ENVIRONMENTAL ASSESSMENT

AND

NEGATIVE DECLARATION

FOR

GTE HAWAIIAN TELEPHONE COMPANY
INCORPORATED

PAIR GAINS & CROSS CONNECT CABINET INSTALLATION

PUAKO SPUR ROAD, PUAKO
OUUHI & LALAMILO, SOUTH KOHALA, HAWAII

PREPARED BY

VOLT, VOLTELCON

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ENVIRONMENTAL ASSESSMENT - NEGATIVE DECLARATION
Puako Beach Road, Fair Gains/Cross Connect/Cabinets Installation

APPLICANT

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Gordon Yadao
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AUTHORITY

County of Hawaii
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CLASS OF ACTION

Development within the State Land Use Conservation District; Use of State Land
CONSULTED AGENCIES

State Department of Land and Natural Resources
- Office of Conservation and Environmental Affairs
- Land Management Division

County of Hawaii
- Department of Public Works, Solid Waste Division
- Planning Department
II. PROJECT DESCRIPTION

A. INTRODUCTION

GTE Hawaiian Telephone Company, Incorporated is requesting an easement site of 600 square feet on a portion of tax map key 1/6-6-02:40. The easement will be developed in two stages. Initially one pair gain cabinet, one electrical meter cabinet and one cross connect cabinet will be installed on concrete slabs on proposed easement site. At some future date an additional pair gain cabinet will be installed as the community grows and the need presents itself. This proposed project would be located off of Puako Spur Road, be on State land, adjacent to the County of Hawaii's Puako Solid Waste Transfer Station and will provide improved telephone service to residents of the nearby Puako Beach Lots and other existing residences in the area. All work will be done to applicable County of Hawaii Building Code standards, and maintenance will be by the applicant, GTE Hawaiian Telephone Company. There will be no requirements for wastewater management, drinking water, or refuse disposal due to the installation or maintenance of the cabinets. Total development of easement site will require two separate installations.

At completion of each installation the site will be secured.

B. TECHNICAL CHARACTERISTICS

GTE Hawaiian Telephone Company provides tele-communications facilities and services to the State of Hawaii. These services are provided to both the private sector and governmental agencies in many forms. Administered by the Public Utilities Commission, GTE Hawaiian Telephone Company is mandated to maintain and keep abreast of the total community's needs.

The cabinets will provide additional and more current state of the art telecommunication systems as well as increasing the telephone line capacity to the increasing private subscriber residents of Puako. The pair gain device has the capacity to electronically convert telephone lines that would previously serve three (3) subscribers into enough lines to satisfy five hundred and twenty eight (528) subscribers. The cross connect system serves as a line detector as well as a method of distributing the available lines to the serving area. The A.C. power meter cabinet is a device used by HELCO to measure the amount of electricity used to power the devices for billing purposes. The typical pair gain cabinet is 71" wide, 30" deep, and 65" high. The typical cross connect cabinet is 58" wide, 16" deep, and 51" high. The A.C. power meter cabinet is four (4) feet high, three (3) feet wide and one and a half (1 1/2) feet long. All cabinets are built of heavy gauge steel, are totally self contained, and present no danger to the public. All cabinets will be connected to subsurface electrical and telephone conduits that will run from the easement site directly into the utility easement area contained in the Puako Spur road right of way. The typical utility trench is 30" wide, 21" deep and between thirty (30) feet to fifty (50) feet long to an existing joint utility pole. The trench
will contain four 4" telephone conduits and one 2" electrical conduit. No additional utility poles will be required and aside from the subject requested easement site all equipment will be contained in the permitted highway right of way. The easement site will be completely fenced with 5' high chain link fence with a gate for access. All site work will be done in accordance with applicable government, building, and electrical code/standards. No significant environmental impacts are anticipated from the design, construction and installation of these cabinets.

C. SOCIO-ECONOMIC CHARACTERISTICS

As previously stated, the purpose of this installation is to improve the current telecommunication capacity for the private residents living in the Puako Beach Lots subdivision as well as surrounding residential areas. It will also provide the infrastructure necessary to support any new coastal recreational developments planned for the future. The placement of this easement site in the area adjacent to the Puako Solid Waste Transfer Station seems appropriate as it minimizes any adverse social, visual and environmental impacts by keeping the equipment in an area that is currently supporting a use that is more industrial in nature thereby preserving the surrounding open space.

No residences or businesses will be displaced by this project. There are no secondary adverse effects on future development, population and public facilities resulting from this project.

D. ENVIRONMENTAL CHARACTERISTICS

The proposed project will not result in "significant" environmental impacts, with the actual construction consisting of site preparations for the equipment pad, and minor trenching for conduit connections. At the actual completion of the project the areas surrounding the concrete pads, in and around the proposed easement site and in the highway right of way will be restored to the condition existing prior to any construction.
III. AFFECTED ENVIRONMENT

A. GEOGRAPHIC CHARACTERISTICS

1. Topography

The proposed site is located off of Puako Spur Road in the area immediately adjacent to the County of Hawaii’s Puako Solid Waste Transfer Station. The area selected for the site is below the grade of the Puako Spur roadway and is relatively flat.

2. Geology/Soils

The Soil Survey of Hawaii Island, Hawaii, prepared by the U. S. Department of Agriculture, Soil Conservation Service describes the soils in the proposed site as being in the Kawaihau Series. These series consist of extremely stony soils in volcanic ash. In profile the "surface layer is dark reddish brown, extremely stony, and very fine sandy loam at about 2 inches thick. Below this is dark reddish-brown and dusky-red stony silt loam. Hard pahoehoe lava bedrock is at depth of about 33 inches. The surface layer is neutral, and the subsoil is neutral, mildly alkaline".

B. HYDROLOGICAL CHARACTERISTICS

1. Drainage

There is no onsite flooding at the project site and no major excavation work will be necessary to affect existing drainage patterns. Soil permeability is moderate, the site is natural slope drained. Annual rainfall is 5 to 20 inches per year, most of which falls during the winter months.

2. Flood Plain Management

According to the National Flood Insurance Program Flood Insurance Rate map, the easement site is designated as Zone X, an area which is outside of the 500 year flood plain.

3. Coastal Zone Management Program

Implementation of this project will not cause violation of any of the provisions or objectives of the State of Hawaii Coastal Zone Management Act. The proposed site is outside of the Civil Defense Tsunami Evacuation map area and as such is not subject to the hazards associated with tsunami.
C. BIOLOGICAL CHARACTERISTICS

The portion of subject parcel that will be used for the easement site is located in an area that has been used in the past as pasture land for livestock as well as being close to an old "rubbish dump" site, now the County of Hawaii's Puako Solid Waste Transfer Station. The current use is open space but because of the previous usage of the property it is highly unlikely that there would be any indigenous flora and fauna found in the proposed site location.

D. SERVICE FACILITIES AND PUBLIC UTILITIES

The proposed installation will require access to a telephone cable system and electrical power. Both of these utilities will be obtained by way of a subsurface conduit system that will run from the easement site into the Puako Spur highway right of way approximately thirty (30) to fifty (50) feet to connect to an existing joint utility pole. This joint utility pole is part of a pole line constructed in the area in 1958. There will be, no sewer, water or other utilities needed.

E. ARCHAEOLOGICAL SITES

There has been no onsite inspection conducted for archaeological sites. The alterations made to the parcel to construct the solid waste transfer station will as the past use of the area for livestock grazing almost precludes there being any visual evidence of archaeological sites. If any sites are uncovered during the installation phase, the applicant will instruct the contractor to halt work and will immediately advise the State Historic Preservation Division.

F. AESTHETICS AND VISUAL CHARACTERISTICS

The cabinets are diminutive in size and not considered structures. Overall physical dimensions for DMS1-U SERIES 800 are 71" wide, 30" deep, 65" high, the Series 600 cabinet is slightly smaller. The cross cabinet is 58" wide, 16" deep, and 51" high. The A. C. power meter cabinet is four (4) feet high, three (3) feet wide and one and a half (1 1/2) feet long. The cabinets will be painted in greenish-olive drab weather resistant paint and secured to concrete slabs within the proposed easement area. The entire easement area will be enclosed by a five (5) foot high chain link fence with an entry gate that will be locked. The proposed site is located off of Puako Spur Road in an area behind an existing chain link fence and oleander hedge. The equipment site will not be evident as it is located below the grade of Puako Spur Road and as such, will not have a negative visual impact from the Puako Spur Road or Kawaihe-Puako Road view perspective.
IV. SUMMARY OF MAJOR IMPACTS AND MITIGATION MEASURES

The proposed action is not expected to have any significant environmental impacts. Any short term adverse impacts resulting from the installation will be temporary in nature and construction related. The short term impacts will be mitigated by the construction methods employed; and for the size of the project the impacts are not considered major in scope.
V. ALTERNATIVES CONSIDERED

A. ALTERNATIVE LOCATIONS

No attempt was made to secure an easement site in the surrounding area. The primary service area is located in the Puako Beach Lots where all the homes are within the boundaries of the tsunami and flood zone designation. Every effort is made to locate this type of electronic equipment where it won't be subject to destruction by tsunami or flood. The properties located mauka of Puako Beach Lots are all owned by the State of Hawaii and the proposed site adjacent to the Puako Rubbish Transfer Station keeps the equipment in an area that is supporting a use that is more industrial in nature thereby preserving the surrounding open space.

B. DO-NOTHING ALTERNATIVE

The "Do-Nothing" alternative cannot be considered in view of the present and long term future demand for increased telephone service in the Puako area. As a public utility, the applicant is under mandate to provide service to the customer market which is expanding at a dramatic rate.
VI. DETERMINATION, FINDINGS, AND REASONS SUPPORTING DETERMINATION

After completing an assessment of the potential environmental effects of the proposed project, it has been determined that an Environmental Impact Statement (EIS) is not required. Therefore, this document constitutes a Notice of Negative Declaration.

Reasons supporting the Negative Declaration determination are as follows using as the criteria, the policy, guideline and provisions of Chapters 342, 343, and 344 Hawaii Revised Statutes.

1. The proposed action primarily consists of the design, construction and installation of telephone service equipment and will not adversely affect the physical and social environment.

2. There will be no permanent degradation of the existing ambient air and noise levels resulting from this project. During construction operations, air quality, noise levels, and traffic disruptions are expected to be affected, but these will be temporary and minor.

3. No residences or businesses will be displaced by this project.

4. There are no known endangered species of animal or plants within the project site.

5. There are no natural, historic or archaeological sites within the project limits.

6. Limited grading may be required to achieve the final finish grade, and fugitive dust may result from the minor quantities of earthwork. Standard mitigation measures are required by both the State and County of Hawaii and will be employed by the contractor.

7. There are no secondary adverse effects on future development, population and public facilities resulting from this project.
VII. LIST OF PREPARERS

GTE HAWAIIAN TELEPHONE COMPANY INCORPORATED
Engineering Division, Hilo Hawaii

VOLT, Voltelcon
Pahala, Hawaii
LIST OF FIGURES

Title

Figure

1. Location Map
2. Site Location
3. Project Site Plan
FIGURE III
LIST OF EXHIBITS

Exhibits
A. DMSI-U SERIES 600 (Slightly smaller than Series 800)
B. Cross Connect Cabinets
C. A. C. Electrical Meter Cabinet
D. Pictures of Proposed Site & Surrounding Area
DMS URBAN 1

SERIES 600 ENHANCED CABINET

DIMENSIONS

EXHIBIT A
CROSS CONNECT CABINETS
EXHIBIT B
TERMINAL, 100A COMB. METER-MAIN WITH TEST Y-PASS FACILITY. RELEA AN CAT. NO. 214 HTB OR IG.

LOADCENTER,
4-CRT, 125A MAIN LUG, 10, 5N 120/240V

10"X8"X8" FULL CAN

FIRM UNDISTURBED SOIL OR COMPACTED FILL

FINAL GRADES

2" PVC SCHED 40, 24" ROD, 30" CONDUIT 5" BEND DIRECT BURIED.

3/8" X 8-6" GROUND ROD.

1" PVC SCHED 40 DUCT TO AUTO-CONT STATION "A"

6 PVC SCHED 40 DUCT TO AUTO-CONT STATION "B"

1" PVC SCHED 40 DUCT TO LIGHTS & MAILBOXES.

3 TO RELCO TRANSFORMER

A. C. ELECTRICAL METER CABINET

EXHIBIT C