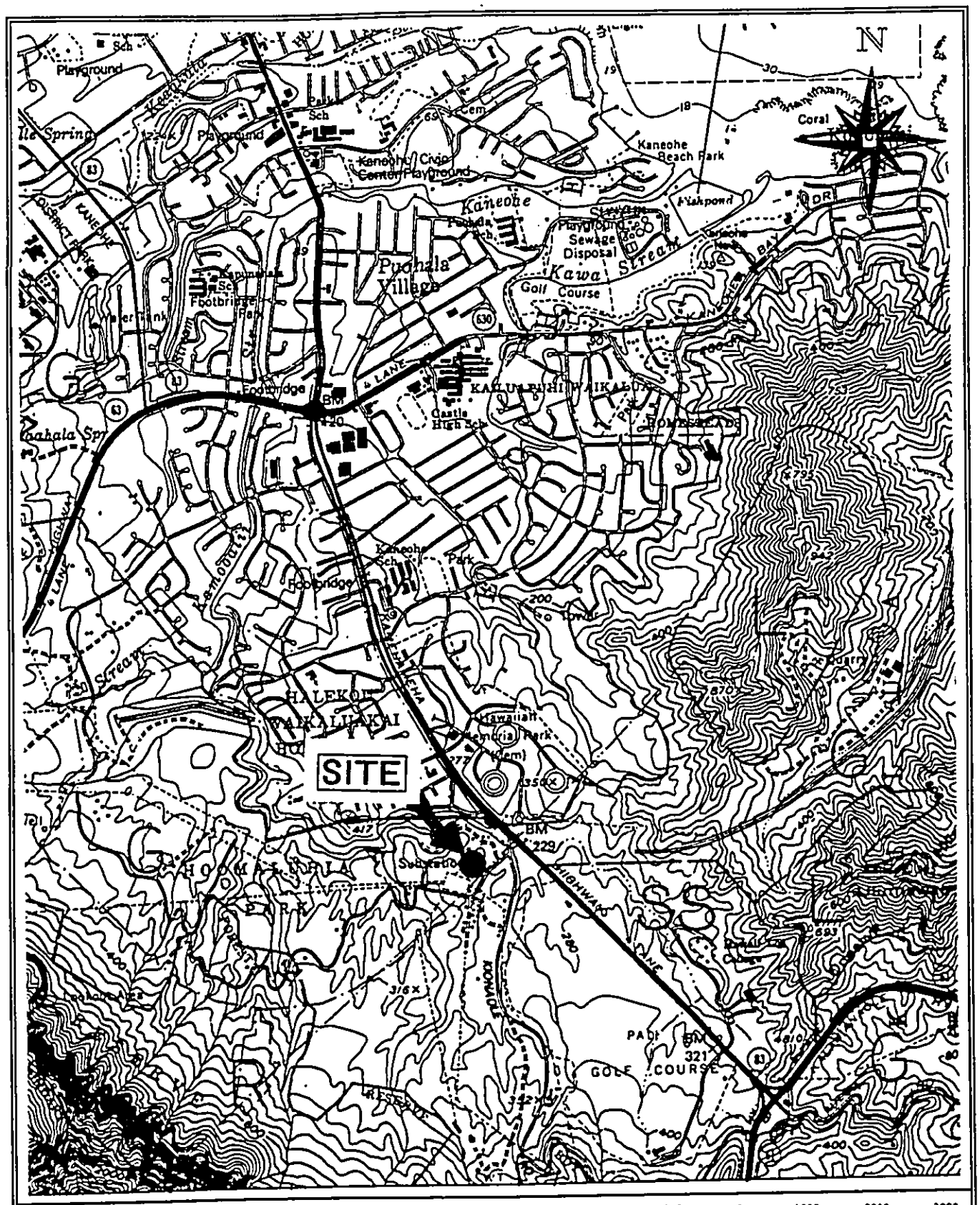
LIST OF EXHIBITS

LIST OF APPENDICES

FINAL ENVIRONMENTAL ASSESSMENT
FOR A PCS CELL SITE AT KANEOHE
KANEOHE SITE T-52D
45-610 Kionaole Road, Kaneohe, Oahu, Hawaii
Tax Map Key: 4-5-42: Portion of 8

I. INTRODUCTION

A.	Applicant	:	DCR Communications, Inc. 2550 M Street, NW, Ste. 200 Washington, DC 20037
B.	Approving Agency	:	Department of Land & Natural Resources
C.	Recorded Fee Owner	:	Nakamoto Properties, Inc. 971 Waiholo Street Honolulu, Hawaii 96821
D.	Agent	:	Kusao & Kurahashi, Inc. Planning and Zoning Consultants 210 Ward Avenue, Suite 124 Honolulu, Hawaii 96814 (808) 538-6652
E.	Tax Map Key	:	4-5-42: Portion of 8
F.	Location	:	45-610 Kionaole Road, Kaneohe (Exhibit 1)
G.	Lot Area	:	394,262 sf
H.	State Land Use	:	Conservation District (Exhibit 2)



P = Protective
R = Resources
L = Limited
G = General

EXHIBIT 2

CONSERVATION SUBZONE MAP

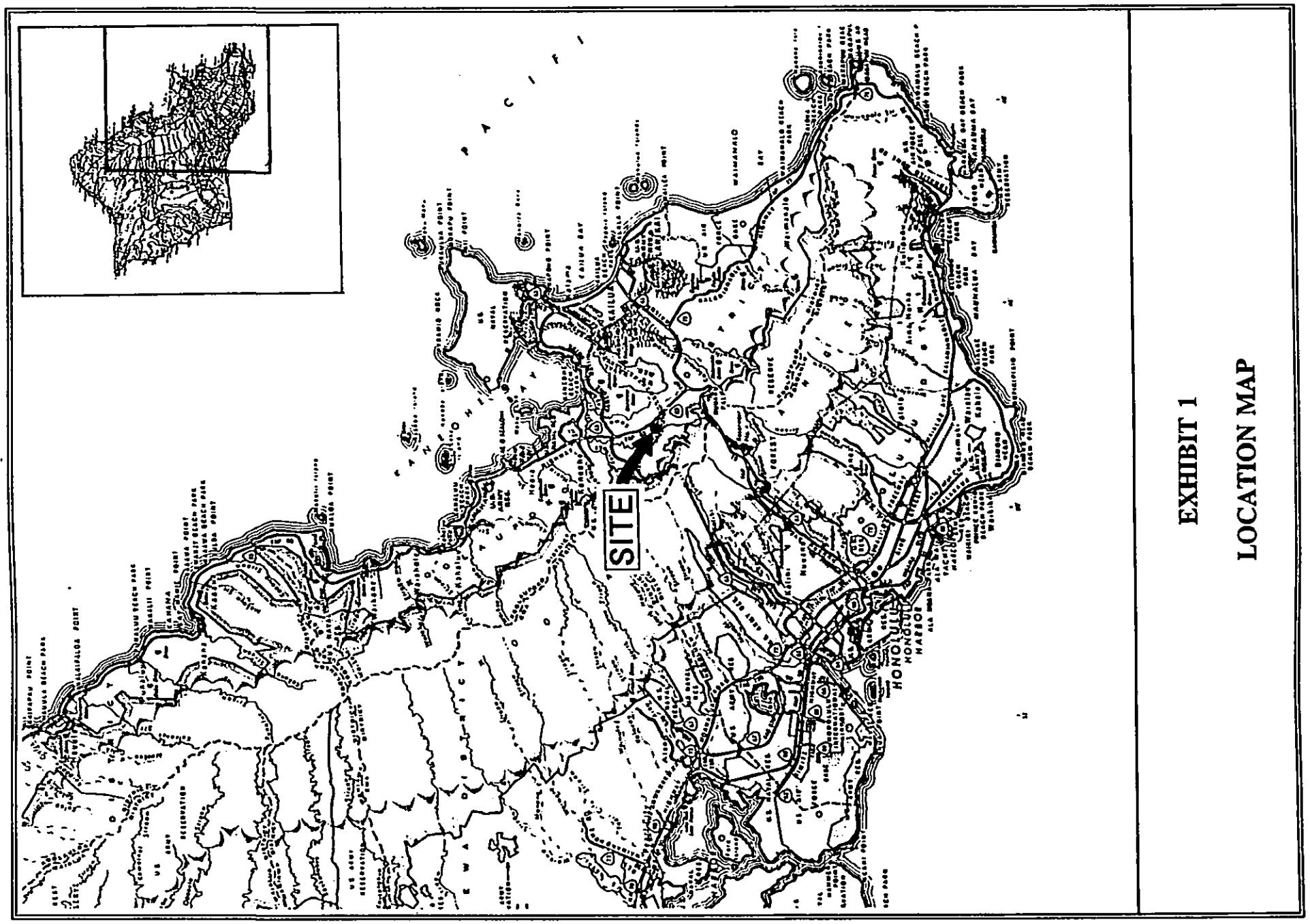


EXHIBIT 1

LOCATION MAP

I.	Development Plan		
	Land Use Map	:	Preservation
	Public Facilities Map	:	No improvements affecting this site
J.	Zoning	:	P-1 Restricted Preservation
K.	Existing Use	:	Vacant with trees and brush
L.	List of Agencies Consulted	:	Department of Land & Natural Resources Department of Land Utilization Office of Environmental Quality Control Office of Hawaiian Affairs

II. DESCRIPTION OF THE PROPOSED ACTION

A. General Description

1. Proposed Development

The applicant proposes to construct a personal communication system (PCS) cell site within a 625 square foot area of this 9.051 acre lot in Kaneohe. The PCS cell site will consist of a 98'-5" monopole with four panel antennas, two equipment cabinets and conduits and cables on a 25' x 25' concrete foundation pad.

2. Location

The 9.051 acre subject property is located at 45-610 Kionaole Road in Kaneohe, Oahu.

3. Surrounding Area

The subject site is bounded by Kionaole Road, Kamehameha Highway, and the Hawaiian Electric Company, (HECO) Koolau Substation in Kaneohe. The lot is located just north of the Pali Golf Course.

4. Land Use Approvals

a. State Land Use

The project site is located within the State Land Use Conservation District. The proposed PCS Cell Site use is consistent with the State's Conservation District designation. P-1 Restricted Preservation zoned lands are under the jurisdiction of the Department of Land and Natural Resources and subject to the Conservation District regulations of Title 13, Chapter 5, Hawaii Administrative Rules. The proposed PCS Cell Site is a permitted use subject to approval of a

Conservation District Use Permit (CDUP) by the State Department of Land and Natural Resources. The applicant is submitting a CDUP application simultaneously with this Environmental Assessment.

b. Development Plan

The Koolaupoko Development Plan (DP) Land Use Map designates the project site as Preservation. The proposed PCS cell site and the adjacent, existing HECO substation are acceptable uses under the Preservation designation.

c. Zoning

The site is zoned P-1 Restricted Preservation and is under the jurisdiction of the Department of Land and Natural Resources and subject to the Conservation District regulations of Title 13, Chapter 5, Hawaii Administrative Rules.

B. Technical Characteristics

1. Use Characteristics

The project site is within the General Conservation District subzone. The purpose of the General Conservation District is to

conserve, protect, and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

The use of this site as a PCS Cell Site for a public utility communication system, is consistent with the purpose stated above. The wireless telephones that have been purchased serve a dual purpose, one is the convenience of always being accessible to others or having access to a telephone. The second purpose which has been a very important component in many users decision to purchase a wireless phone, is the safety aspect. Spouses and parents have equipped their mates and children, respectively to insure that in times of emergency, the users will be able to dial 911 or call home for aid or assistance.

With the increase in the number of wireless phones circulating in the islands, radio stations have asked for the commuter's assistance in the location of traffic jams as a service to other commuters in the mornings and afternoons. One radio station has even formed a "posse" to assist in the tracking of stolen vehicles, vehicles involved

in hit and run accidents and other violations. By having listeners call in the whereabouts and directions of travel of these perpetrators and forwarding this information to the local police, several perpetrators have been caught.

The crude and clumsy walkie-talkie is quickly being replaced by wireless telephones which are evolving into compact and convenient tools for citizen networks such as community policing teams and would probably serve neighborhood watch programs where residents patrol their neighborhood in the interest of deterring criminal activities.

The instant access to a telephone (wireless) is also a great tool in providing a quick response for victims that require emergency medical assistance. Although there are probably no solid statistics available, it is obvious that the few minutes saved in hunting down a telephone by having a wireless telephone readily available has had to have saved a few or possibly many lives. Depending on the situation, these seconds or minutes saved can be critical.

The public health, safety and welfare is served through the provision of dependable and complete island-wide coverage that the different wireless companies are attempting to achieve.

2. Physical Characteristics

The applicant proposes to construct a public utility PCS communication system within this 9.051 acre subject lot in Kaneohe. The communication system will consist of a 98'-5" monopole with four panel antennas, two equipment cabinets, conduits and cables and a six-foot height chain link fence, with 3-foot wide personnel gate, surrounding the PCS Cell Site.

3. Construction Characteristics

As shown on the site plans, (See Appendix I, Site Plans), the proposed 98'-5" monopole will be located at the southeast corner of the property. The four proposed antennas will be placed on a triangle platform at the top of the monopole (See Appendix I, Sheet 3, Platform Plan). Each of the four panel antennas will be approximately 5'-10" x 6.3" x 2.7" in size. These rectangular shaped panel antennas will weigh approximately 20 lbs each.

Antennas 1A and 1B will be 10 feet apart and face the east. These antennas will be approximately 17' and 23' (respectively) from the closest property line. Antennas 3A and 3B will also be 10 feet apart and face the north. These antennas will be approximately 25' and 28' (respectively) from the closest property line. The finished height of each antenna will be approximately 101'-5" from existing grade (See Appendix I, Sheet 3, Elevation Drawings).

The two transmitter cabinets will be located adjacent to the 98'-5" monopole (See Appendix I, Sheet 2, Transmitter Equipment Layout Plan). The proposed transmitter equipment cabinets, will be approximately 4'-3" x 2'-4" x 5'-9" in size.

In addition, the project will require installing cables and conduits to the four directional panel antennas. The cables will run from the four proposed panel antennas down to the transmitter cabinets at ground level. The applicant will also install a 6'-0" chain link security fence with 3'-0" wide personnel gate surrounding the monopole and transmitter equipment cabinets.

III. IMPACTS

A. Demographic Impacts

1. Residential Population

The proposed PCS Cell Site will not contain dwelling units and will not affect or increase residential population.

2. Visitor Population

The proposed PCS Cell Site will not affect or increase visitor population.

3. Character or Culture of the Neighborhood

The project site is located adjacent to the existing HECO Substation, Kionaole Road, Kamehameha Highway, and H-3. The proposed PCS Cell Site will have similar form and appearance as the existing transmission poles, utility equipment and high power lines surrounding the site (See Appendix II, Photographs of the Site).

Once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the

existing HECO substation. The existing substation has various power lines and utility structures at and above 100 feet in height.

4. Displacement

The project site is currently vacant and will not displace any residents or businesses.

B. Economic Impacts

1. Economic Growth

The proposed development will have no impact on the existing economic growth for the area.

2. Employment

The proposed development will not increase or impact employment for the area.

3. Government Revenues (taxes)

The proposed development will not increase or impact the government revenues for this site.

4. Location vis-a-vis Intended Market

In the case of PCS cell site, the location of the cell site is always very appropriate in terms of the intended market or user,

because all users will be situated within effective range of the antenna signals.

A complete and dependable public utility communication system, should be able to provide service to users anywhere around the island, so they may be able to contact or be contacted during emergencies or at other times. The proposed communication system will provide an island-wide public utility communication service and therefore requires cell sites throughout the island. The majority of the proposed PCS Cell Sites are located in urban areas and atop of existing structures. Due to the mountainous composition of the island, the applicant will be forced to locate some PCS Cell Sites in rural areas and conservation districts as in this application.

C. Housing Impacts

1. Increase Supply

The proposed project is located on a vacant lot, does not include residential units and will not increase the housing supply.

2. Affordable Units

The proposed PCS Cell Site does not include residential units and therefore will not provide affordable units.

D. Public Services

1. Access and Transportation

The project site is accessed by an existing HECO access road, Kionaole Road and Kamehameha Highway. The proposed PCS Cell Site will have minimal impact on traffic, with preventive maintenance visits occurring approximately once or twice a month.

Access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate.

2. Water

The proposed PCS Cell Site will be unmanned and does not require water service.

3. Wastewater

The proposed PCS Cell Site will be unmanned and does not require municipal wastewater disposal service.

4. Drainage

The proposed PCS Cell Site will be placed on a concrete foundation pad of approximately 25' x 25', which will contain footings for the antenna, the chain link fence, and the equipment pad, with no additional grading or earth work to be performed. The proposed project will not significantly impact the existing drainage and no drainage system improvements are planned.

5. Solid Waste

The proposed PCS Cell Site is an unmanned site and will not require municipal refuse service.

6. Schools

The proposed PCS Cell Site will not affect enrollment in surrounding schools.

7. Parks

The proposed PCS Cell Site will not affect the existing parks or recreation areas in the surrounding neighborhood. As discussed earlier, the project site is adjacent to an existing HECO Substation with utility poles and equipment of similar form and appearance as the

proposed monopole and equipment being installed. The proposed PCS Cell site will blend in with the existing utility poles and equipment.

8. Police

The proposed PCS Cell Site will not affect the existing police service for this neighborhood.

9. Fire

The proposed PCS Cell Site will not affect the existing fire service for this neighborhood.

10. Utilities

a. Electric

The proposed PCS Cell Site will coordinate with Hawaiian Electric Company to obtain service from a nearby utility pole.

b. Gas

The proposed PCS Cell Site will not impact gas service in the surrounding area.

c. Telephone

The proposed PCS Cell Site will coordinate with Hawaiian Telephone Company to obtain service form a nearby utility pole.

E. Environmental Impacts

1. Historic and Archaeological Resources

The property is not listed on either the Hawaii or National Registers of Historic Places, therefore the proposed development is not expected to have an impact on archaeological resources.

The proposed PCS Cell Site will be placed on a concrete foundation pad of approximately 25' x 25', which will contain footings for the antenna, the chain link fence, and the equipment pad, with no additional grading or earth work to be performed.

During the construction of the project approved under this Conservation District Use Permit, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will instruct the contractor (earthwork) to

stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

2. Natural Features

a. Water Resources

There are no water resources within the project site.

b. Flood Plain Management

The project site is situated in Zone D, an area in which flood hazards are undetermined. Being situated at the 280-foot elevation, however, the potential of flood hazards are expected to be minimal to non-existent.

c. Wetlands Protection

The project site does not contain wetlands and will not affect any wetlands.

d. Coastal Zone Management

The project site is not within the coastline. The nearest coastline is about two miles from the project site.

e. Unique Natural Features

The project site is relatively level and will not affect erosion or soil suitability within or surrounding the site.

f. Flora and Fauna

Although the majority of the project site is overgrown with trees and brush. A Flora and Fauna Survey, prepared by Botanical Consultants, for the proposed project site is included in Appendix III. As stated in the survey, all of the plants found in this site are "very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds." "Except for the fairy-tern, none of the birds found on this site are native to the Hawaiian Island and all are commonly found on Oahu."

g. Agricultural Lands

The proposed PCS site is relatively small, 625 square feet, and does not support existing agricultural production. Although there are no future plans for agricultural production

on the surrounding land, the proposed PCS cell site will not affect the agricultural potential of the surrounding lands.

h. Open Space

As discussed earlier, the project site is adjacent to the existing HECO Substation and the proposed PCS Cell Site will blend with the existing utility poles and equipment. The proposed development will not impact the open space on the site or of the surrounding neighborhood. The majority of the impact will result from aesthetics and views. Since the proposed development will be adjacent to an existing HECO Substation and various utility poles, the proposed monopole with four panel antennas and two transmitter equipment cabinets will blend in with the surrounding area.

3. Noise

The proposed PCS Cell Site will not impact the noise quality for the site or the surrounding neighborhood.

4. Air Quality

The proposed PCS Cell Site will not impact the air quality for the site or the surrounding neighborhood.

5. Hazards

a. Nuisances and Site Safety

The applicant will construct a 6-foot security chain link fence with a 3-foot wide, locked, personnel gate to maintain a high level of security for the site.

b. Thermal Explosive

The proposed PCS cell site will not contain or be situated near thermal explosive storage areas.

c. Airport Clear Zone

The proposed PCS Cell Site will not affect the Airport Clear Zones.

F. Agency Comments

The Department of Land and Natural Resources has requested comments, during the Draft Environmental Assessment review, from various City, and State agencies who provide infrastructure or services which may

be affected by the proposed development. To date the Office of Hawaiian Affairs and Office of Environmental Quality Control have responded with their response attached in Appendix IV and restated below:

The Office of Hawaiian Affairs is concerned with the effect telecommunication sites have on the visual landscape. This concern is intensified when the proposed site is within the conservation district. DCR Communications, Inc.'s DEA does nothing to mollify these concerns. The DEA contains only minimal information, states that there will be visual impacts from the proposed action but declines to provide any mitigation.

For example, on page 13 (DEA PCS Cell Site at Kaneohe) it states that "[t]he proposed communication system will provide an island-wide public utility communication service and therefore requires cell sites throughout the island". However, no information is provided in the DEA as to where the additional cell sites will be located, the number of additional cell sites anticipated and whether they will necessitate separate conservation district use applications.

In addition, no survey for archaeological or cultural resources were conducted, no studies on flora and fauna are cited, and no discussion of the

impacts of construction on the site are included in the Draft Environmental Assessment (DEA).

Finally, visual impacts are discussed in the section entitled "Open Space" at page 19 (DEA PCS Cell Site at Kaneohe). The document offers that "[t]he majority of the impact will result from aesthetics and views" but it fails to address these impacts. Instead the applicant concludes that since the proposed development will be adjacent to existing HECO utility poles it will blend in with the surrounding area. This rationale is repeated in the half-page section on mitigation which states that "[s]ince impacts of the proposed antenna additions on the vacant land are negligible, no mitigation measures are planned.

The lack of specific information on archaeology, flora and fauna and the failure to provide mitigation measures for the impacts to the visual landscape cause this DEA to be deficient. Action on the CDUP should not be taken until the DEA is made acceptable.

The following responds to the concerns presented by the Office of Hawaiian Affairs:

1. The effect that this telecommunication site will have on the visual landscape will be minimal. The proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totalling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. The proposed cell site will blend in with the larger electrical towers and electrical transformers existing at the adjacent HECO Substation. The access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate. The pole, antennas and utility equipment will be painted to match surrounding structures.

2. The island wide public utility communication system will require cell sites throughout the island. We have planned approximately 75 sites around the entire island of Oahu. The majority of the sites will be located on top of existing structures (buildings or other company's monopoles). Due to the mountainous topography of the island, we must locate some antennas (possibly up to six) in remote areas of the island and within the Conservation

Districts. Each public utility cell site may require a State (Conservation District Use Approval) or a City (Conditional Use Permit) depending on the location of the site, and will require City Building permits. We are still in the process of acquiring leases for the various sites. Due to the competitiveness of the telecommunication business we are not able to disclose the exact location of our cell sites.

3. Since the project site is not listed on the State of Hawaii or US Federal Register of Historic and Archaeologic Sites, the project will not impact historic or archaeologic sites. Therefore the proposed development is not expected to have an impact on archaeological resources.

During the construction of the project approved under this Conservation District Use Permit, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will instruct the contractor (earthwork) to

stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

We have enclosed a copy of the flora and fauna survey report, prepared by Botanical Consultants, for the proposed project site. Although the development site is 625 square feet in size, the survey report was done for a 30-foot by 30-foot area that included the project site's 25-foot x 25-foot area and a 5-foot wide surrounding strip totalling 900 square feet. As stated in the survey, all of the plants found in this site are "very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds." "Except for the fairy-tern, none of the birds found on this site are native to the Hawaiian Islands and all are commonly found on Oahu."

The proposed development will include little or no additional grading or earth work to be performed. As shown in the photographs of the site, the site is sparsely covered with various types of grass and weeds. There will be minimal impact to existing flora and fauna in the vicinity.

4. As stated earlier, the proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totalling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. The proposed cell site will blend in with the larger electrical towers and electrical transformers existing at the adjacent HECO Substation. The proposed monopole is situated among taller more obtrusive poles and power lines thus the proposed impacts will be minimal. The site is also situated above Kamehameha Highway, behind tall trees and shrubbery, such that the site will be partially blocked from view along Kamehameha Highway.

The access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate. The pole, antennas and utility equipment will be painted to match surrounding structures.

The Office of Environmental Quality Control (OEQC) commented as follows:

1. Consult with the Department of Land Utilization and document your contact in the Final EA.

2. In the Final EA, identify public view points of the project site from which visual impacts may occur, and:

   a. show these impact by superimposing the proposed project on photographs taken from these public view points.

   b. identify measures which will mitigate visual impacts. We recommend painting the cell site equipment so that it will blend in with the surroundings.

The following responds to the OEQC's concerns:

1. A copy of the request for review and comment to the City Department of Land Utilization (DLU) in connection with the subject Draft EA, is attached (See Appendix IV). We have not received comments from the DLU, to date, but will include any timely comments and our responses in the Final EA.

2. Once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the

existing HECO substation. The existing substation has various power lines and utility structures at and above 100 feet in height.

The proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totaling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. The proposed cell site will blend in with the larger electrical towers and electrical transformers existing at the adjacent HECO Substation. The proposed monopole is situated among taller more obtrusive poles and power lines thus the proposed impacts will be minimal. The site is also situated above Kamehameha Highway, behind tall trees and shrubbery, such that the site will be partially blocked from view along Kamehameha Highway.

The access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate. The pole, antennas and utility equipment will be painted to match surrounding structures.

The Department of Land Utilization provided the following comments:

1. The Department of Land Utilization is concerned with the rapid proliferation of telecommunication facilities on Oahu's may mountain tops and ridges. The characteristics which give such areas their inherit advantage over low lying areas, also makes them typically pristine scenic areas as well. The preservation of such scenic areas and the massing of multiple facilities above surrounding areas, built or not, is an important land use issue.

2. Consequently, we note that the Draft EA only describes Pocket Communications, Inc.'s plans for the development of this particular site (T-52D), and does not discuss its development in the context of Pocket Communications, Inc.'s overall plans for providing PCS services on Oahu.

The Final EA should be revised to discuss how other possible locations were not selected for development (i.e., based on signal strength, acquisition costs, access and maintenance considerations, etc.). The proposed site's strategic importance in context of Pocket Communications, Inc.'s overall plans should be explained.

2. Page 3 of the Draft EA incorrectly indicates current zoning of the subject site as P-2 Restricted Preservation. The Final EA should be revised to indicate that the current zoning is P-1.

3. The proposed cell site is not located within the special management area.

The following responds to the concerns presented by the Department of Land Utilization:

1. The effect that the telecommunication facility will have on the visual landscape for this site will be minimal. The proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totalling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. Once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the existing HECO substation. The existing substation has various power lines and utility structures at and above 100 feet in height. The pole, antennas and utility equipment will be painted to

match the surrounding area thereby reducing the amount of visual impact of the proposed development.

The island wide public utility communication system will require cell sites throughout the island. We have planned approximately 75 sites around the entire island of Oahu. The majority of the sites will be located on top of existing structures (buildings or another company's monopole). Due to the mountainous topography of the island, we must locate some antennas (possibly up to six) in remote areas of the island and within the Conservation Districts. Each cell site may require permitting either by the State (Conservation District Use Approval) or the City (Conditional Use Permit) depending on the location of the site, and a City Building Permit. We are still in the process of acquiring leases for many of our sites. Due to the competitiveness among PCS providers and the proprietary nature of our network design, we must be cautious about early disclosure of the location of all of our anticipated cell sites that make up our coverage grid without assurance from the City that such information will be accorded commercial confidential status and

restricted from disclosure to or inspection by the public. Alternatively, we might be able to meet and review our network plan with you provided we are not require to provide a copy for your department records. The applicant would be glad to discuss this with you.

The radio frequency engineers for Pocket Communications, Inc. designed the telecommunication system by making over lapping search rings around the island base on various factors including signal strength predictions. Research is then preformed to obtain willing property owners within the search ring to develop a cell site. Pocket Communications, Inc. is restricted by the willingness or conditions of property owners in each search ring area to develop the site. Each property owner carefully reviews the proposed development and signs a lease agreement prior to final development and permit approvals. If nothing can be obtained within the search ring, then the engineers must redesign the ring and begin the process again to determine the best suitable candidate. Changes to one search ring could affect the

configuration and effectiveness of surrounding search rings requiring a system reconfiguration.

2. The Final EA will be corrected to state that the zoning of the subject site is P-1 *Restricted Preservation district.*

3. The applicant understands that the subject site is <u>not</u> located within the special management area.

IV. ALTERNATIVE CONSIDERED

As discussed throughout this report, the construction of the 98'-5" monopole with four panel antennas and two transmitter equipment cabinets will have negligible impact on the property or the surrounding area.

The monopole and antennas will be of similar form and appearance as nearby utility poles and street lamps. The transmitter equipment cabinets will be of similar form and appearance as other ground level structures housing utility equipment and machinery. Once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the existing HECO

substation. The existing substation has various power lines and utility structures at and above 100 feet in height.

The only other alternative considered was a no action alternative which would cause DCR Communications, Inc. difficulties in providing a complete and dependable public utility in this mountainous and rural area. This alternative is not acceptable, particularly in light of the minimal impact that the proposed antennas would have on the surrounding area.

V. MITIGATION MEASURES

The addition of the 98'-5" monopole with four panel antennas, two transmitter equipment cabinets, concrete foundation and security fence to the site will have negligible environmental impact on the site and the surrounding area. The majority of the impact will result from aesthetics and views. Since the proposed development will be adjacent to an existing HECO Substation and various utility poles, the proposed monopole with four panel antennas and two transmitter equipment cabinets will blend in with the surrounding area.

As discussed earlier, once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the

enclosed photographs and will be minimal in comparison to the existing HECO substation. The existing substation has various power lines and utility structures at and above 100 feet in height.

Since impacts of the proposed antenna additions on the vacant land are negligible, mitigation measures planned will be to restrict access and paint the antennas and accessory equipment to match the surrounding area.

VI. BASIS FOR A NEGATIVE DECLARATION FOR THE PROPOSED PCS CELL SITE

A. Description of the Proposed Action

As described earlier, the applicant plans to construct a public utility communication system PCS cell site within this 9.051 acre subject lot in Kaneohe. The cell site will consist of a 98'-5" monopole with four panel antennas, two equipment cabinets, conduits and cables and a six-foot height chain link fence, with 3-foot wide personnel gate, surrounding the PCS Cell Site.

Based on these findings, the proposed PCS Cell Site, which would require a minimal amount of grading, would not be substantially impacting

on surrounding neighborhoods, and would be vital to the development of an island-wide public utility communication service.

B. Determination and Reasons Supporting Determination

The proposed project would not have a significant effect on the environment and therefore preparation of an environmental impact statement is not required. Based on the "Significance Criteria", Section 12 of Hawaii Administrative Rules Title 11, Chapter 200, "Environmental Impact Statement Rules", which were reviewed and analyzed, we have come to the following conclusions:

1. **No irrevocable commitment to loss or destruction of any natural or cultural resource would result.**

The proposed site will be fenced and locked with access provided only to maintenance personnel.

No significant natural resources are present on the site. The project site is not listed on the State Historic Site Register and there are no known archaeological or historic sites within the project site. The subject property is not listed on either the Hawaii or National Registers of Historic Places. With no previous record of historic or

archaeological discoveries and the minimal amount of construction planned for the site, the proposed development is not expected to have an impact on archaeological resources.

During the construction of the project, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

We have enclosed a copy of the flora and fauna survey report, prepared by Botanical Consultants, for the proposed project site. Although the development site is 625 square feet in size, the survey report was done for a 30-foot by 30-foot area that included the project site's 25-foot x 25-foot area and a 5-foot wide surrounding strip totalling 900 square feet. As stated in the survey, all of the plants found in this site are "very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds." "Except for the fairy-

tern, none of the birds found on this site are native to the Hawaiian Islands and all are commonly found on Oahu."

The proposed development will include little or no additional grading or earth work to be performed. As shown in the photographs of the site, the site is sparsely covered with various types of grass and weeds. There will be minimal impact to existing flora and fauna in the vicinity.

2. **The action would not curtail the range of beneficial uses of the environment.**

The project will not curtail the range of beneficial uses of the environment. The project site will be situated within a restricted access area where the maintenance personnel are the only ones allowed entry. It does not serve any recreational purpose or provide any other beneficial use of the environment. The project will make it possible to provide PCS phone service with island-wide coverage to all the residents and visitors of the island.

3. **The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.**

The State's environmental policies and guidelines are set forth in Chapter 344, Hawaii Revised Statutes, "State Environmental Policy". The broad policies set forth include conservation of natural resources and enhancement of the quality of life. As discussed earlier, the project does not affect significant natural resources. The proposed public utility communication system will enhance the quality of life for the residents and visitors of the rural community by providing the convenience of always being accessible to others or having access to a wireless telephone with island-wide coverage for social, business or security reasons.

4. **The economic or social welfare of the community or state would not be substantially affected.**

Construction of the proposed PCS Cell Site would result in temporary economic benefits to the construction industry. It will provide a benefit to the social welfare of the Kaneohe community by providing a complete and dependable public utility service to all residents and visitors, including those in the rural portions of the island.

5. **The proposed action does not substantially affect public health.**

The proposed action may have a positive effect on public health by providing an island-wide PCS phone service on which residents and visitors may rely on for communication during emergency situations for residents and visitors of the Kaneohe community.

The wireless telephones that have been purchased serve a dual purpose, one is the convenience of always being accessible to others or having access to a telephone. The second purpose which has been a very important component in many users decision to purchase a wireless phone, is the safety aspect. Spouses and parents have equipped their mates and children, respectively to insure that in times of emergency, the users will be able to dial 911 or call home for aid or assistance.

With the increase in the number of wireless phones circulating in the islands, radio stations have asked for the commuter's assistance in the location of traffic jams as a service to other commuters in the mornings and afternoons. One radio station has even formed a "posse" to assist in the tracking of stolen vehicles, vehicles involved

in hit and run accidents and other violations. By having listeners call in the whereabouts and directions of travel of these perpetrators and forwarding this information to the local police, several perpetrators have been caught.

The crude and clumsy walkie-talkie is quickly being replaced by wireless telephones which are evolving into compact and convenient tools for citizen networks such as community policing teams and would probably serve neighborhood watch programs where residents patrol their neighborhood in the interest of deterring criminal activities.

The instant access to a telephone (wireless) is also a great tool in providing a quick response for victims that require emergency medical assistance. Although there are probably no solid statistics available, it is obvious that the few minutes saved in hunting down a telephone by having a wireless telephone readily available has had to have saved a few or possibly many lives. Depending on the situation, these seconds or minutes saved can be critical.

The public health, safety and welfare is served through the provision of dependable and complete island-wide coverage that the different wireless companies are attempting to achieve.

6. **No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.**

The proposed PCS Cell Site is designed to aid the existing landline telephones by provided dependable and complete wireless communication service to the entire island. As such it will not provide an impetus for additional increases in population. The project will not have an adverse impact on public facilities.

7. **No substantial degradation of environmental quality is anticipated.**

The project will have minimal impact on environmental quality. The PCS Cell Site facility's only long term impact would be on views and would be similar in impact to the existing HECO Substation, which is adjacent to the project site. As discussed earlier, once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the existing HECO

substation. The existing substation has various power lines and utility structures at and above 100 feet in height. The PCS Cell Site will not affect noise environment or air quality of the surrounding area, except for temporary impacts during construction.

In order to mitigate temporary construction impacts, contractors working on the project will be directed to insure that their vehicle engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractor's will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality of roadways are most sensitive.

As mentioned earlier, in order to mitigate temporary construction impacts on noise, the contractors will be directed to insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractors comply with existing noise regulations of the State and County.

In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing

drainage impacts to the receiving waters. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

8. **The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable affects on the environment.**

The proposed project does not involve a commitment to larger actions nor will it result in cumulative impacts to the environment. As mentioned earlier, the proposed PCS Cell Site is designed to aid existing landline telephones by providing a dependable and complete wireless communication system to the entire island. As such it will not provide an impetus for additional increases in population. The project will not have an adverse impact on public facilities.

9. **No rare, threatened or endangered species or their habitats would be affected.**

As mentioned earlier, the small 25' x 25' site has a controlled access with only the maintenance personnel allowed entry. No rare, threatened, or endangered species or their habitats will be affected.

The flora and fauna survey report, prepared by Botanical Consultants, for the proposed project site, states that all of the plants found in this site are "very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds." "Except for the fairy-tern, none of the birds found on this site are native to the Hawaiian Islands and all are commonly found on Oahu."

10. **Air quality, water quality or ambient noise levels would not be detrimentally affected.**

In order to mitigate temporary construction impacts on air quality, the contractors working on the project will be directed to insure that their vehicles engines are properly maintained to insure efficient operation and minimized vehicle exhaust fumes. Project contractors will also be asked to minimize construction vehicle movement during the peak traffic hours when air quality is most sensitive.

As mentioned earlier, in order to mitigate temporary construction impacts on noise, the contractors will be directed to

insure that vehicle and equipment engines are properly maintained to insure efficient operation. Further mitigation of noise impacts will be provided by insuring that contractors comply with existing noise regulations of the State and County.

In order to mitigate temporary construction impacts on water quality, best management practices will be followed in minimizing drainage impacts to the receiving waters. The project is not situated over a potable water source and will not impact on the City's potable ground water system.

11. **The project would not affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters.**

No environmentally sensitive areas would be affected. The project will not be situated on land involving or affecting flood hazard districts, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters. The proposed PCS Cell Site will be adjacent to an existing HECO Substation reservoir that has been at that location for over 15 years.

VII. CONCLUSION

Based on the foregoing report, the applicant respectfully requests your approval of a Findings of No Significant Impact for this Final Environmental Assessment to allow the construction of the proposed monopole with four panel antennas, two equipment cabinets, conduits and cables and a six-foot height chain link fence, with 3-foot wide personnel gate, surrounding the PCS Cell Site described in this report. The project will be developed and constructed in a fashion that will be sensitive to the environment.

APPENDIX I

SITE PLANS

DCR HONOLULU PCS PROJECT

SITE T-52D KANEOHE CENTRAL
PROJECT NO. 3HUO

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
T-1	INDEX OF DRAWINGS, SYMBOLS & ABBREVIATIONS, PROJECT SUMMARY AND VICINITY MAP
1	PLOT PLAN
2	SITE PLAN, ANTENNA EXCLUSION ZONES AND TRANSMITTER EQUIPMENT LAYOUT PLAN
3	ELEVATIONS AND PLATFORM PLAN
4	SECTIONS AND DETAILS
5	SECTIONS AND DETAILS
6	SECTIONS AND DETAILS
7	CHAIN LINK FENCE NOTES
8	GENERAL NOTES AND ANTENNA AND COAXIAL CABLE SCHEDULE

SYMBOLS & ABBREVIATIONS

——— - - ———	PROPERTY LINE	DET. / SHT.	DETAIL NO. SHEET NO.
——— G ———	GROUND WIRE		
1A	ANTENNA MARK	(N)	NEW
AZ.	AZIMUTH	W/	WITH
℄	CENTERLINE		
(E)	EXISTING		

PROJECT SUMMARY

THIS PROJECT INCLUDES:

CONSTRUCTION OF A CONCRETE FOUNDATION AND INSTALLATION OF A 30 METER TALL STEEL MONOPOLE AND PLATFORM DESIGNED AND FURNISHED BY THE OWNER.

INSTALLATION OF 2 PAIRS OF ANTENNAS ATTACHED TO THE MONOPOLE PLATFORM.

INSTALLATION OF BASE TRANSCEIVER STATION (BTS) MOUNTED ON A NEW CONCRETE PAD WITH A CHAIN LINK FENCE ENCLOSURE.

INSTALLATION OF COAXIAL CABLE RUNS BETWEEN THE BTS AND ANTENNAS.

NEW 100A ELECTRICAL AND TELEPHONE SERVICE FROM NEARBY UTILITY POLE.

HEC
SUB

PLOT: 1 = 1 T68 ..DWG

S PROJECT

HE CENTRAL
UO

IMARY

N AND INSTALLATION OF A
TFORM DESIGNED AND

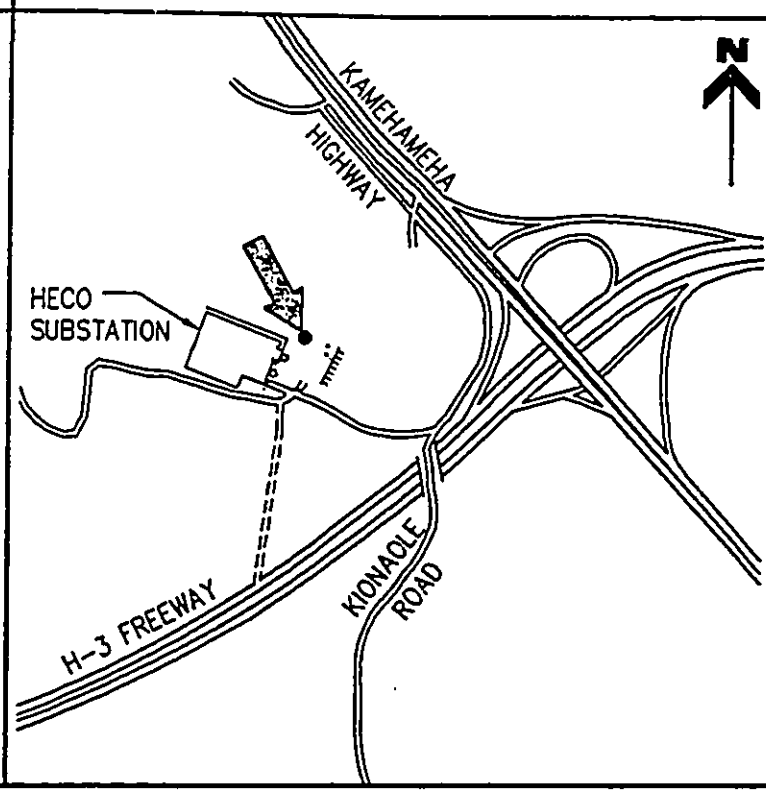
TACHED TO THE MONOPOLE

N (BTS) MOUNTED ON A
NCE ENCLOSURE.

WEEN THE BTS AND ANTENNAS.

VICE FROM NEARBY UTILITY

VICINITY MAP



OWNER APPROVAL	
OWNER REPRESENTATIVE	DATE

REVIEWED BY:	
RF ENGINEERING	DATE
CONSTRUCTION	DATE

DCR
COMMUNICATIONS,
INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED
PROFESSIONAL
ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

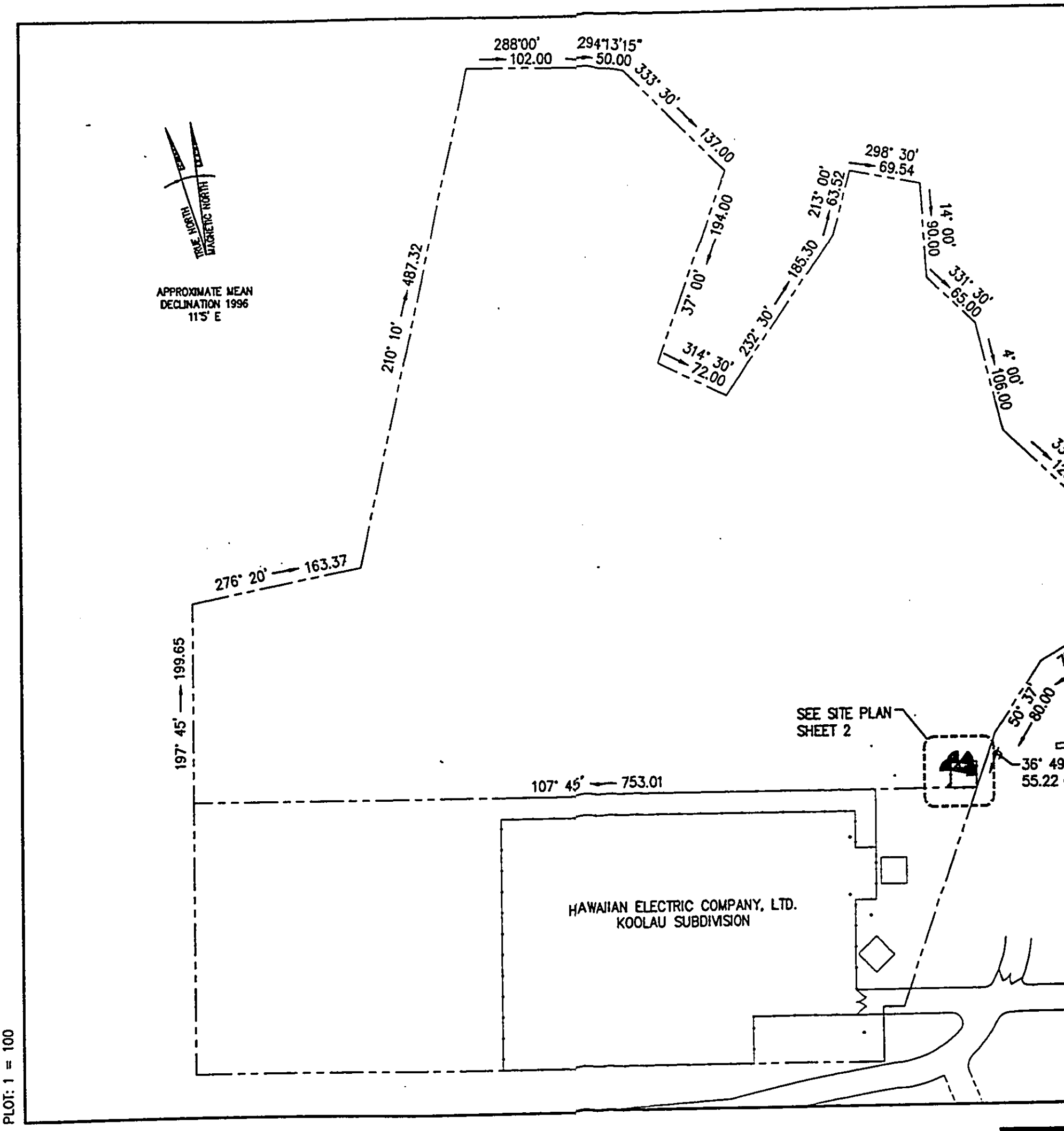
ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

INDEX OF DRAWINGS, SYMBOLS & ABBREVIATIONS, PROJECT SUMMARY AND VICINITY MAP

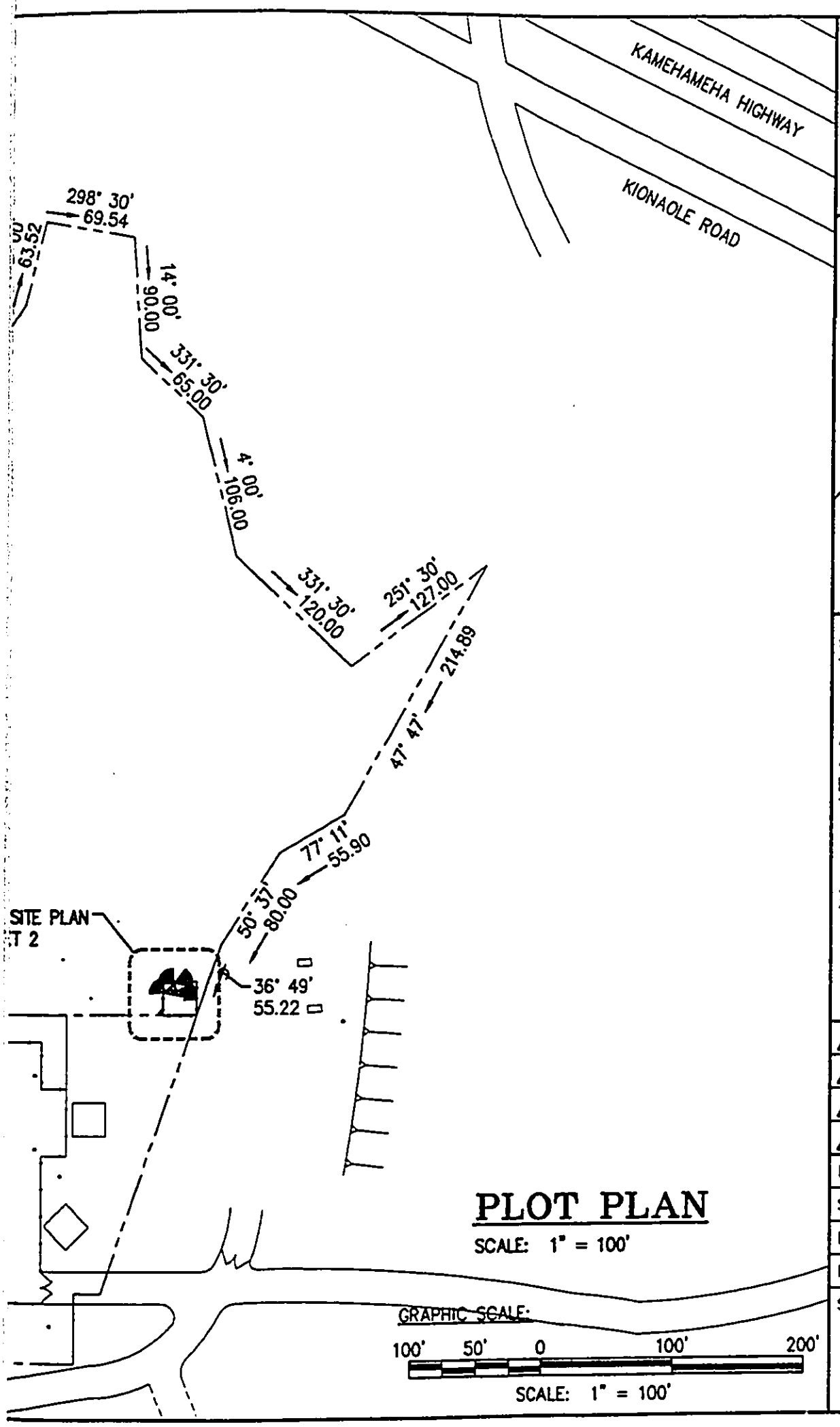
1	5/17/96	ISSUED FOR ZONING

Date	MAY 17, 1995
Scale	AS SHOWN
Drawn	VTY
Proj. No.	

SHEET
T-1
Of _____ Sheets


TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN
DECLINATION 1996
11°5' E
288°00'
102.00
294°13'15"
50.00
333° 30'
137.00
194.00
37° 00'
314° 30'
72.00
232° 30'
185.30
213° 00'
63.52
298° 30'
69.54
14° 00'
90.00
331° 30'
65.00
4° 00'
106.00
210° 10'
487.32
276° 20'
163.37
197° 45'
199.65
107° 45'
753.01
SEE SITE PLAN
SHEET 2
50° 37'
80.00
36° 49
55.22
HAWAIIAN ELECTRIC COMPANY, LTD.
KOOLAU SUBDIVISION

PLOT: 1 = 100



DCR
COMMUNICATIONS,
INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED
PROFESSIONAL
ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

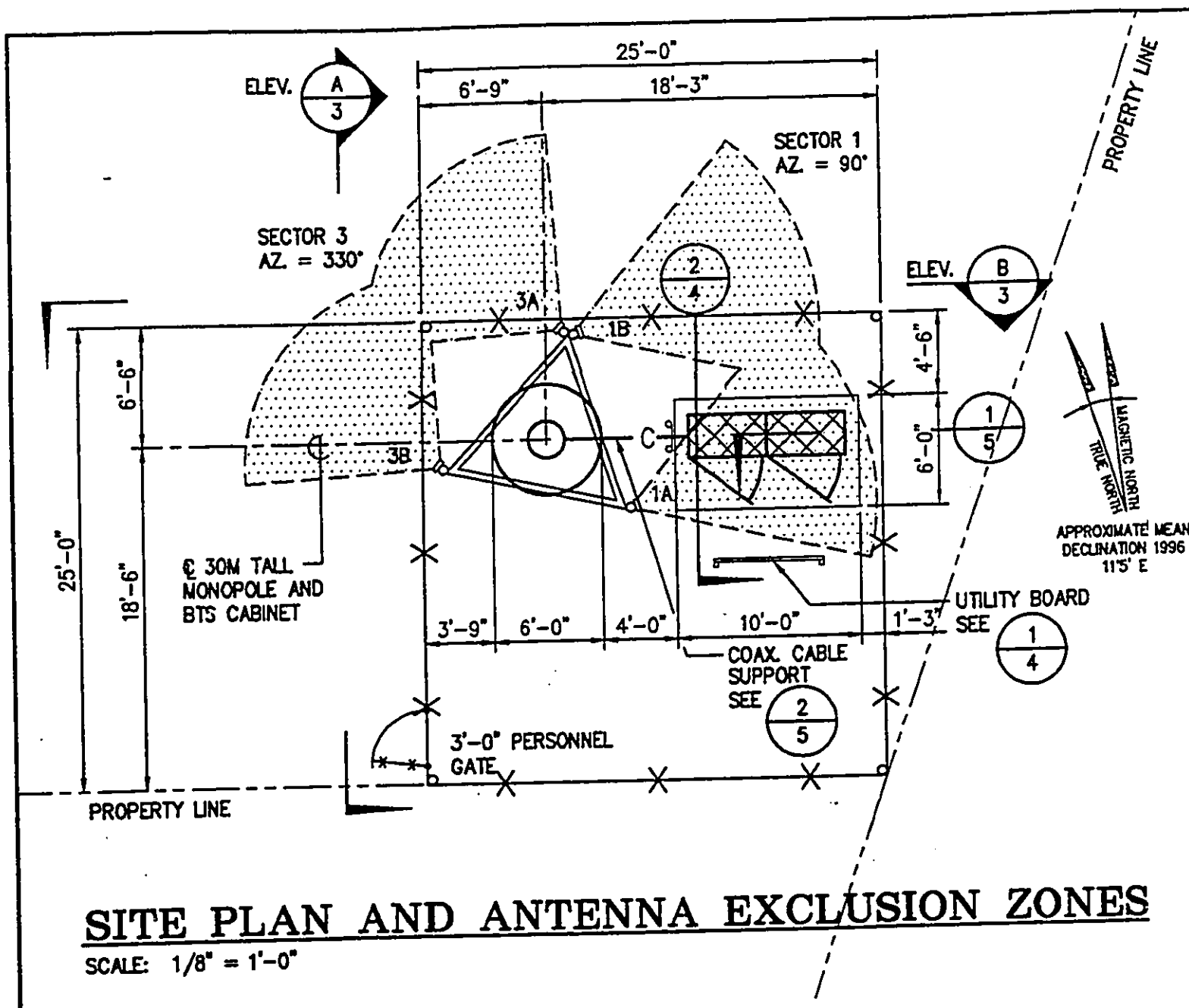
SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

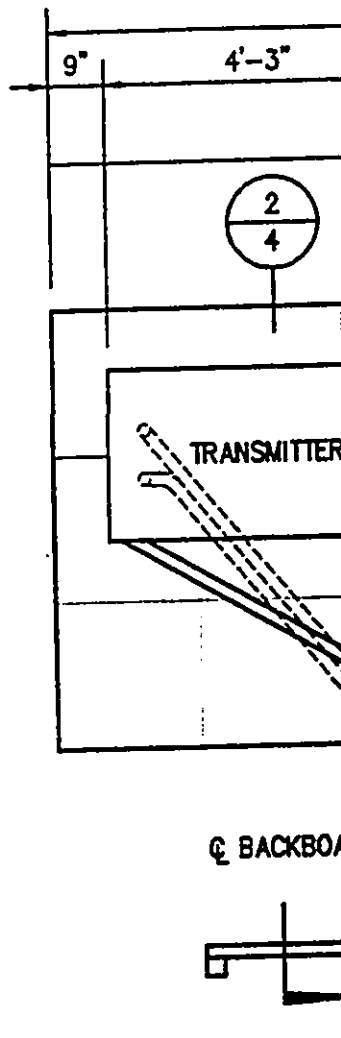
ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

PLOT PLAN

A	5/17/96	ISSUED FOR ZONING
Date		MAY 17, 1996
Scale		AS SHOWN
Drawn		VTY
Proj. No.		

SHEET
1
Of _____ Sheets



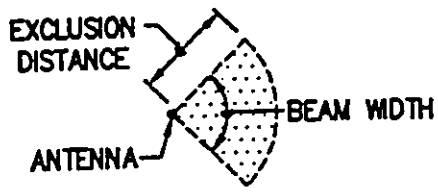


SITE PLAN AND ANTENNA EXCLUSION ZONES

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

1/2 TRANSMITTE

SCALE: 3/8" = 1'-0"

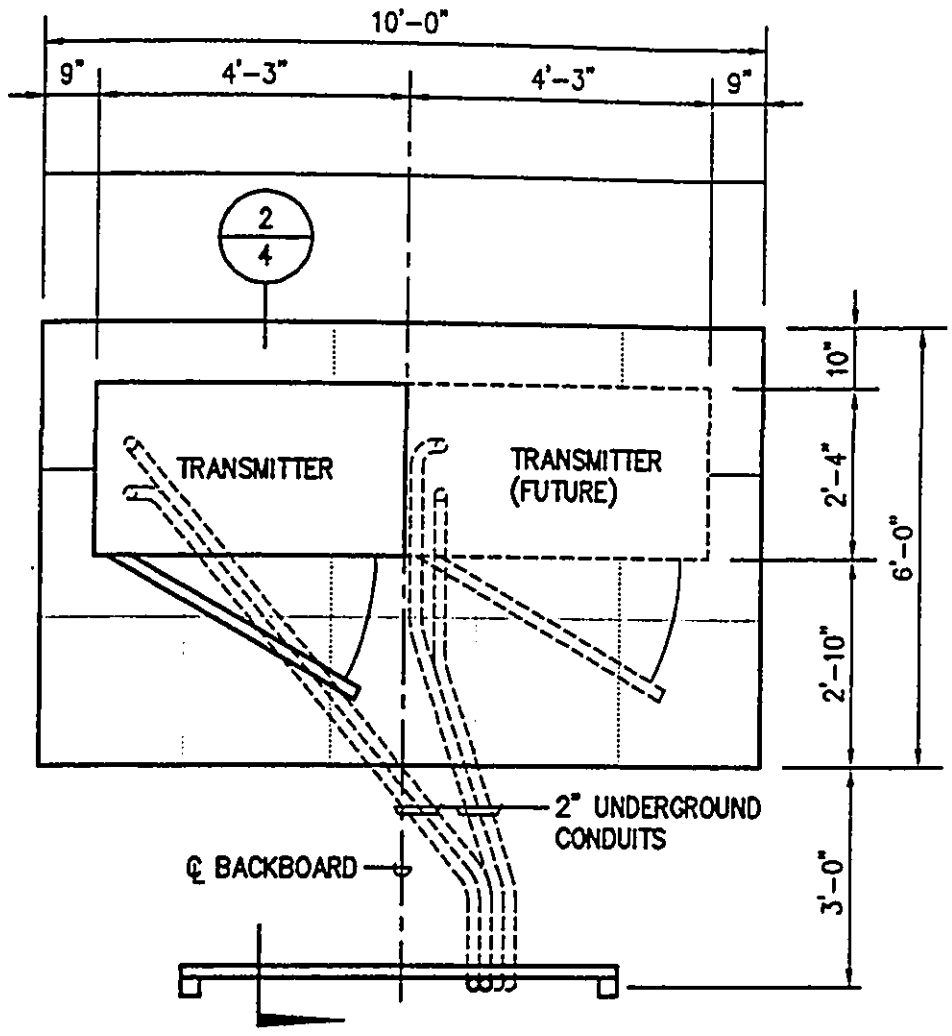


EXCLUSION DISTANCE = 12.7'
ANTENNA BEAM WIDTH:
ANTENNAS 1A & 1B = 63°
ANTENNAS 2A & 2B = 90°

TYPICAL ANTENNA EXCLUSION ZONE

NOT TO SCALE

FILE: T52U-2.DWG
PLOT: 1 = 1



1/2 TRANSMITTER EQUIPMENT LAYOUT PLAN

SCALE: 3/8" = 1'-0"

GRAPHIC SCALE:

8' 4' 0 8' 16'

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

DCR COMMUNICATIONS, INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED PROFESSIONAL ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

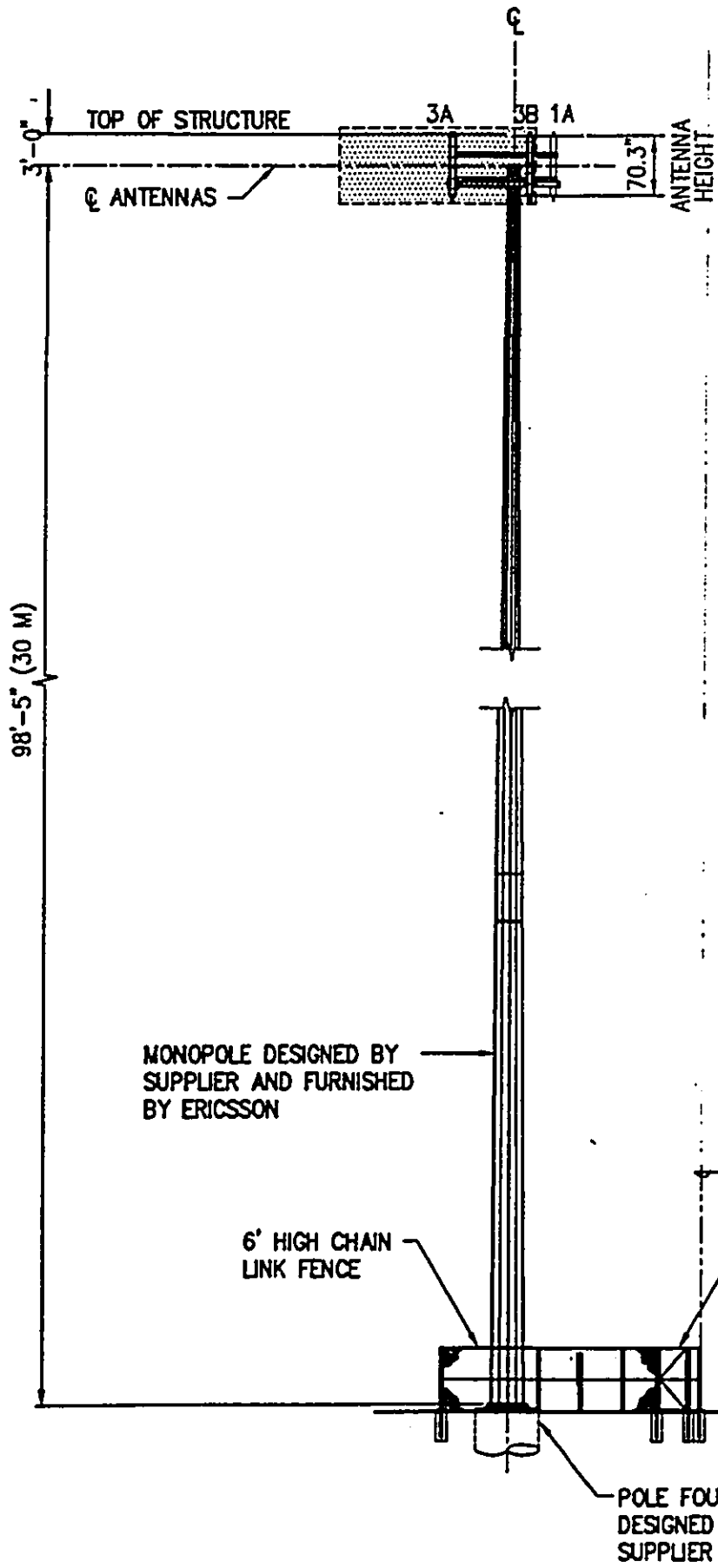
SITE PLAN, ANTENNA EXCLUSION ZONES AND TRANSMITTER EQUIPMENT LAYOUT PLAN

1	5/17/96	ISSUED FOR ZONING

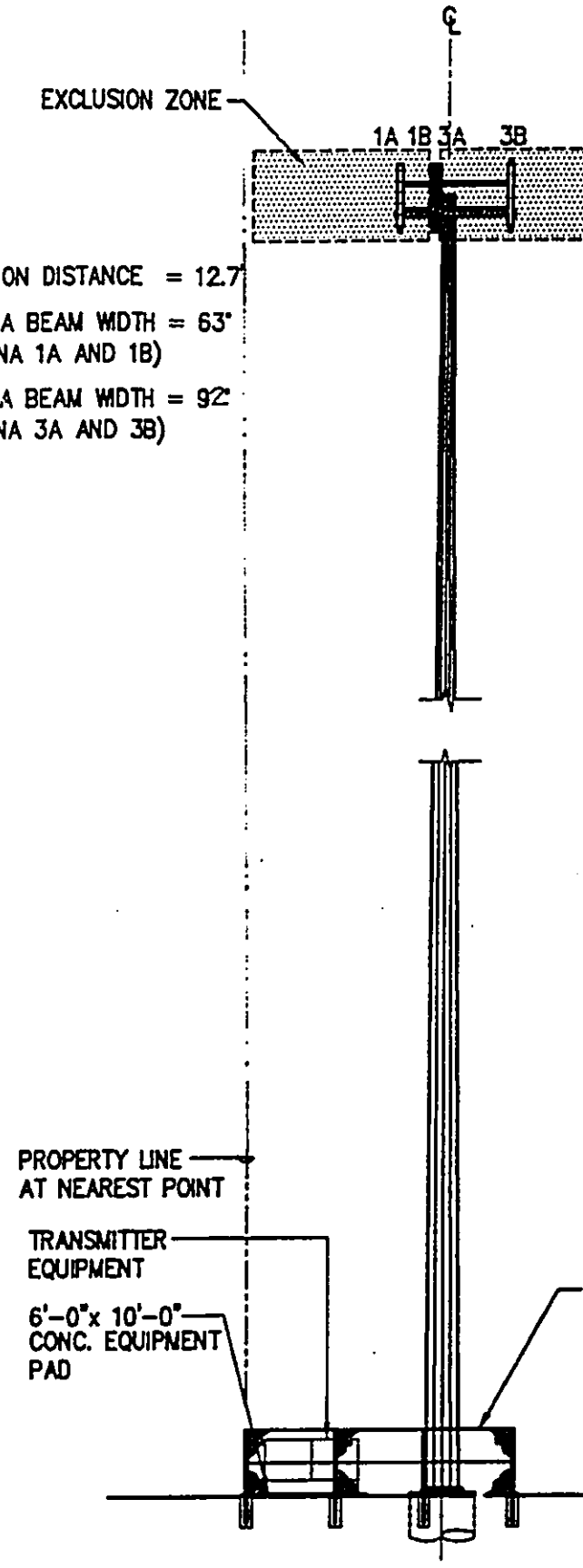
Date	MAY 17, 1996
Scale	AS SHOWN
Drawn	VTY
Proj. No.	

SHEET 2

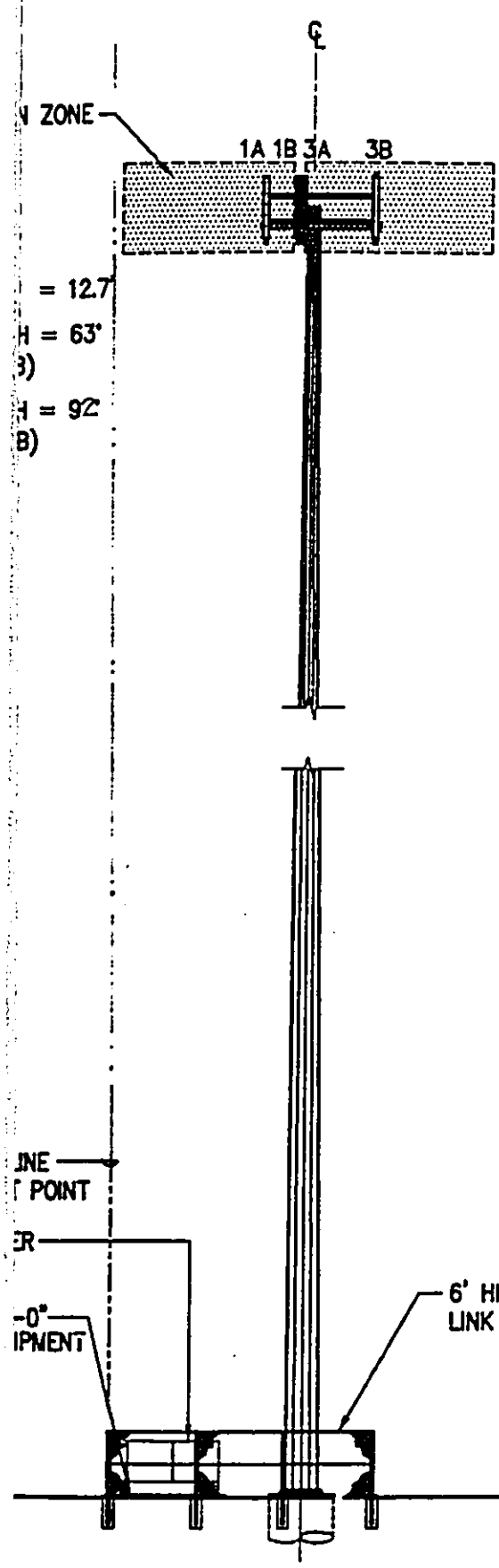
Of _____ Sheets



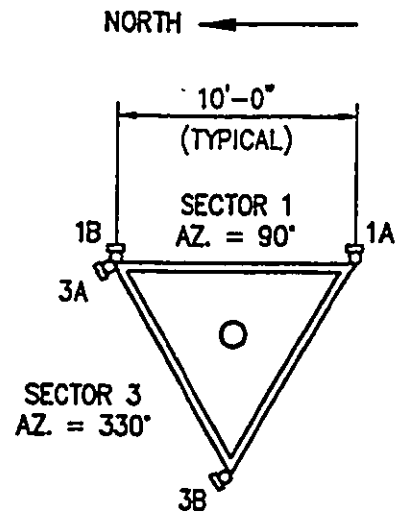
A/3 ELEVATION
SCALE: 1/16" = 1'-0"



B/3 ELEVATION
SCALE: 1/16" = 1'-0"



B/3 ELEVATION
SCALE: 1/16" = 1'-0"



3/3 PLATFORM PLAN
SCALE: 1/8" = 1'-0"

DCR
COMMUNICATIONS,
INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED
PROFESSIONAL
ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

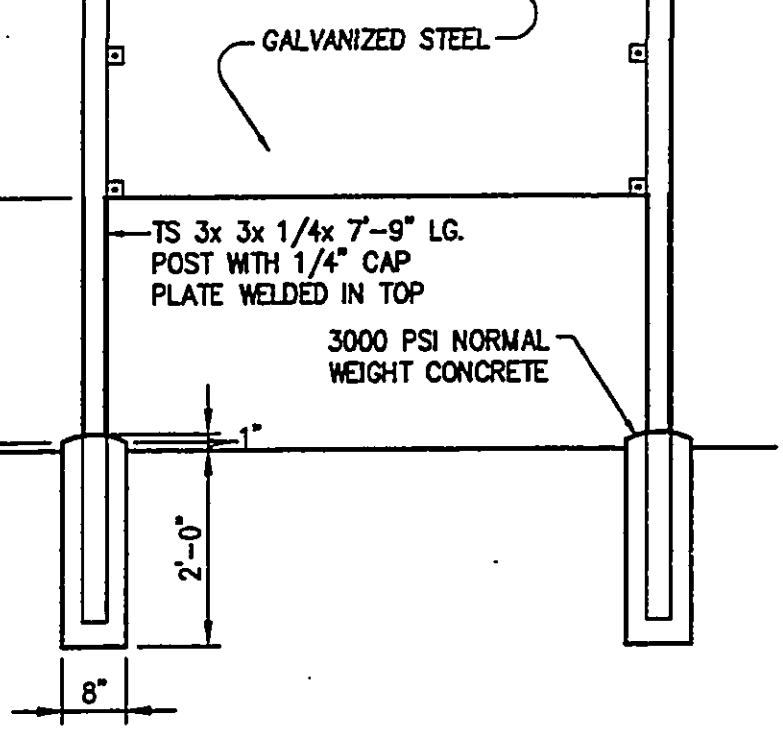
SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

ELEVATIONS AND
PLATFORM PLAN

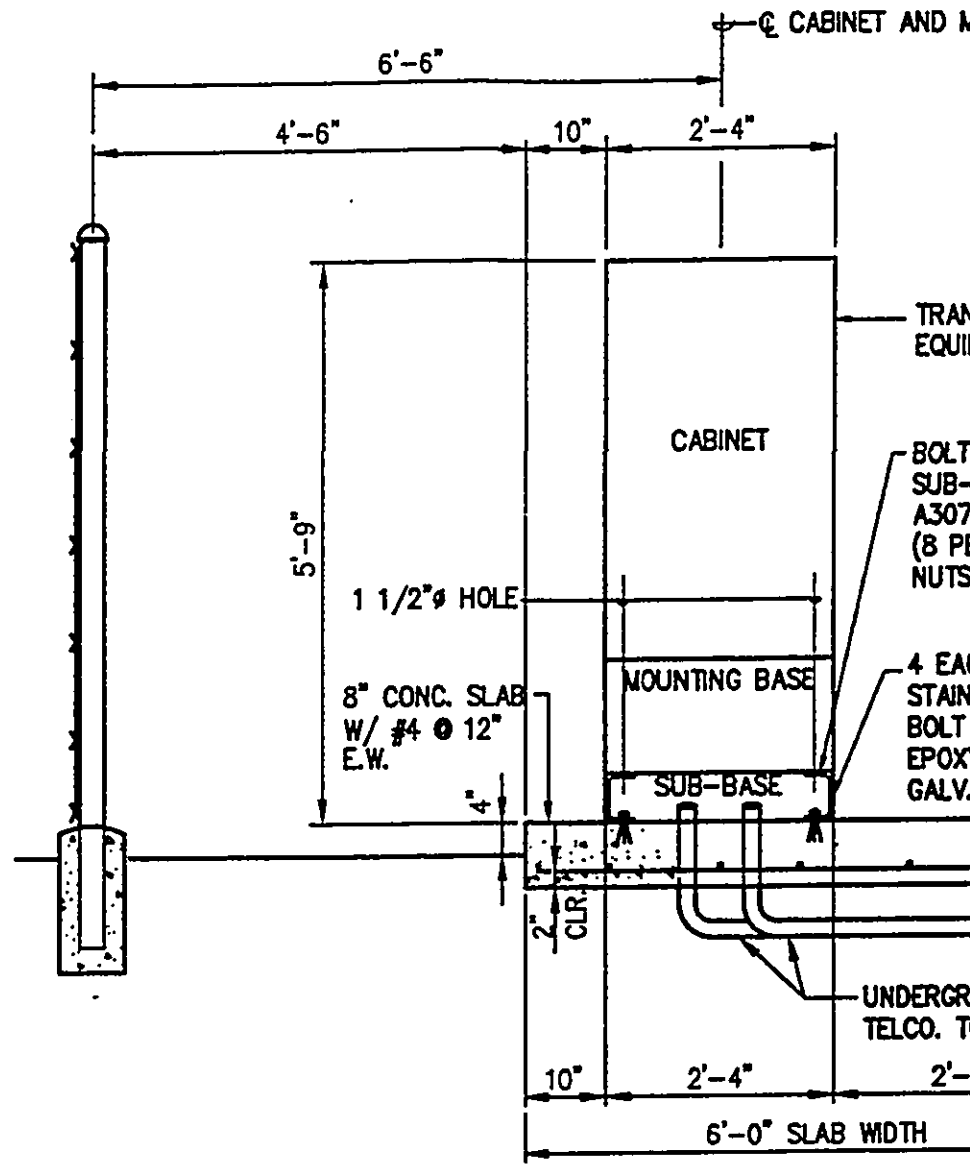
A	5/17/96	ISSUED FOR ZONING
Date	MAY 17, 1996	
Scale	AS SHOWN	
Drawn	MAI, VTY	
Proj. No.		

SHEET
3
Of _____ Sheets



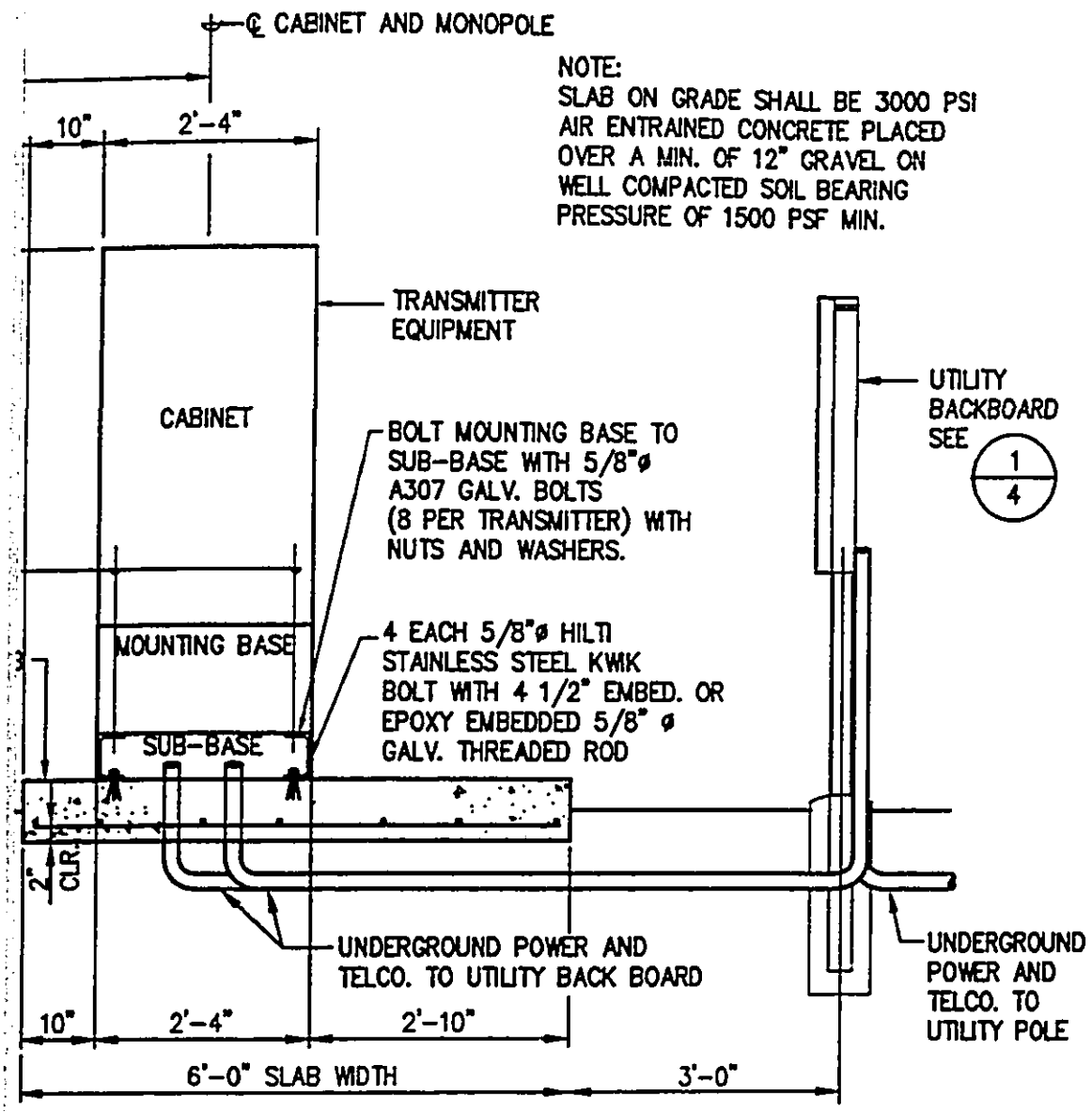
UTILITY BACKBOARD DETAIL

1/4 SCALE: 1/2" = 1'-0"



2/4 SEC
SCALE:

FILE: T520-436.DWG
PLOT: 1 = 1



2/4 **SECTION**
SCALE: 1/2" = 1'-0"

DCR COMMUNICATIONS, INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED PROFESSIONAL ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

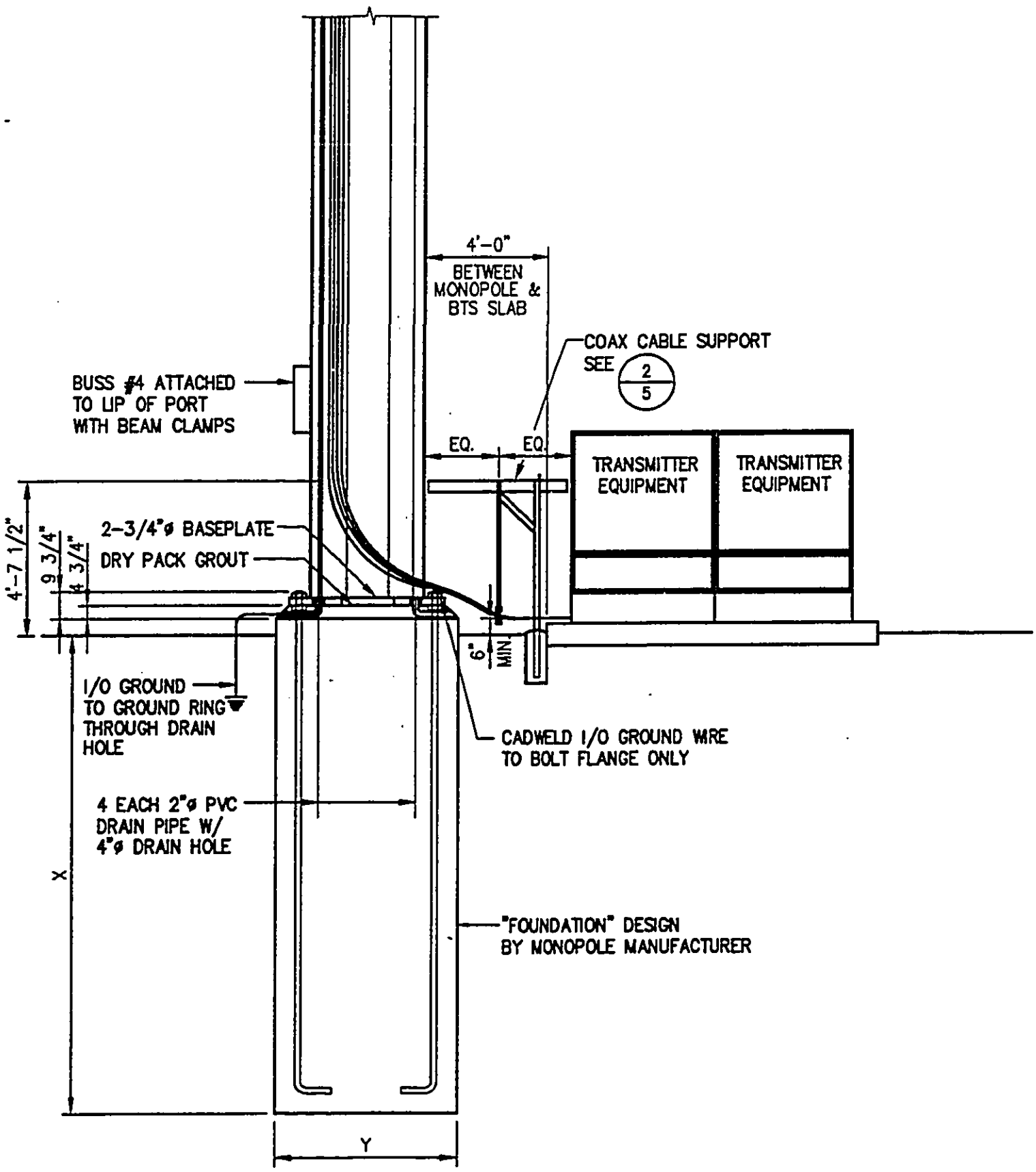
SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

SECTIONS AND DETAILS

△		
△		
△		
△A	5/17/96	ISSUED FOR ZONING

Date	MAY 17, 1996
Scale	AS SHOWN
Drawn	MAI, VTY
Proj. No.	
SHEET	4
	Of _____ Sheets



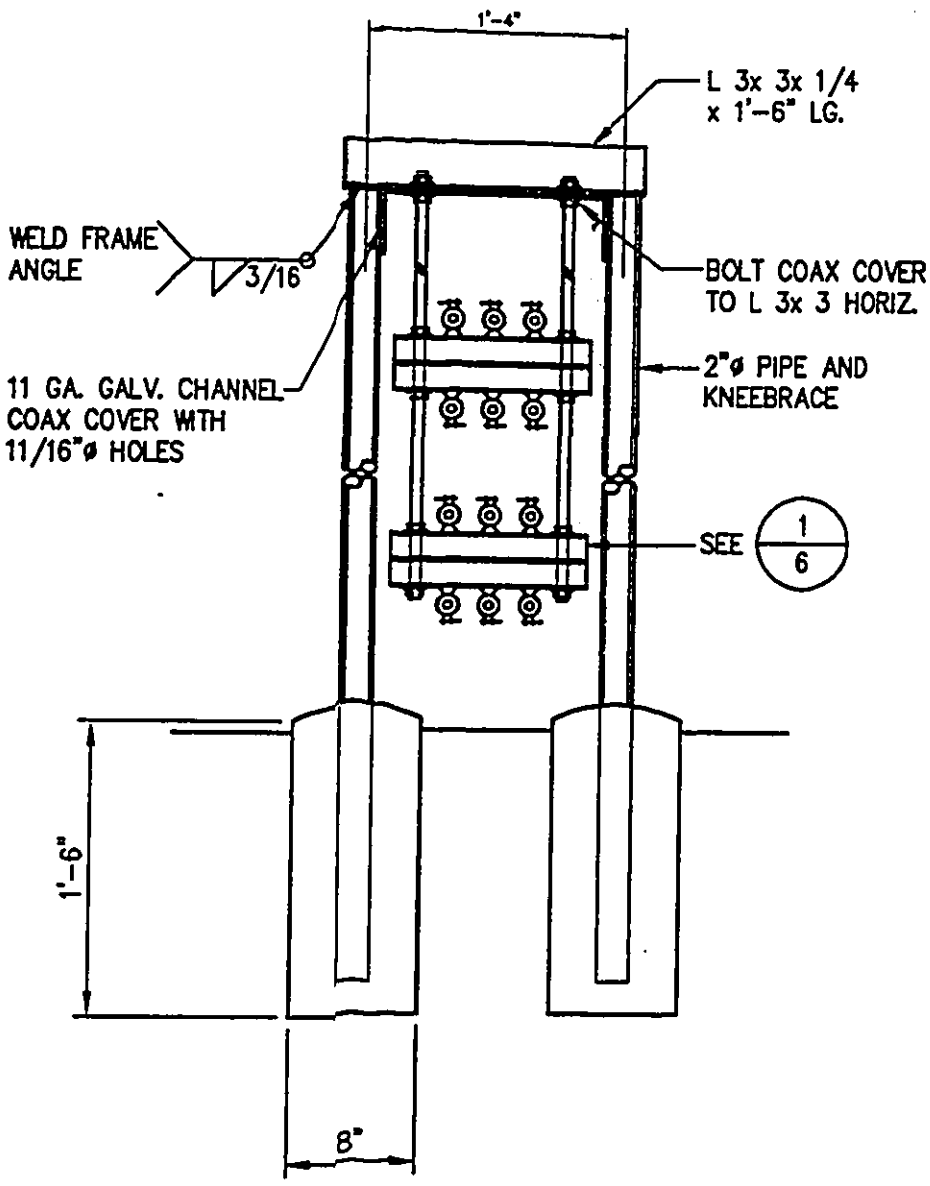
1/5 SECTION
SCALE: 1/4" = 1'-0"

WELD FRAME ANGLE

11 GA. GALV. CHAN
COAX COVER WITH
11/16"ø HOLES

1'-6"

FI[illegible] T52[illegible] "6.DW[illegible]
PLOT: 1 = 1



COAX CABLE SUPPORT DETAIL

2/5 SCALE: 1" = 1'-0"

DCR COMMUNICATIONS, INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED PROFESSIONAL ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

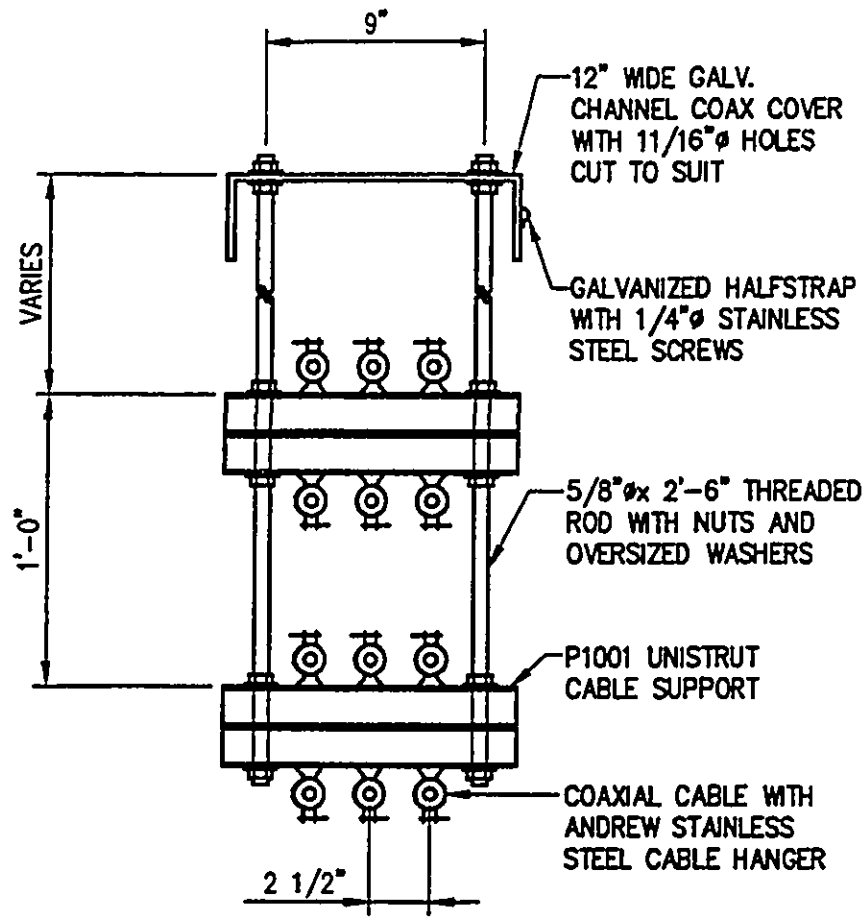
SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

SECTIONS AND DETAILS

△		
△		
△		
△A	5/17/96	ISSUED FOR ZONING

Date	MAY 17, 1996
Scale	AS SHOWN
Drawn	MAI, VTY
Proj. No.	
SHEET	5
Of _____ Sheets	



1/6 DETAIL

SCALE: 1 1/2" = 1'-0"

DCR
COMMUNICATIONS,
INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED
PROFESSIONAL
ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

SITE NO.: T-52D

SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

SECTIONS AND DETAILS

△		
△		
△		
△A	5/17/96	ISSUED FOR ZONING

Date	MAY 17, 1996
Scale	AS SHOWN
Drawn	MAI, VTY
Proj. No.	

SHEET
6
Of _____ Sheets

CHAIN LINK FENCE NOTES:

DESCRIPTION:

HEIGHT (OVERALL): FENCE TO STAND 6' ABOVE GRADE WHEN ERECTED.

FABRIC: SHALL BE NO. 9 GAUGE HOT-DIPPED GALVANIZED. TOP SELVAGE TO HAVE A TWISTED & BARBED FINISH; BOTTOM SELVAGE TO HAVE A KNUCKLED FINISH.

LINE POST: MEDIUM FENCE; 1.900" O.D. TUF-20 STRUCTURAL TUBING, GALVANIZED INSIDE AND OUTSIDE, NOMINAL WALL THICKNESS @ 0.090", WEIGHT PER FOOT @ 1.74 LBS.

TERMINAL POST: END, CORNER AND PULL POSTS HOT-DIP PIPE 2.875" O.C. - 4.46 LBS. PER LINEAL FT. - GALVANIZED INSIDE AND OUTSIDE.

GATES: GATE FRAMES TO BE MADE OF 1.900 O.D. TUBULAR MATERIAL HOT-DIP GALVANIZED INSIDE AND OUT. CORNERS TO HAVE MORTISED JOINTS FOR PROPER FIT (HAMMERING OF PIPE NOT ACCEPTABLE). WELDS TO BE CONTINUOUS AROUND PIPE, CLEANED AND TREATED WITH ZINC-RICH FENCE. FABRIC TO BE THE SAME AS FENCE. GATES TO BE COMPLETED WITH MALLEABLE IRON PIPE AND SOCKET HINGES, CATCH STOPS AND CENTER REST. HINGES TO PERMIT GATE TO SWING BACK AGAINST FENCE - 180° IF REQUIRED.

GATE POST: HOT-DIP GALVANIZED PIPE INSIDE AND OUT ACCORDING TO THE FOLLOWING TABULATION.

GATE FRAME	GATE OPENING	GATE POST	WEIGH LIN. FT
1.90 O.D.	SINGLE TO 6' OR DOUBLE TO 12' INCL.	2.875" O.D.	4.46
1.90 O.D.	SINGLE OVER 6' TO 13' OR DOUBLE OVER 12' TO 26' INCL.	4.00" O.D.	6.56
1.90 O.D.	SINGLE OVER 13' TO 18' OR DOUBLE OVER 26' TO 36' INCL.	6.66" O.D.	18.97

PLOT: 1 = 1 T52I .DWG

LINK FENCE NOTES:

TION:

(OVERALL): FENCE TO STAND 6' ABOVE WHEN ERECTED.

SHALL BE NO. 9 GAUGE HOT-DIPPED ZED. TOP SELVAGE TO HAVE A TWISTED ED FINISH; BOTTOM SELVAGE TO HAVE A ED FINISH.

ST: MEDIUM FENCE; 1.900" O.D. TUF-20 JRAL TUBING, GALVANIZED INSIDE AND , NOMINAL WALL THICKNESS @ 0.090", PER FOOT @ 1.74 LBS.

L POST: END, CORNER AND PULL POSTS PIPE 2.875" O.C. - 4.46 LBS. PER T. - GALVANIZED INSIDE AND OUTSIDE.

GATE FRAMES TO BE MADE OF 1.900 O.D. MATERIAL HOT-DIP GALVANIZED INSIDE T. CORNERS TO HAVE MORTISED JOINTS PER FIT (HAMMERING OF PIPE NOT BLE). WELDS TO BE CONTINUOUS PIPE, CLEANED AND TREATED WITH ZINC- NCE. FABRIC TO BE THE SAME AS FENCE. O BE COMPLETED WITH MALLEABLE IRON D SOCKET HINGES, CATCH STOPS AND REST. HINGES TO PERMIT GATE TO ACK AGAINST FENCE - 180° IF REQUIRED.

ST: HOT-DIP GALVANIZED PIPE INSIDE AND CORDING TO THE FOLLOWING TABULATION.

ATE OPENING	GATE POST	WEIGHT LIN. FT.
LE TO 6' OR BLE TO 12' INCL.	2.875" O.D.	4.46
LE OVER 6' TO 13' OR BLE OVER 12' TO 26' INCL.	4.00" O.D.	6.56
LE OVER 13' TO 18' OR BLE OVER 26' TO 36' INCL.	6.66" O.D.	18.97

INSTALLATION:

POST SPACINGS: POSTS TO BE SPACED IN LINE OF FENCE NOT FARTHER APART THAN 10-FOOT CENTERS.

POST SETTINGS: ALL POSTS TO BE SET 18 INCHES IN CONCRETE FOOTINGS. DIAMETER OF HOLE TO BE 8 INCHES.
TOP RAIL: HOT-DIP GALVANIZED INSIDE AND OUT 1-5/8" O.D. PROVIDED WITH COUPLINGS EVERY 21 FEET. IN LIEU OF TOP RAIL, A 9-GAUGE GALVANIZED WIRE CAN BE USED TO PASS THROUGH BASE OF LINE POST TOPS.

BRACES: WHERE 9-GAUGE WIRE IS USED IN LIEU OF TOP RAIL, BRACES SHALL BE HOT-DIPPED INSIDE AND OUTSIDE MATERIAL. BRACE SHALL BE THE SAME AS TOP RAIL, BE SPACED MIDWAY BETWEEN TOP RAIL AND GROUND, AND EXTEND FROM TERMINAL POST TO FIRST ADJACENT LINE POST. BRACES TO BE SECURELY FASTENED TO POSTS BY SUITABLE PRESSED STEEL CONNECTORS, THEN TRUSSED FROM LINE POST BACK TO TERMINAL POST WITH 3/8" ROUND ROD.

FITTINGS: HOT-DIP GALVANIZED. ALL FITTINGS TO BE MALLEABLE, CAST IRON OR PRESSED STEEL.

TIE WIRE: FABRIC TO BE FASTENED TO LINE POSTS WITH TIE WIRES SPACED APPROXIMATELY 24 INCHES APART AND FASTENED TO TOP RAIL APPROXIMATELY 18 INCHES APART. WHEN 9 GAUGE TENSION WIRE IS USED IN LIEU OF TOP RAIL, THE FABRIC IS THEN FASTENED TO TENSION WIRE WITH 11 GAUGE HOG RINGS AT 18 INCHES APART.

FRAMEWORK MATERIAL: ALL POSTS, RAILS AND BRACES HOT-DIP GALVANIZED INSIDE AND OUT.

GROUNDING:

GROUND FENCING TO GROUND RING AT EACH CORNER.

PROVIDE GROUND JUMPER BETWEEN GATE AND FENCING.

GENERAL:

BIDDERS MUST ADHERE STRICTLY TO SPECIFICATIONS. ANY CHANGE OR DEVIATION FROM THESE SPECIFICATIONS, OR ANY DETAIL IN WHICH THEIR PRODUCT DIFFERS FROM THESE SPECIFICATIONS, MUST BE EXPLAINED IN DETAIL IN A SEPARATE LETTER ACCOMPANYING THEIR BID.

DCR
COMMUNICATIONS, INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED PROFESSIONAL ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

CHAIN LINK FENCE NOTES

1		
2		
3		
A	5/17/96	ISSUED FOR ZONING

Date: MAY 17, 1996
Scale: AS SHOWN
Drawn: MAI, VTY
Proj. No.

SHEET 7
Of _____ Sheets

GENERAL NOTES:

1. CONFORM TO THE UNIFORM BUILDING CODE, 1991 EDITION

2. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED BY FIELD MEASUREMENT AND FROM THE EXISTING STRUCTURAL DRAWINGS. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION.

3. CONCRETE FOR FOUNDATIONS FOR MONOPOLES AND TOWERS SHALL ATTAIN A STRENGTH OF 3500 PSI AT 3 DAYS (72 HOURS). CONCRETE SHALL BE WORKABLE FOR AT LEAST ONE HOUR AFTER BEGINNING OF PLACEMENT OF CONCRETE.

4. ALL OTHER CONCRETE SHALL ATTAIN A STRENGTH OF 3000 PSI AT 28 DAYS.

5. CONCRETE TEST CYLINDERS FOR FOUNDATIONS FOR MONOPOLES AND TOWERS SHALL BE AS FOLLOWS:

   A. EIGHT TEXT CYLINDERS SHALL BE PREPARED FOR EACH SITE.

   B. TWO CYLINDERS SHALL BE TAKEN FROM EACH TRUCK. IF LESS THAN FOUR TRUCKS ARE REQUIRED, TEST CYLINDERS SHALL BE TAKEN FROM ALL TRUCKS, FOR A TOTAL OF 8 TEST CYLINDERS.

   C. CYLINDERS SHALL BE TESTED AS FOLLOWS:
      (1) TWO CYLINDERS AT 3 DAYS (72 HOURS). IF REQUESTED BY ERICSSON, THESE TEST CYLINDERS SHALL BE BROKEN THE MORNING OF THE THIRD DAY.
      (2) TWO CYLINDERS AT 7 DAYS.
      (3) TWO CYLINDERS AT 28 DAYS.
      (4) TWO CYLINDERS SHALL BE HELD IN RESERVE FOR USE AS REQUIRED.

6. STRUCTURAL STEEL

   A. STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED, AFTER FABRICATION.

   B. ALL EXPOSED STEEL THAT IS NOT GALVANIZED SHALL BE COATED WITH A GALVANIZING PRODUCT IN THE FIELD.

   C. ALL FASTENERS TO BE STAINLESS STEEL STRUCTURAL FASTENERS FOR ANTENNA SUPPORT. ASSEMBLIES SHALL CONFORM TO ASTM A307 OR ASTM A36. ALL STRUCTURAL FASTENERS FOR STRUCTURAL STEEL FRAMING SHALL CONFORM TO ASTM A325. FASTENERS SHALL BE 5/8 INCH MINIMUM DIAMETER BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE. ALL EXPOSED FASTENERS, NUTS, AND WASHERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. CONCRETE EXPANSION ANCHORS SHALL BE HILTI KWIK BOLTS UNLESS OTHERWISE NOTED.

6. STRUCTURAL STEEL (CONTINUED)

   D. STRUCTURAL STEEL PIPES SHALL BE ASTM A501 OR ASTM A53, GRADE B. STRUCTURAL STEEL PLATES AND RODS SHALL BE ASTM A36. DESIGN, FABRICATION, AND ERECTION OF STEEL SHALL BE IN ACCORDANCE WITH THE "AISC SPECIFICATION FOR , THE DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."

   E. WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) D.1.1-92. STRUCTURAL WELDING CODE-STEEL. WELD ELECTRODES SHALL BE E70XX. WELDS SHALL BE MADE BY AWS CERTIFIED WELDERS. PREQUALIFIED WELDING PROCEDURES ARE TO BE USED, UNLESS AWS QUALIFICATION IS SUBMITTED TO THE OWNER PRIOR TO FABRICATION.

7. EPOXY SHALL BE RAWL FOIL-FAST 2 COMPONENT CARTRIDGE SYSTEM OR EQUAL.

8. THE GENERAL CONTRACTOR AND OR HIS SUBCONSULTANTS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK.

9. LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF AMERICAN INSTITUTE FOR TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.

10. ALL COAXIAL CABLE CONNECTORS AND TRANSMITTER EQUIPMENT SHALL BE AS SPECIFIED BY THE OWNER AND IS NOT INCLUDED IN THESE CONSTRUCTION DOCUMENTS. CONNECTION HARDWARE SHALL BE STAINLESS STEEL.

11. CLOUDED PARTS OF DRAWINGS ARE AS-BUILT CONDITIONS OR SUPPOSED TO BE BUILT WHEN TRANSMITTER IS IN PLACE.

12. THE CONSTRACTOR SHALL COORDINATE ACCESS TO THE SITE WITH THE LAND OWNER.

ANTENNA AND COAXIAL CABLE SCHEDULE

ANTENNA MARK	SECTOR	ANTENNA	COAXIAL CABLE FEED LOCATION	AZIMUTH (0°=NORTH)	COAXIAL CABLE MARK	COAXIAL CABLE TYPE	TRX ANT CONFIGUR
1A	1	DAPA SYSTEMS MODEL 49210 63° 17.8 dBd PANEL (70.3' x 8.7" x 2.7")	BOTTOM	90	1AT/1AR	—	TRX\F
1B	1	DAPA SYSTEMS MODEL 49210 63° 17.8 dBd PANEL (70.3' x 8.7" x 2.7")	BOTTOM	90	1BT/1BR	—	TRX\F
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
3A	3	DAPA SYSTEMS MODEL 59210 92° 16.3 dBd PANEL (70.3' x 6.3" x 2.7")	BOTTOM	330	3AT/3AR	—	TRX\F
3B	3	DAPA SYSTEMS MODEL 59210 92° 16.3 dBd PANEL (70.3' x 6.3" x 2.7")	BOTTOM	330	3BT/3BR	—	TRX\F

PLOT: 1 = 1

M A53,
L BE
EEL
N FOR ,
. STEEL

WELDING
TEEL. WELD
BY
DURES
TED TO

SHALL
ONS

AN
OREST
OR
EATED

ENT SHALL
THESE
BE

R SUPPOSED

WITH THE

COAXIAL CABLE TYPE	TRX ANTENNA CONFIGURATION
	TRX\RX
	TRX\RX
	-
	-
	TRX\RX
	TRX\RX

DCR
COMMUNICATIONS,
INC.

HONOLULU, HAWAII

MYLES Y. SHIMOKAWA
LICENSED PROFESSIONAL ENGINEER
NO. 3906-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

KSF, INC.

SITE NO.: T-52D
SITE NAME: KANEOHE CENTRAL

ADDRESS:
45-610 KIONAOLE ROAD
KANEOHE, HAWAII 96744
TMK: (1) 4-5-42 : 8

GENERAL NOTES AND ANTENNA AND COAXIAL CABLE SCHEDULE

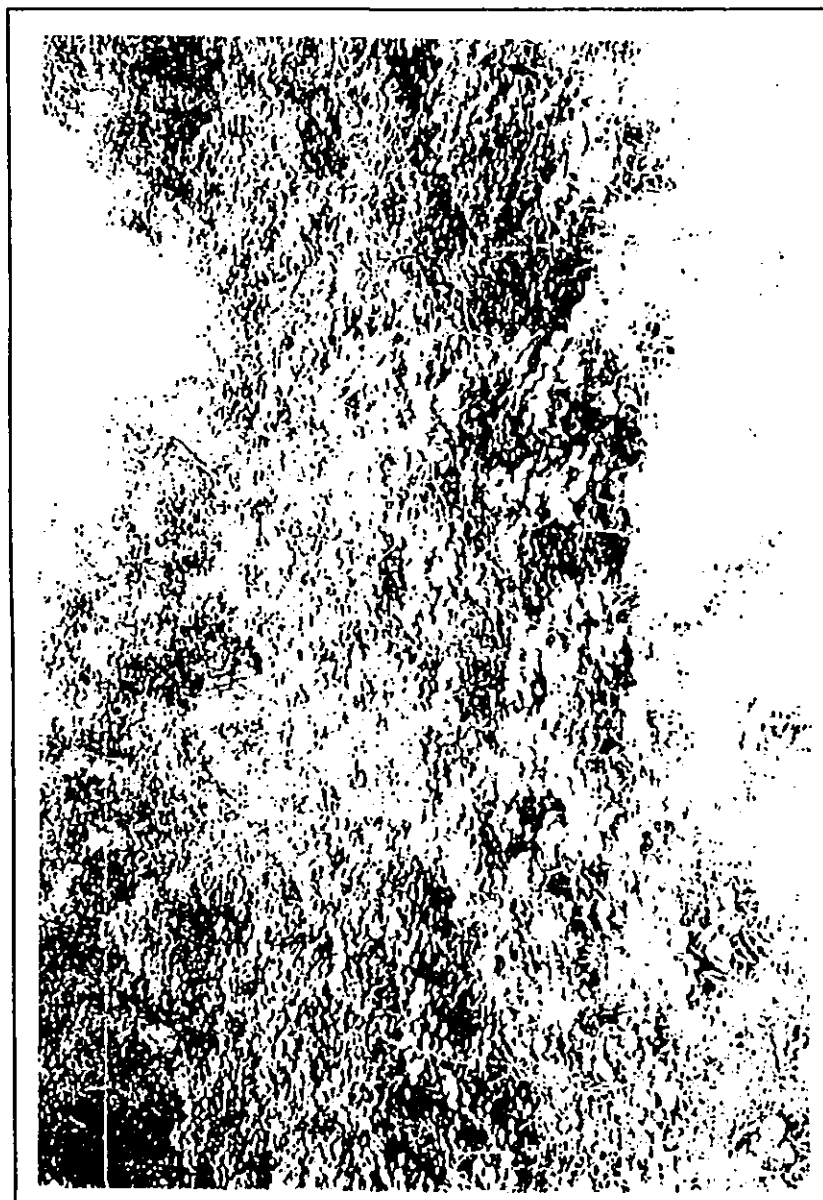
△		
△		
△		
△A	5/17/96	ISSUED FOR ZONING

Date MAY 17, 1996
Scale AS SHOWN
Drawn MAI, VTY
Proj. No.
SHEET 8
Of _____ Sheets

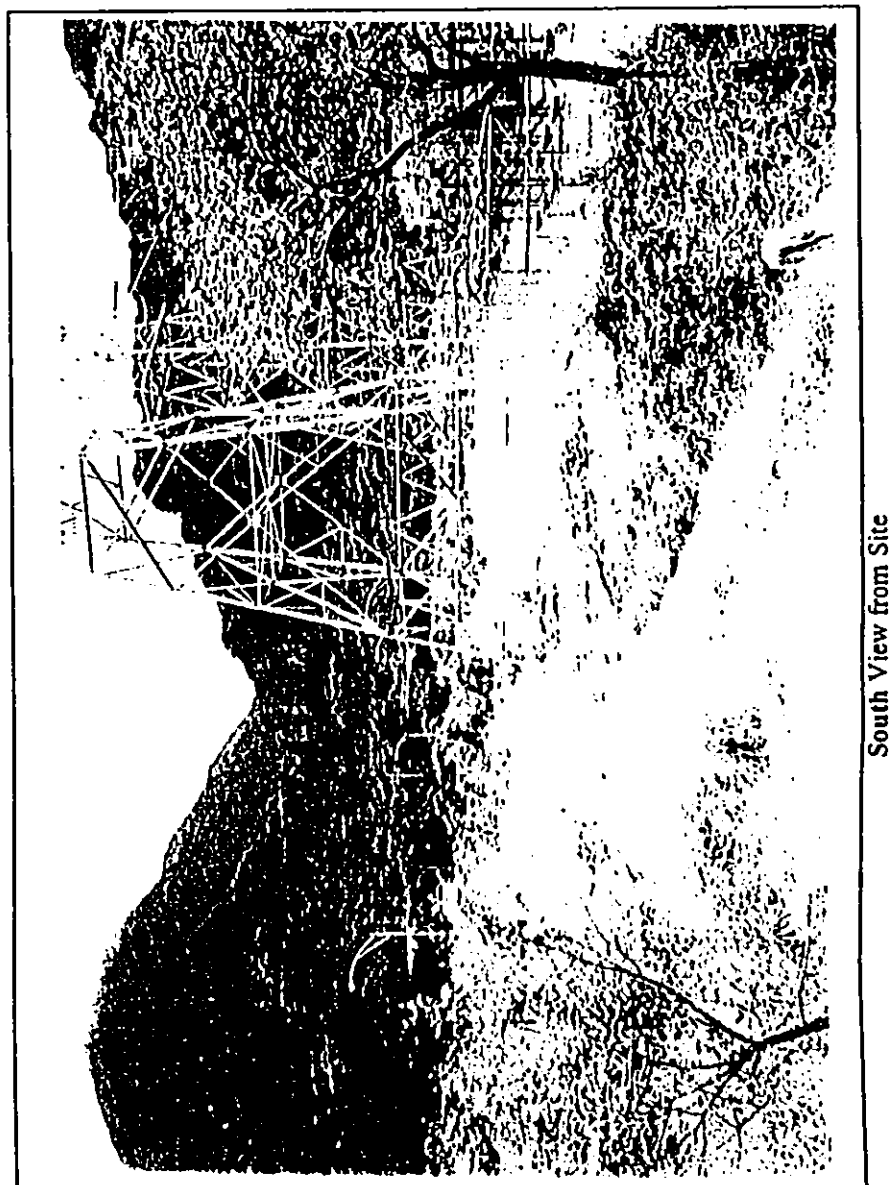
APPENDIX II

PHOTOGRAPHS OF THE SITE

T-52D

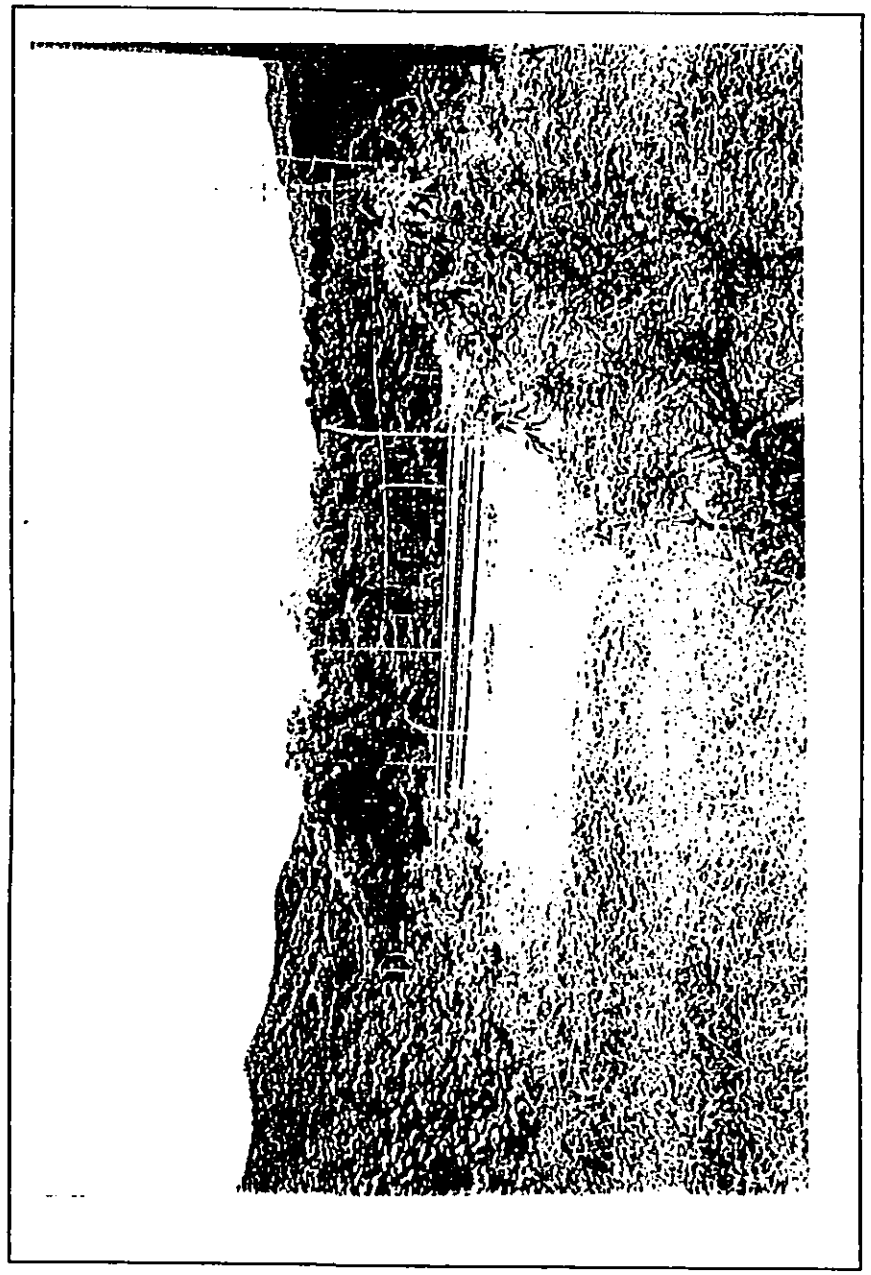


North View from Site

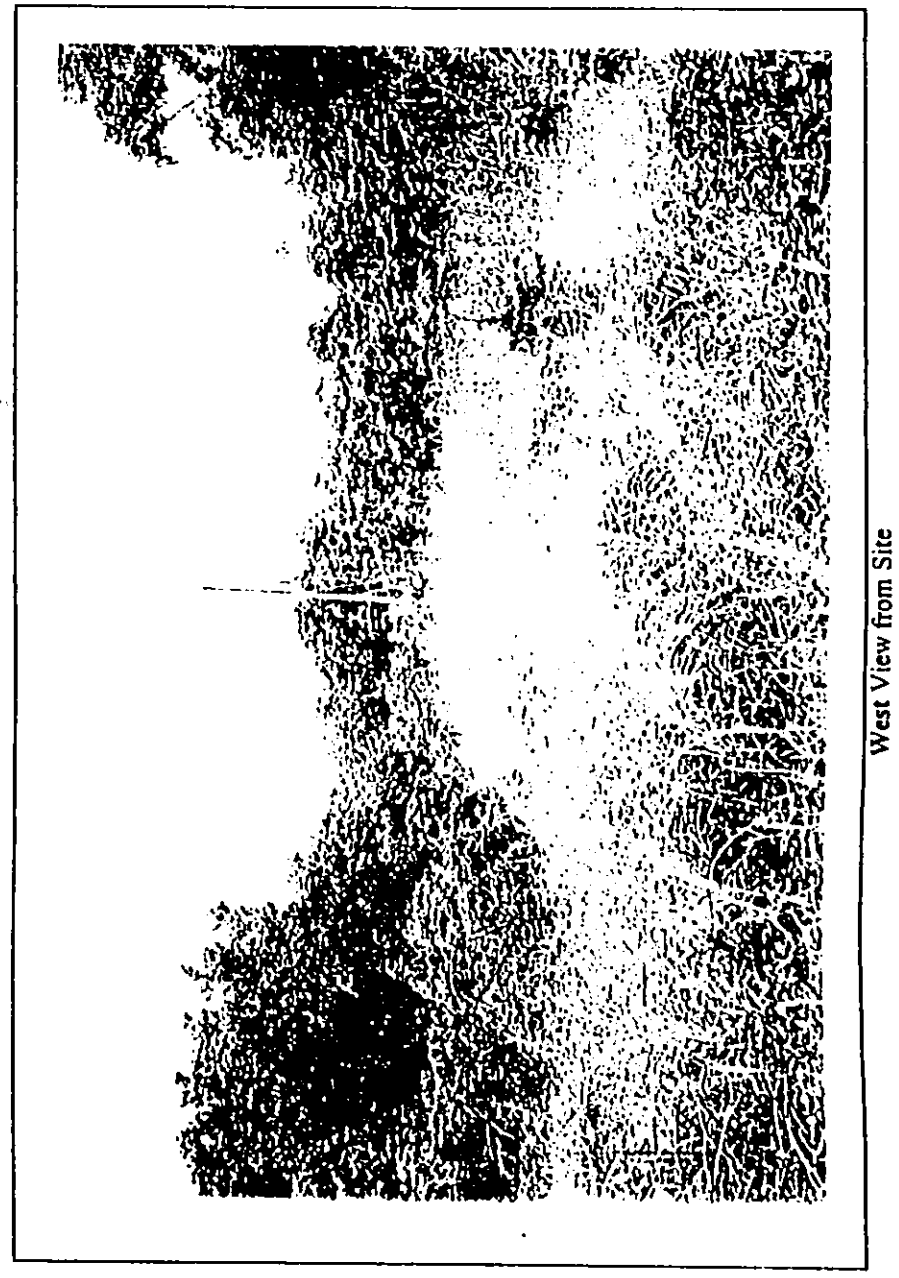


South View from Site

T-52D

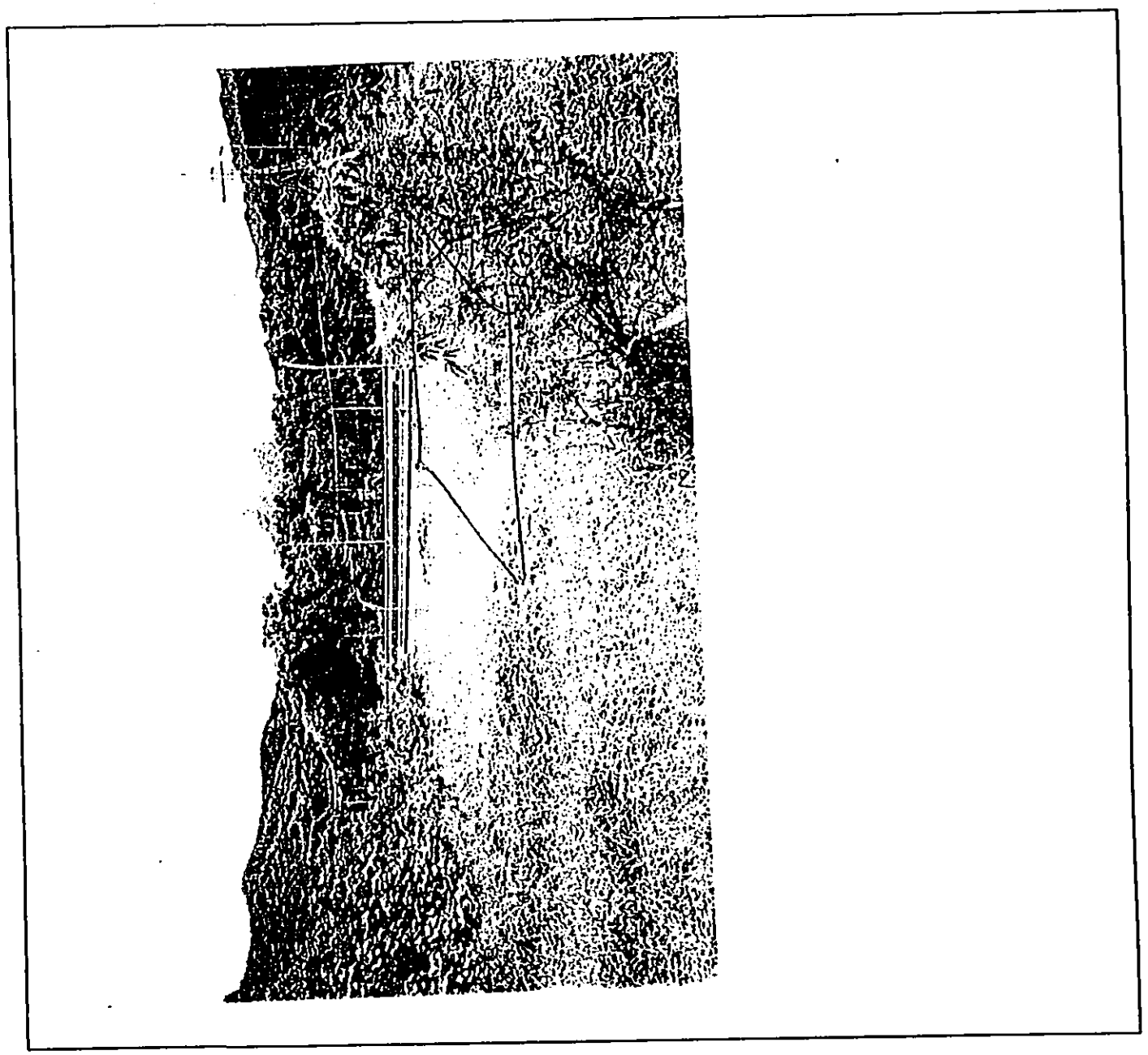


East View from Site



West View from Site

T-52D



View of Proposed Site

APPENDIX III

FLORA AND FAUNA SURVEY REPORT

Prepared by Botanical Consultants

FLORA AND FAUNA SURVEY REPORT FOR A PROPOSED PCS CELL SITE 45-610 KIONAOLE ROAD, KANEOHE, HAWAII

On October 8, 1996, the nine hundred square foot proposed PCS Cell Site, 45-610 Kionaole Road, Kaneohe, Hawaii was surveyed to ascertain what flora occupies the area and to determine the species composition of the fauna of this small site.

FLORA

The proposed PCS Cell Site is located on abandoned agricultural land. All parts of the site were surveyed and a total of nine plant species were found. The primary vegetation is wedelia (*Wedelia trilobata* (L.) Hitchc.). There are also three yellow guava tree seedlings (*Psidium guajava* L.) on the site as well as some California grass (*Brachiaria mutica* (Forssk.) Stapf) and some Hilo grass (*Paspalum conjugatum* Bergius). The only other plants on this small site are one each of the following: sensitive plant (*Mimosa pudica* L.), honohono (*Commelina diffusa* N. L. Burm.), and *Stachytarpheta urticifolia* (Salisb.) Sims. Around the edges of the site sword fern (*Nephrolepis exaltata* (L.) Schott.) is common.

All of these plants are very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds.

FAUNA

A survey to determine what fauna occupy the proposed PCS Cell Site in Kaneohe, Hawaii was carried out on October 8, 1996. One twenty minute fixed station observation period and one wide, circular transsect were carried out on

this small site.

No rats, field mice, or mongoose were found although they are presumed to be present. However, a surprisingly large number of bird species were found including a single indigenous bird, the common fairy-tern (*Gygis alba*). In addition many large mourning doves (*Zenaida macroura*), red-whiskered and red-vented bulbuls (*Pycnonotus jocosus* and *P. cafer), orange-cheeked wax bills (Estrilds caerulescens*), white eyes (*Zosterops japonicus*), and house sparrows (*Passer domesticus*) occupy the site and its environs. Only a single myna (*Acridotheres tristis*) was seen on the powerline near the site.

Except for the fairy-tern, none of the birds found on this site are native to the Hawaiian Islands and all are commonly found on Oahu.

APPENDIX IV

AGENCY COMMENTS

BENJAMIN J. CAYETANO
GOVERNOR

GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

220 SOUTH KING STREET
FOURTH FLOOR
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

August 22, 1996

Mr. Michael D. Wilson, Director
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Attention: Don Horiuchi

Dear Mr. Wilson:

Subject: Draft Environmental Assessment (EA) for PCS Cell Site, Kaneohe, Oahu; TMK: 4-5-42: por. 8

We have the following comments:

1. Consult with the Department of Land Utilization and document your contact in the final EA.

2. In the final EA, identify public view points of the project site from which visual impacts may occur, and:

   a. show these impacts by superimposing the proposed project on photographs taken from these public view points.

   b. identify measures which will mitigate visual impacts. We recommend painting the cell site equipment so that it will blend in with the surroundings.

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

Sincerely,

for GARY GILL
Director

c: Douglas Logan, DCR Communications
Keith Kurahashi, Kusao & Kurahashi

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

December 6, 1996

Mr. Gary Gill
Director
Office of Environmental Quality Control
State of Hawaii
220 S. King Street, Fourth Floor
Honolulu, Hawaii 96813

Attention: Ms. Nancy Heinrich

Dear Mr. Gill:

Subject: **Draft Environmental Assessment (EA) for PCS Cell Site**
Kaneohe, Oahu (Site T-52D)
Tax Map Key: 4-5-42: Portion of 8

Thank you for your response to the State Department of Land and Natural Resources' request for review and comment on the subject Draft Environmental Assessment in connection with the Conservation District Use Permit (CDUP) application.

Our response to the comments submitted will be included in the Final Environmental Assessment and are summarized as follows:

1. A copy of the request for review and comment to the City Department of Land Utilization (DLU) in connection with the subject Draft EA, is attached. We have not received comments from the DLU, to date, but will include any timely comments and our responses in the Final EA.

2. Once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the existing HECO substation. The existing substation has various power lines and utility structures at and above 100-feet.

The proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totaling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. The proposed cell site will blend in with the larger electrical towers and electrical transformers existing at the adjacent HECO Substation. The proposed monopole is situated among taller more obtrusive poles and power lines thus the proposed impacts will be minimal. The site is also situated above Kamehameha Highway, behind tall trees and shrubbery, such that the site will be partially blocked from view along Kamehameha Highway.

The access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate. The pole, antennas and utility equipment will be painted to match surrounding structures.

Should you have questions or require additional information please contact Debra Tom or myself.

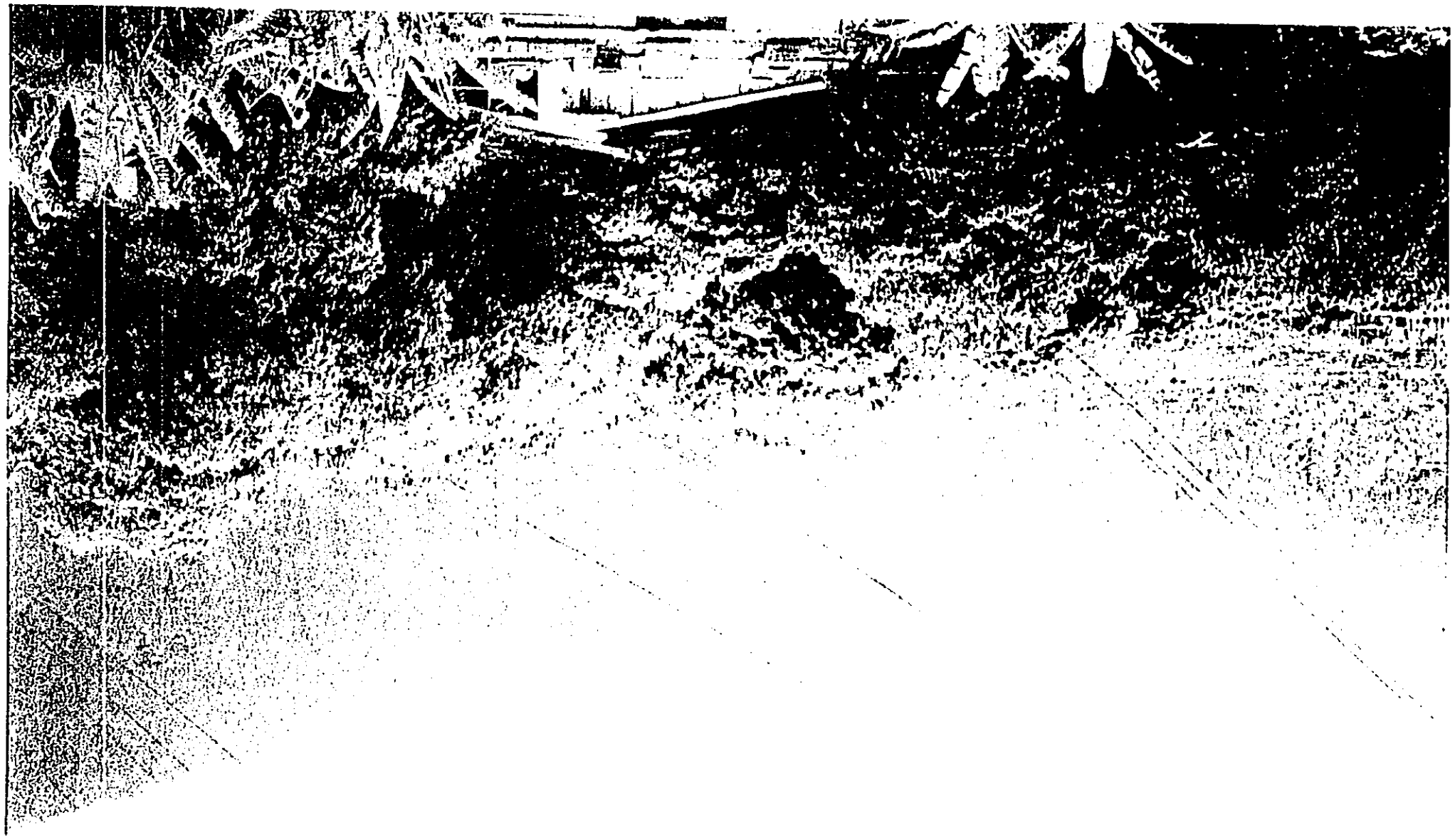
Very truly yours,

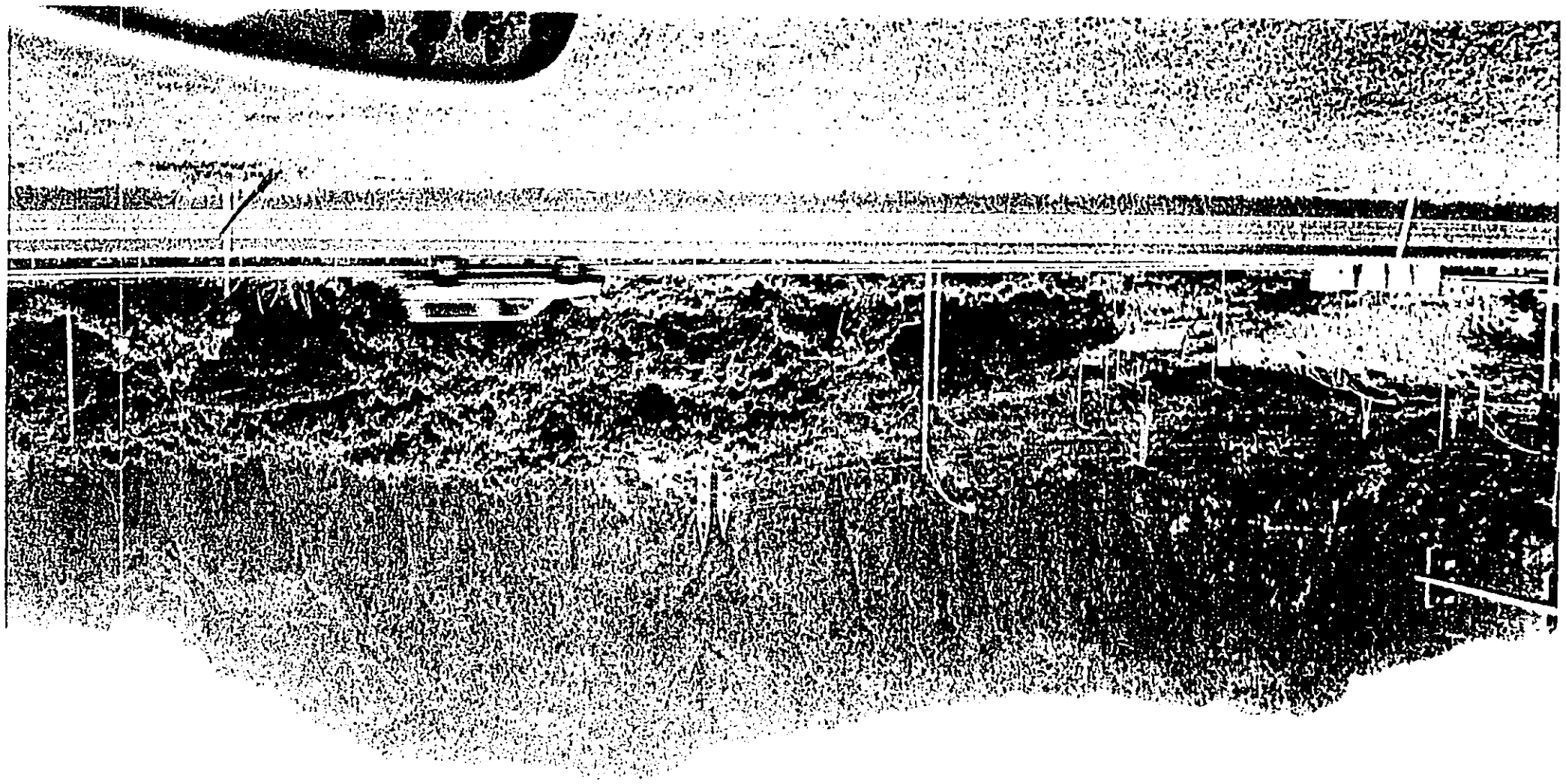
Keith H. Kurahashi

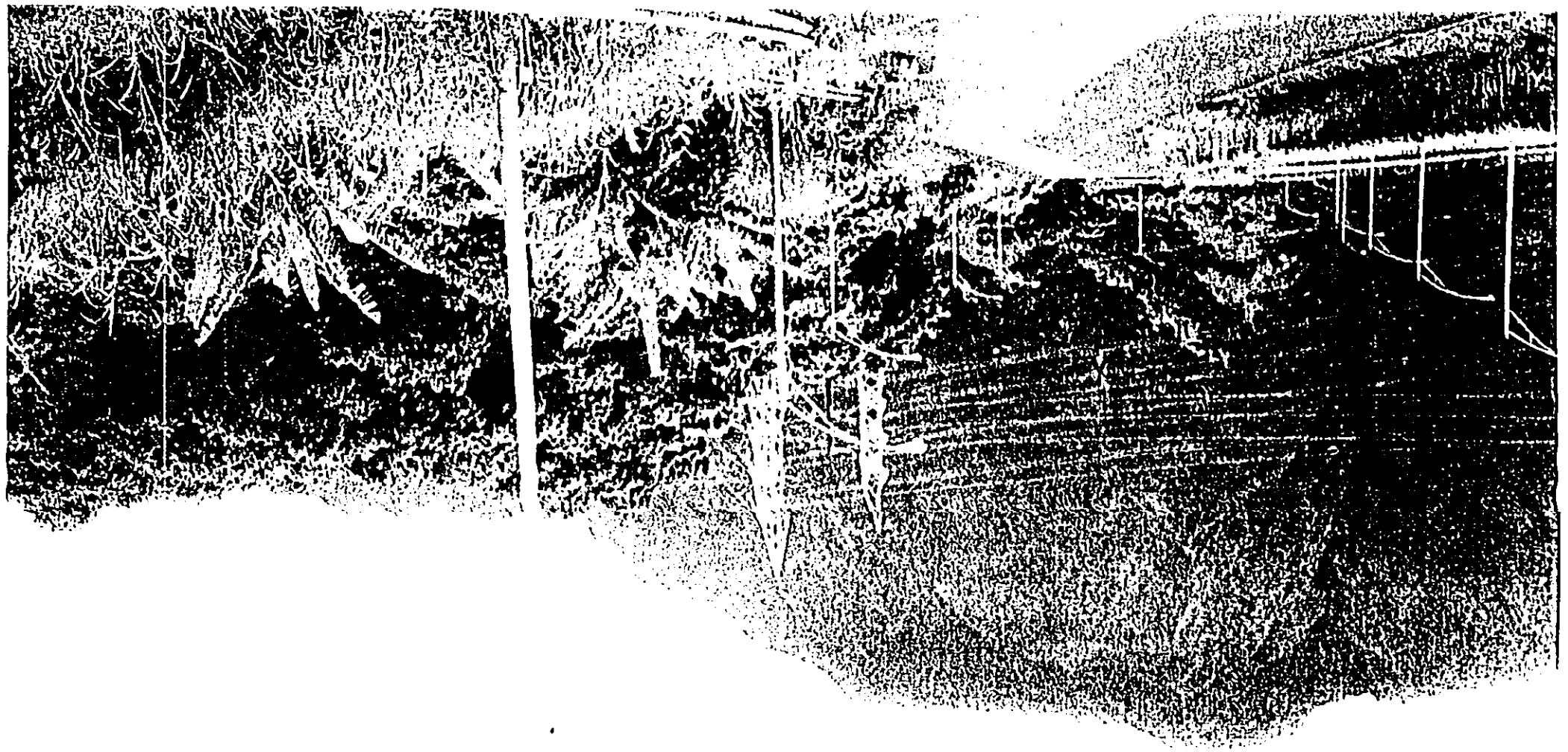
Keith H. Kurahashi

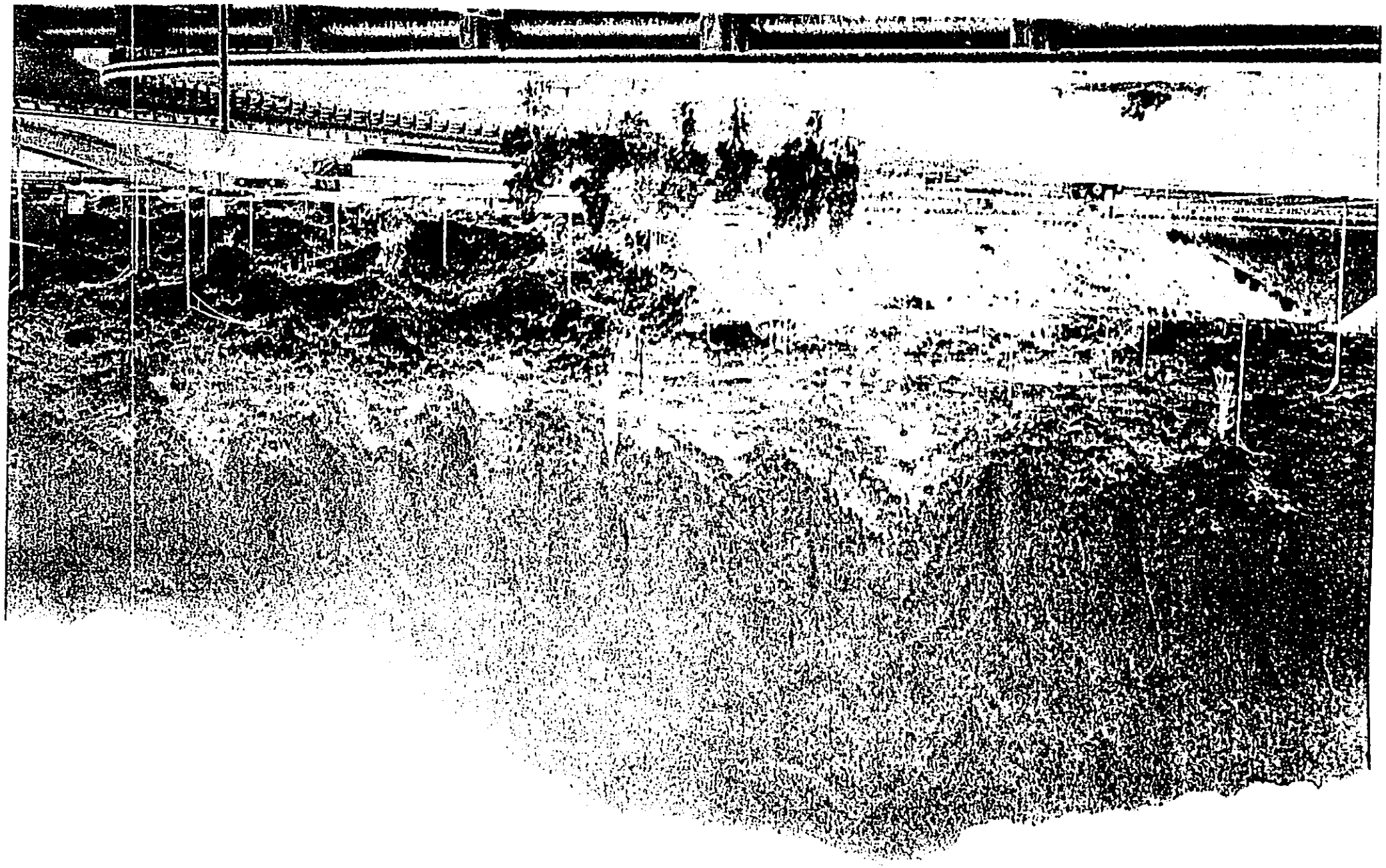
Encl.

cc: DCR Communications, Inc.









LO

T520 3731

RECEIVED
DIVISION OF
LAND MANAGEMENT
SEP 12 2 24 PM '96

STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
667 SOUTH KING STREET, SUITE 100
HONOLULU, HAWAII 96813
(808) 548-8960

September 6, 1996

RECEIVED
96 SEP 11 A9:17
DEPT. OF LAND
& NATURAL RESOURCES
STATE OF HAWAII

Mr. Michael D. Wilson, Chairperson
State of Hawaii
Board of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809

Re: Conservation District Use Application for Cellular Telecommunication Facility; DCR Communications, Inc.; Kane'ohe, O'ahu; TMK 4-5-41:8 (por.)

Dear Mr. Wilson:

Thank you for the opportunity to review the above-referenced Conservation District Use Application (CDUA). After review, we find that the information contained in the Draft Environmental Assessment (DEA) is inadequate.

The Office of Hawaiian Affairs is concerned with the effect telecommunication sites have on the visual landscape. This concern is intensified when the proposed site is within the conservation district. DCR Communications, Inc.'s DEA does nothing to mollify these concerns. The DEA contains only minimal information, states that there will be visual impacts from the proposed action but declines to provide any mitigation.

For example, on page 13 it states that "[t]he proposed communication system will provide an island-wide public utility communication service and therefore requires cell sites throughout the island". However, no information is provided in the DEA as to where the additional cell sites will be located, the number of additional cell sites anticipated and whether they will necessitate separate conservation district use applications.

In addition, no survey for archaeological or cultural resources were conducted, no studies on flora and fauna are cited, and no

discussion of the impacts of construction on the site are included in the DEA.

Finally, visual impacts are discussed in the section entitled "Open Space" at page 19. The document offers that "[t]he majority of the impact will result from aesthetics and views" but if fails to address these impacts. Instead the applicant concludes that since the proposed development will be adjacent to existing HECO utility poles it will blend in with the surrounding area. This rational is repeated in the half-page section on mitigation which states that "[s]ince impacts of the proposed antenna additions on the vacant land are negligible, no mitigation measures are planned.

The lack of specific information on archaeology, flora and fauna and the failure to provide mitigation measures for the impacts to the visual landscape cause this DEA to be deficient. Action on the CDUA should not be taken until the DEA is made acceptable.

If you have any questions please contact Linda Delaney, Land and Natural Resources Division Officer or Lynn Lee, EIS Planner at 594-1888.

Sincerely,

Linda M. Colburn
Administrator

cc: Clayton H.W. Hee, Chairperson
Board of Trustee

Kina'u Boyd Kamali'i, Chairperson
Land and Sovereignty Committee

T-52D

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

October 11, 1996

Ms. Linda M. Colburn
Administrator
Office of Hawaiian Affairs
State of Hawaii
567 South King Street, Suite 100
Honolulu, Hawaii 96813

Attention: Ms. Linda Delaney
Land and Natural Resources Division Officer

Dear Ms. Colburn:

Subject: Conservation District Use Application for a Cellular Telecommunication Facility, DCR Communications, Inc.
Tax Map Key: 4-5-42: Portion of 8, Kaneohe, Oahu

Thank you for your prompt response to the State Department of Land and Natural Resources' request for review and comment on the subject Draft Environmental Assessment in connection with the Conservation District Use Permit (CDUP) application.

Our response to the comments submitted will be included in the Final Environmental Assessment and are summarized as follows:

1. The amount of the effect telecommunication sites have on the visual landscape for this site will be minimal. The proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totalling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. The proposed cell site will blend in with the larger electrical towers and electrical transformers existing at the adjacent HECO Substation. The access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate. The pole, antennas and utility equipment will be painted to match surrounding structures.

2. The island wide public utility communication system will require cell sites throughout the island. We have planned approximately 75 sites around the entire island of Oahu. The majority of the sites will be located on top of existing structures (buildings or another company's monopole). Due to the mountainous topography of the island, we must locate some antennas (possibly up to six) in remote areas of the island and within the Conservation Districts. Each public utility cell site will require either a State (Conservation District Use Approval) or City (Conditional Use Permit) depending on the location of the site, and City Building permit. We are still in the process of acquiring leases for the various sites. Due to the competitiveness of the telecommunication business we are not able to disclose the exact location of our cell sites.

3. Since the project site is not listed on the State of Hawaii or US Federal Register of Historic and Archaeologic Sites, the project will not impact historic or archaeologic sites. Therefore the proposed development is not expected to have an impact on archaeological resources.

During the construction of the project approved under this Conservation District Use Permit, should any previously unidentified archaeological resources such as artifacts, shell, bone, or charcoal deposits, human burial, rock or coral alignments, pavings or walls be encountered, the applicant will instruct the contractor (earthwork) to stop work and contact the Historic Preservation Office for review and approval of mitigation measures.

We have enclosed a copy of the flora and fauna survey report, prepared by Botanical Consultants, for the proposed project site. Although the development site is 625 square feet in size, the survey report was done for a 30-foot by 30-foot area that included the project site's 25-foot x 25-foot area and a 5-foot wide surrounding strip totalling 900 square feet. As stated in the survey, all of the plants found in this site are "very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds." "Except for the fairy-tern, none of the birds found on this site are native to the Hawaiian Islands and all are commonly found on Oahu."

The proposed development will include little or no additional grading or earth work to be performed. As shown in the photographs of the site, the

site is sparsely covered with various types of grass and weeds. There will be minimal impact to existing flora and fauna in the vicinity.

4. As stated earlier, the proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totalling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. The proposed cell site will blend in with the larger electrical towers and electrical transformers existing at the adjacent HECO Substation. The visual impacts for a single monopole and accessory equipment in the middle of an open field would have a significant impact, but the proposed monopole is situated among taller more obtrusive poles and power lines thus the proposed impacts will be minimal. The site is also situated above Kamehameha Highway, behind tall trees and shrubbery, such that the site will be partially blocked from view along Kamehameha Highway.

The access to the PCS Cell Site and monopole antenna will be restricted by a 6'-0" high chain link fence and 3'-0" wide, locked, personnel gate. The pole, antennas and utility equipment will be painted to match surrounding structures.

Should you have questions or require additional information please contact Debra Tom or myself.

Very truly yours,

Keith H. Kurahashi

Encl.

cc: DCR Communications, Inc.

FLORA AND FAUNA SURVEY REPORT FOR A PROPOSED PCS CELL SITE
45-610 KIONAOLE ROAD, KANEOHE, HAWAII

On October 8, 1996, the nine hundred square foot proposed PCS Cell Site, 45-610 Kionaole Road, Kaneohe, Hawaii was surveyed to ascertain what flora occupies the area and to determine the species composition of the fauna of this small site.

FLORA

The proposed PCS Cell Site is located on abandoned agricultural land. All parts of the site were surveyed and a total of nine plant species were found. The primary vegetation is wedelia (*Wedelia trilobata* (L.) Hitchc.). There are also three yellow guava tree seedlings (*Psidium guajava* L.) on the site as well as some California grass (*Brachiaria mutica* (Forssk.) Stapf) and some Hilo grass (*Paspalum conjugatum* Bergius). The only other plants on this small site are one each of the following: sensitive plant (*Mimosa pudica* L.), honohono (*Commelina diffusa* N. L. Burm.), and *Stachytarpheta urticifolia* (Salisb.) Sims. Around the edges of the site sword fern (*Nephrolepis exaltata* (L.) Schott.) is common.

All of these plants are very commonly found in waste places and abandoned fields on all islands. None are native to the Hawaiian Islands and all are considered to be weeds.

FAUNA

A survey to determine what fauna occupy the proposed PCS Cell Site in Kaneohe, Hawaii was carried out on October 8, 1996. One twenty minute fixed station observation period and one wide, circular transsect were carried out on

this small site.

No rats, field mice, or mongoose were found although they are presumed to be present. However, a surprisingly large number of bird species were found including a single indigenous bird, the common fairy-tern (*Gygis alba*). In addition many large mourning doves (*Zenaida macroura*), red-whiskered and red-vented bulbuls (*Pycnonotus jocosus* and *P. cafer), orange-cheeked wax bills (Estrilds caerulescens*), white eyes (*Zosterops japonicus*), and house sparrows (*Passer domesticus*) occupy the site and its environs. Only a single myna (*Acridotheres tristis*) was seen on the powerline near the site.

Except for the fairy-tern, none of the birds found on this site are native to the Hawaiian Islands and all are commonly found on Oahu.

DEPARTMENT OF LAND UTILIZATION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4414 • FAX: (808) 527-6743

JEREMY HARRIS
MAYOR

PATRICK T. ONISHI
DIRECTOR

LORETTA K.C. CHEE
DEPUTY DIRECTOR

96-07490(ST)

December 9, 1996

Mr. Keith H. Kurahashi
Kusao & Kurahashi, Inc.
Ward Plaza
210 Ward Avenue, Suite 124
Honolulu, Hawaii 96814

Dear Mr. Kurahashi:

Draft Environmental Assessment (EA) For
PCS Cell Site At Kaneohe (Site T-52D)
Kaneohe, Oahu
Tax Map Key: 4-5-42: por. 08

We have reviewed the subject Draft EA transmitted by your letter dated October 14, 1996, and have the following comments:

1. The Department of Land Utilization is concerned with the rapid proliferation of telecommunication facilities on Oahu's many mountain tops and ridges. The characteristics which give such areas their inherit advantage over low lying areas, also makes them typically pristine scenic areas as well. The preservation of such scenic areas and the massing of multiple facilities above surrounding areas, built or not, is an important land use issue.

   Consequently, we note that the Draft EA only describes Pocket Communications, Inc.'s plans for the development of this particular site (T-52D), and does not discuss its development in the context of Pocket Communications, Inc.'s overall plans for providing PCS services on Oahu.

   The Final EA should be revised to discuss how other possible locations were not selected for development (i.e., based on signal strength, acquisition costs, access and maintenance considerations, etc.). The proposed site's strategic importance in the context of Pocket Communications, Inc.'s overall plans should be explained.

2. Page 3 of the Draft EA incorrectly indicates current zoning of the subject site as P-2 Restricted Preservation. The Final EA should be revised to indicate that the current zoning is P-1.

3. The proposed cell site is <u>not</u> located within the special management area.

Should you have any questions, please contact Steve Tagawa of our staff at 523-4817.

Very truly yours,

PATRICK T. ONISHI
Director of Land Utilization

PTO:am

g:96-07490.sht

KUSAO & KURAHASHI, INC.
Planning and Zoning Consultants
WARD PLAZA
210 WARD AVENUE, SUITE 124
HONOLULU, HAWAII 96814

BUS. (808) 538-6652
FAX (808) 521-4292

December 18, 1996

Mr. Patrick T. Onishi
Director
Department of Land Utilization
City and County of Honolulu
650 S. King Street, 7th Floor
Honolulu, Hawaii 96813

Attention: Mr. Steve Tagawa
Environmental Review Branch

Dear Mr. Onishi:

Subject: Draft Environmental Assessment for PCS Cell Site
Kaneohe, Oahu, (Site T-52D)
Tax Map Key: 4-5-42: Portion of 8

Thank you for your response (Reference No. 96-07490(ST)), dated December 9, 1996, to our request for review and comment on the subject Draft Environmental Assessment in connection with the proposed Conservation District Use Permit application.

Our response and the comments submitted will be included in the Final Environmental Assessment (EA) and are summarized as follows:

1. The effect that the telecommunication facility will have on the visual landscape for this site will be minimal. The proposed development which includes a single monopole and two equipment cabinets will occur on a very small lot, totalling about 625 square feet in size. The site is located adjacent to the existing HECO Koolau Substation in Kaneohe. Once completed, the site will be visible from Kionaole Road and H-3. The views from Kionaole Road and H-3 are as shown on the enclosed photographs and will be minimal in comparison to the existing HECO substation. The existing substation has various power lines and utility structures at and above 100

feet in height. The pole, antennas and utility equipment will be painted to match the surrounding area thereby reducing the amount of visual impact of the proposed development.

The island wide public utility communication system will require cell sites throughout the island. We have planned approximately 75 sites around the entire island of Oahu. The majority of the sites will be located on top of existing structures (buildings or another company's monopole). Due to the mountainous topography of the island, we must locate some antennas (possibly up to six) in remote areas of the island and within the Conservation Districts. Each cell site may require permitting either by the State (Conservation District Use Approval) or the City (Conditional Use Permit) depending on the location of the site, and a City Building Permit. We are still in the process of acquiring leases for many of our sites. Due to the competitiveness among PCS providers and the proprietary nature of our network design, we must be cautious about early disclosure of the location of all of our anticipated cell sites that make up our coverage grid without assurance from the City that such information will be accorded commercial confidential status and restricted from disclosure to or inspection by the public. Alternatively, we might be able to meet and review our network plan with you provided we are not require to provide a copy for your department records. The applicant would be glad to discuss this with you.

The radio frequency engineers for Pocket Communications, Inc. designed the telecommunication system by making over lapping search rings around the island base on various factors including signal strength predictions. Research is then preformed to obtain willing property owners within the search ring to develop a cell site. Pocket Communications, Inc. is restricted by the willingness or conditions of property owners in each search ring area to develop the site. Each property owner carefully reviews the proposed development and signs a lease agreement prior to final development and permit approvals. If nothing can be obtained within the search ring, then the engineers must redesign the ring and begin the process again to determine the best suitable candidate. Changes to one search ring could

affect the configuration and effectiveness of surrounding search rings requiring a system reconfiguration.

2. The Final EA will be corrected to state that the zoning of the subject site is *P-1 Restricted Preservation district.*

3. The applicant understands that the subject site is <u>not</u> located within the special management area.

Should you have questions or require additional information please contact Debra Tom or myself.

Very truly yours,

Keith H. Kurahashi

Keith H. Kurahashi

Encl.

cc: Pocket Communications, Inc.