

DEC 2 3 2010

Deputy Directors
FRANCIS PAUL KEENO

MICHAEL D. FORMBY

INTERIM DIRECTOR

JIRO A. SUMADA

IN REPLY REFER TO:

HAR-EP 0569.11

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION
79 SOUTH NIMITZ HIGHWAY
HONOLULU, HAWAII 96813-4898

December 6, 2010

TO:

KATHERINE PUANA KEALOHA, DIRECTOR

OFFICE OF ENVIRONMENTAL QUALITY CONTROL

DEPARTMENT OF HEALTH

FROM:

DAVIS K. YOGI

HARBORS ADMINISTRATOR

SUBJECT:

PROPOSED VERIZON WIRELESS H13 KAWAIHAE CELLS SITE

(3) 6-1-003: PARCEL 034, KAWAIHAE, HAWAII

FINAL ENVIRONMENTAL ASSESSMENT/NEGATIVE DECLARATION

DETERMINATION

The State of Hawai'i, Department of Transportation, Harbors Division has reviewed the comments received during the 30-day public comment period which began on August 7, 2009. It was important to include a response from the National Park Service which was received on June 11, 2010. The agency has determined that this project will not have significant environmental effects and has issued a Negative Declaration, also referred to as a Finding of No Significant Impact (FONSI). Please publish this notice in the December 23, 2010 issue of *The Environmental Notice*.

We have enclosed a completed OEQC Publication Form, one (1) hard copy of the Final EA and one (1) CD containing electronic copies of the Publication Form, Final EA, and project summary. Please call Sandra Rossetter of the Harbors Division Engineering Planning Section at 587-1886 or email sandra.c.rossetter@hawaii.gov if you have any questions.

Enc.



Proposed Verizon Wireless HI3 Kawaihae Harbor Cell Site (VZW Project ID #2004070432) Kawaihae Harbor (TMK No.: [3] 6-1-003: Parcel 034) Kawaihae, Hawaii 96743

> October 12, 2010 Project No. 17007-007129.00

> > Prepared for:

VERIZON WIRELESS

c/o Cades Schutte, LLP 1000 Bishop Street, Suite 1200 Honolulu, Hawaii 96813



For the benefit of business and people

Prepared by:

BUREAU VERITAS NORTH AMERICA, INC.

Health, Safety, and Environmental Services 970 N. Kalaheo Avenue, Suite C-316 Kailua, Oahu, Hawaii 96734 808.531.6708 www.us.bureauveritas.com



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List of Acronyms

AGL Above Ground Level
AMSL Above Mean Sea Level
APE Area of Potential Effects
BGS Below Ground Surface

CAA Clean Air Act

CDP Community Development Plan
CZMP Coastal Zone Management Program

dBa Decibel, A-weighted

DBEDT State of Hawaii, Department of Business, Economic Developments and Tourism

DHHL State of Hawaii, Department of Hawaiian Home Lands
DLNR State of Hawaii, Department of Land and Natural Resources

DOFAW Division of Forestry and Wildlife

DOH State of Hawaii, Department of Health

DOT State of Hawaii, Department of Transportation

DPP County of Hawaii, Department of Planning and Permitting

DPW County of Hawaii, Department of Public Works

EA Environmental Assessment

FCC Federal Communications Commission FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map
FONSI Finding of No Significant Impact
GP County of Hawaii General Plan
HAR Hawaii Administrative Rules

HEER Hazard Evaluation and Emergency Response

HELCO Hawaii Electric Light Company, Inc.

HHF Historic Hawaii Foundation HRS Hawaii Revised Statutes HSPA Hawaii State Planning Act

H₂S Hydrogen Sulfide

μg/m³ Micrograms per cubic meter

mg/L Milligrams per liter

NAAQS National Ambient Air Quality Standards

NCRP National Council on Radiation Protection and Measurements

NEPA National Environmental Policy Act NHO Native Hawaiian Organization

NMV National Map Viewer

NPA National Programmatic Agreement

NPS National Park Services

OCEA Office of Conservation and Environmental Affairs

OEQC Office of Environmental Quality Control

OHA Office of Hawaiian Affairs

OP Office of Planning RF Radio Frequency

SHPD State Historic Preservation Division SHPO State Historic Preservation Officer

SMA Special Management Area

SO₂ Sulfur Dioxide TMK Tax Map Key

UIC Underground Injection Control

US United States



List of Acronyms (Continued)

USCB United States Census Bureau

USACE United States Scribed Barleda
USACE United States Army Corps of Engineers
USFWS United States Fish and Wildlife Service
USGS United States Geological Survey

VZW Verizon Wireless



Executive Summary

Purpose and Need

This Final Environmental Assessment (EA) for the proposed Verizon Wireless (VZW) HI3 Kawaihae Harbor Cell Site, to be located at Kawaihae Harbor (Tax Map Key [TMK] No. [3] 6-1-003: Parcel 034), Kawaihae, Hawaii, has been prepared in accordance with the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), and the State of Hawaii, Department of Health (DOH) - Office of Environmental Quality Control (OEQC) requirements. NEPA consists of a set of standards which projects must meet in order to ensure that all environmental information is made available to interested parties before construction begins. This Final EA was issued for a 30-day public and agency review and comment period. Comments made during this period was included in the Final EA. These comments in addition to the EA analyses, was considered in decision-making regarding the cell site proposed.

Proposed Action

According to VZW, the Proposed Action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall finished height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain-link fence (Lat/Long: 200 01' 58" N and 1550 49' 25" W [NAD83]).

Construction activities that will disturb the ground surface in the vicinity of the proposed project site include: (1) excavating to install a new foundation for the monopole; (2) constructing a new foundation for the equipment shelter; and (3) installing electrical and telecommunications conduits from the equipment shelter to the light standard.

Environmental Consequences

The Proposed Action is not expected to have significant adverse effects on the environment. The Proposed Action involves erecting a monopole in an area, located on the southeastern-most portion of Kawaihae Harbor, with existing power where the environment has been previously altered for development. Clearing, grading, and excavation activities required for the proposed project are limited to the immediate vicinity of the subject property. No significant impact to the land is anticipated since previous clearing was undergone in the area to produce the parking lot on which the monopole is to be placed.

Specific environmental resources with the potential for environmental consequences include natural physical and biological resources, noise, view and visual impacts, utilities, cultural resources, socioeconomics, environmental justice, air quality, public access, traffic impacts, land use, access to the area, and health and safety.

The Proposed Action is not expected to impact views and visual impacts, and will not impact natural biological resources, cultural resources, public access, traffic impacts, land use, access to the area or health and safety. The Proposed Action is expected to have positive impacts on socioeconomics and environmental justice.

Past and future projects that impact groundwater are expected to have cumulative negative impacts. However, these are not expected to be significant because the affected aquifer is not used as drinking water.

Noise levels are anticipated to slightly increase during construction. The emergency generator will increase noise levels during power outages and maintenance activities; however, it will be stored in an equipment shelter, which will reduce the amount of noise produced.

Utility lines currently run along the boundary of the project area and will be diverted to supply services to the project site; however, within the site the utility lines will be routed underground within the parking compound.



1.0 <u>INTRODUCTION</u>

This Final Environmental Assessment (EA) for the proposed Verizon Wireless (VZW) HI3 Kawaihae Harbor Cell Site, to be located at Kawaihae Harbor (Tax Map Key [TMK] No. [3] 6-1-003: Parcel 034), Kawaihae, Hawaii 96743 (the "subject property"), has been prepared in accordance with the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), and the State of Hawaii, Department of Health (DOH) - Office of Environmental Quality Control (OEQC) requirements. NEPA consists of a set of standards which projects must meet in order to ensure that all environmental information is made available to interested parties before construction begins.

The proposed cell site will be constructed for the purpose of benefiting the community at large with better cellular phone reception. This EA was prepared and is being submitted in order to obtain the Special Management Area (SMA) permit necessary to build the site.

This EA was conducted to comply with Title 47 of the Code of Federal Regulations, Subsection 1.1307(a)(1) through (a)(8) and (b); Chapter 344, Hawaii Revised Statutes (HRS); and Hawaii Administrative Rules (HAR) Title 11, State of Hawaii DOH, Chapter 200, Environmental Impact Rules. It is expected that the outcome of this EA will be a Finding of No Significant Impact (FONSI) for the Proposed VZW HI3 Kawaihae Harbor Cell Site.

For purposes of this assessment, the term "subject property" is specifically defined as the lease land area that encompasses the "Proposed Action," as defined in Section 3.1 of this report. The "subject parcel" is defined as the entire parcel of land, as identified by a county tax assessor, on which the subject property lies. This assessment was requested in association with leasing an area within the subject parcel where the Proposed Action will affect the subject property.

2.0 SUBJECT PROPERTY/PARCEL DESCRIPTION

2.1 SUBJECT PARCEL/PROPERTY LOCATION

The subject parcel, currently owned by the State of Hawaii, is an unpaved lot without structures that measures 1.925 acres in area located in an industrial-marine setting. The subject parcel is located on the southeastern-most portion of Kawaihae Harbor.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting (DPP), the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most corner of the subject parcel (Latitude/Longitude: 20° 01' 58" N and 155° 49' 25" W NAD83).

2.2 CURRENT USE OF SUBJECT PARCEL/PROPERTY

At the time of Bureau Veritas' June 14, 2007 and August 21, 2008 site visits, the subject parcel was unpaved land and contained no structures. The subject parcel is used for temporary storage of shipping containers; however, no stored items were observed in the area of the subject property during Bureau Veritas' site visits. The subject property occupies the southeastern-most corner of the subject parcel and Kawaihae Harbor.



Based on observations made during Bureau Veritas' site visit, the following information was ascertained:

- Hawaii Electric Light Company, Inc. (HELCO) provides electricity to the subject parcel.
- There are no structures on the subject parcel and no county water services are provided to the subject property.
- There are no structures on the subject parcel and no sewer services are provided to the subject property.
- The storm water runoff from the subject property infiltrates into the unpaved ground surface and flows via sheet flow to the southwest toward Kawaihae Harbor.

2.3 NEIGHBORING PROPERTY OWNER CONSULTATION

In accordance with regulations for the SMA permit, neighboring property owners within 300 feet of the boundary of the Proposed Action were contacted to notify them of the intention to construct the monopole, and consult with them about any environmental concerns they may have in relation to the project. The following table contains further details for the surrounding parcels that were contacted for consultation.

Tax Map Key Number	Parcel Owner	Direction from Subject Parcel	Zoning	State Land Use Designation
6-1-2: Parcel 76	Hawaiian Home Lands	North	Industrial, MG-1a	Urban
6-1-2: Parcel 77	Hawaiian Home Lands	Northeast	Industrial, MG-1a	Urban
6-1-2: Parcel 78	Hawaiian Home Lands	East	Industrial, MG-1a	Urban
6-1-2: Parcel 79	Hawaiian Home Lands	Southeast	Industrial, MG-1a	Urban
6-1-3: Parcel 23	State of Hawaii	West	Industrial, MG-1a	Urban
6-1-3: Parcel 25	State of Hawaii	Southeast	Industrial, MG-1a	Urban
6-1-3: Parcel 37	State of Hawaii	Northwest	Industrial, MG-1a	Urban
6-1-3: Parcel 51	State of Hawaii	South	Industrial, MG-1a	Urban
6-1-3: Parcel 54	State of Hawaii	West	Industrial, MG-1a	Urban
6-1-3: Parcel 59	State of Hawaii and Brewer Environmental Indus	Northwest	Industrial, MG-1a	Urban
6-1-3: Parcel 61	Allen, John S. and State of Hawaii	Southwest	Industrial, MG-1a	Urban
6-1-3: Parcel 62	State of Hawaii	Southwest	Industrial, MG-1a	Urban

The neighboring property owners in the table above were contacted for consultation concerning any potential environmental, historical, or cultural impacts the proposed wireless telecommunications facility may have on immediate or directly adjacent properties. The following comments were received:

• In a response letter dated October 18, 2007, the State of Hawaii, Department of Hawaiian Home Lands (DHHL) stated, "After careful review of the information provided, and the fact that the immediate neighboring property is owned by the Department of Hawaiian Home Lands (DHHL),



DHHL has no comment at this time. However, DHHL would like to be included in all future updates with the project." A copy of correspondence from the DHHL is presented in Appendix C, Section 1.

- A response letter dated January 10, 2008 from the State of Hawaii, Department of Transportation (DOT), Harbors Division Deputy Director stated, "At this time, we are not aware of any potential environmental, historical or cultural impacts that the proposed cell site would have on the requested area or any impacts that the proposed project would have on any adjacent properties." A copy of correspondence from the DOT is presented in Appendix C, Section 1.
- Mr. John S. Allen with DBA John Allen Sign Company was sent a notice concerning the Proposed Action on October 16, 2007 and December 5, 2007. As of the date of this report, no response has been received from this party.
- Brewer Environmental was sent a notice concerning the Proposed Action on January 3, 2008 and February 4, 2008. As of the date of this report, no response has been received from this party.

The first and second notices sent to neighboring landowners who did not respond are located in Appendix C, Sections 2 and 3, respectively.

3.0 PROPOSED ACTION

3.1 TECHNICAL CHARACTERISTICS

According to VZW, the Proposed Action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall finished height of the monopole and antennas will be approximately 64 feet above ground level (agl). An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain-link fence. The monopole and its antennas will be designed to withstand high wind loads, especially during the winter months when high winds are known to frequent the area.

Construction activities that will disturb the ground surface in the vicinity of the proposed project site include: (1) excavating to install a new foundation for the monopole; (2) constructing a new foundation for the equipment shelter; and (3) installing electrical and telecommunications conduits from the equipment shelter to the light standard.

3.2 ENVIRONMENTAL CHARACTERISTICS

The proposed cell site is located in an area with existing power where the environment has been previously altered for development. Clearing, grading, and excavation activities required for the proposed project are limited to the immediate vicinity of the subject property. No significant impact to the land is anticipated since previous clearing was undergone in the area to produce the parking lot on which the monopole is to be placed.

3.3 SCHEDULE

The project is anticipated to proceed following a FONSI determination by the approving agency, the DOT. The estimated starting date of the project is June 1, 2009. The project should take approximately five weeks to complete, with the exception of unforeseen delays.



3.4 IDENTIFICATION OF ALTERNATIVES

In determining a suitable location for construction of a telecommunications antenna site, several search criteria must be met. Various topographic features in the area must be evaluated, including but not limited to: elevation, terrain, and building obstruction. In addition, the antenna tower(s) can only be located in areas that are appropriately zoned by the local jurisdiction.

The purpose of the VZW Kawaihae Harbor Cell Site is to relay signals to a receiving antenna (i.e., personal cell phones) located horizontally outward at some distance. Therefore, the site selection is based on its ability to meet this purpose.

Several sites were investigated, but the proposed Kawaihae Harbor site was chosen primarily because the radio frequency engineer indicated that it would best cover the objective area and would be located in an industrial area. Visually, the site is located near other utility poles. The design includes lighting that the State needs; however, funding is not currently available.

One project alternative was a site at the Kawaihae Industrial Center located at 61-3295 Maluokalani Street in Kamuela, Hawaii. The site was rejected because the DHHL owns the property and did not like the aesthetics of the pole.

A second alternative was also considered in the vicinity of the proposed site, but was disregarded after the property changed ownership and the new owners refused to lease to cellular companies.

4.0 PERMITS

Various federal, state, and local government agencies were contacted for information on permits required for the Proposed Action to move forward. Responses from agencies contacted concerning permits for this site are listed below.

- In a response letter dated August 20, 2007, the United States Army Corp of Engineers (USACE) provided the following comment on the proposed project, "Based on the information you provided as part of the Federal Communications Commission (FCC)Environmental Checklist requirements, we have determined that the proposed project site does not contain waters of the U.S. subject to our jurisdiction, and that the described project and its related activities are understood to not involve the placement of dredged and/or fill material into water of the U.S., including adjacent wetlands; therefore, a DA permit will not be required."
- In a letter dated May 11, 2007, the County of Hawaii, DPP commented that since the Proposed Action is not associated with a commercial maritime project, a revocable permit would be issued for the project instead of a lease. As a stipulation for receiving this revocable permit, an EA must be conducted and a Special Management Area permit submitted.

5.0 COMMUNITY CONSULTATION

The following community organizations were contacted regarding the Proposed Action. Their responses are listed as follows:

Bureau Veritas submitted information regarding the Proposed Action to the Honolulu Star Bulletin
and requested that a Legal Notice be posted to provide notification of the proposed project to the
general public. A Legal Notice describing the Proposed Action was published in the Honolulu
Star Bulletin daily newspaper on July 26, 2007. As of the date of this report, Bureau Veritas has



not received any responses to the published notice. Documentation of the public notice is presented in Appendix D, Section 1.

- As described in Section 2.3 of this report, the landowners within 300 feet of the boundary of the Proposed Action were contacted concerning the potential environmental impacts. No immediate concerns were addressed in the responses.
- Communities in the County of Hawaii are currently formulating Community Development Plans (CDPs). The purpose of a CDP is to help communities manage growth and coordinate the distribution of government services. Communities in the County of Hawaii are divided into geographical areas and Kawaihae falls into the South Kohala region.

Bureau Veritas contacted Mr. Alex Frost, CDP Coordinator for the South Kohala region on October 26, 2007 and December 5, 2007 for information with regards to any potential environmental, historical, cultural, or other impacts the proposed wireless telecommunications facility may have. As of the date of this report, no responses have been received on this matter. It is believed that since the Proposed Action is in compliance with the County of Hawaii General Plan (GP), from which the CDP is based, it is also in compliance with plans for the South Kohala community. Copies of correspondence to the CDP Coordinator can be found in Appendix D, Section 1.

- Bureau Veritas queried local special interest groups about any questions or concerns they may
 have related to the Proposed Action. On October 26, 2007 and December 5, 2007, Bureau
 Veritas sent notices to the Sierra Club, Hawaii Chapter and the University of Hawaii, Sea Grant
 Program Director. As of the date of this report, no responses have been received from either of
 these organizations. Copies of correspondence to these organizations are located in Appendix
 D, Section 2.
- Bureau Veritas queried the National Park Service (NPS), Pu'ukohola Heiau National Historic Site regarding any questions or concerns they may have related to the Proposed Action on January 6, 2010. In a response letter dated March 16, 2010, NPS indicated that their main concern was any visual impacts on the view plane. NPS suggested that "if possible, that the 12 8' panels, which will be mounted near the top of the monopole, be parallel to the ground versus perpendicular. I believe if this is an option, that it would be less intrusive on the view plane if visible at all from areas within the park. As discussed, fortunately the DOT land between the project site and the park serves as an excellent buffer and helps to lessen the impacts from the harbor operations, including visual and noise. The existing lights and light poles at the harbor already poses an impact upon the park's "night sky" and view shed. This proposed project will not increase the effects and impacts to the park resources and visitors which are already presented by the Kawaihae harbor operations and activities."

Bureau Veritas then sent a confirmation letter to NPS on August 3, 2010, which stated that it is not feasible to mount the panel antennas parallel to the ground. In addition, we understand that according to NPS, this project will not affect park resources due to existing operations and activities at Kawaihae harbor.



6.0 AFFECTED ENVIRONMENT

6.1 NATURAL RESOURCES – PHYSICAL RESOURCES

Discussions of physical resources of the natural environment include descriptions of earth and water resources, as well as hazardous materials. Components of the earth include topography, geology, and soil. Topography describes the earth's surface features, including terrain and land forms. Geology studies the solid matter from which the earth is made and includes the history and processes that helped to shape it. Soil is the segment of the earth's surface particulates formed from a parent material when various environmental conditions cause the breakdown of that material. Water resources include surface water and groundwater.

6.1.1 Earth Resources

6.1.1.1 Baseline Conditions

The subject property is located in the Waiaka Slightly Dissected Upland Region of the island of Hawaii, in the town of Kawaihae. The approximate latitude and longitude of the subject property are 20° 1' 58" °N and 155° 49' 25" °W [NAD83], respectively. According to the United States Geological Survey (USGS), Kawaihae, Hawaii, 7.5-minute topographic quadrangle map, the subject property is relatively flat and level (USGS, 1995). The elevation at and around the subject property is approximately five feet above mean sea level (amsl) (USGS, 1995).

The United States (US) Department of Agriculture Soil Conservation Service does not identify the soil type within the area of the subject property. However, based on the historical topographic maps, aerial photographs, and a site interview the Kawaihae Harbor area consists of coral fill dredged from the Kawaihae Harbor.

Fill land is a miscellaneous land type, typically on flat areas built out from the shore and may consist of a mixture of the waste from sugarcane mills, alluvium from floodwaters, and/or dredged material. This land is typically well drained, slowly permeable with medium runoff, and has a slight erosion hazard.

6.1.1.2 Proposed Action Impacts and Mitigation

Bureau Veritas reviewed client-supplied materials regarding the Proposed Action at the subject parcel/property and the potential for the Proposed Action to significantly change the earth resources (e.g., wetland fill, deforestation, or water diversion). According to the construction drawings and design information provided to Bureau Veritas, the Proposed Action will not involve a significant disturbance to the ground surface. Since impacts to this resource are not expected, no mitigation measures are necessary.

6.1.2 Water Resources

6.1.2.1 Baseline Conditions

Bureau Veritas reviewed the Aquifer Identification and Classification Technical Report No. 191, published by the Water Resources Research Center at the University of Hawaii, for information on groundwater conditions below the subject property. The report describes the aquifer below the subject property as part of the Mahukona aquifer system of the Kohala aquifer sector on the island of Hawaii.



The aquifer under the subject property is an unconfined basal aquifer of the flank type (horizontally extensive lavas). Its status is described as an irreplaceable water supply with low salinity (250-1,000 milligrams per liter [mg/L] Chloride) that is currently used as drinking water. However, the subject property lies below the designated underground injection control (UIC) line; therefore, the underlying groundwater would not be used as a drinking water source. This aquifer has a high vulnerability to contamination.

The groundwater depth is estimated to be approximately five feet below ground surface (bgs), and the regional shallow groundwater flow direction is inferred to be southwest, based on surface topography. However, topography is not always a reliable basis for predicting groundwater flow direction. The local gradient under the subject property may be influenced naturally by tidal changes and zones of higher or lower permeability, or artificially by nearby pumping or recharge, and may deviate from the regional trend.

6.1.2.2 Proposed Action Impacts and Mitigation

The subject property is located below the DOH defined UIC line. Areas above the UIC line denote potential underground drinking water sources. Areas below the UIC line generally denote groundwater that is unsuitable for drinking water purposes. Consequently, the groundwater below the subject property is considered non-drinking water.

There may be contact with groundwater during the proposed construction activities; however, since the groundwater is not used for drinking water, there will not be a significant impact to the area and no mitigation measures are necessary.

6.1.3 Hazardous Substances

6.1.3.1 Baseline Conditions

Bureau Veritas performed a database review of the DOH, Hazard Evaluation and Emergency Response (HEER) Office records regarding environmental concerns or violations at the subject property. The subject property was not listed in the HEER database.

6.1.3.2 Proposed Action Impacts and Mitigation

The subject property was assessed for signs of storage, use, or disposal of hazardous materials. The assessment consisted of noting evidence (e.g., drums, unusual vegetation patterns, staining) indicating that hazardous materials are currently or were previously located on the subject property. Potentially hazardous materials are currently not used or stored onsite.

The historical research conducted for this assessment did not reveal evidence of hazardous materials/waste on the subject parcel/property, as noted in the previous section. Also, the proposed action will not involve the use or creation of hazardous substances during the construction or the operation phases. Since no impacts are anticipated, no mitigation measures are necessary.

6.2 NATURAL RESOURCES – BIOLOGICAL RESOURCES

Biological resources of the natural environment include wild plants and animals, both native and alien, which may be affected by the Proposed Action. These species live in an ecological community, or specific habitat, and interact with each other within that community. Ecological communities may include wetlands, oceans, shorelines, mountains, etc. Many laws, including NEPA, were passed to protect these ecological communities from potentially harmful development.



6.2.1 Wetlands

6.2.1.1 Baseline Conditions

The subject property was inspected for the presence of sensitive ecological areas by noting environmental indicators (e.g., wetlands vegetation, floodplains) located on or immediately adjoining the subject property.

According to the United States Fish and Wildlife Service (USFWS) National Wetland Inventory Map website (www.nwi.fws.gov), the subject parcel/property is not located in or near a designated wetland.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) was reviewed to determine if the subject property was located in a flood hazard area. The subject property is located in Zone X, which denotes areas determined to be outside the 500-year floodplain (FEMA/FIRM Map No. 155166-0137 C, revised September 16, 1988).

Bureau Veritas reviewed the following sources for information regarding wetlands in the vicinity of subject parcel/property, including: (1) available wetlands delineation maps published by the National Wetlands Inventory at the website http://www.fws.gov/nwi/, as cited in the 1987 Final Version of the Corps of Engineers Wetlands Delineation Manual; (2) the USGS National Map Viewer (NMV) online database at http://nmviewogc.cr.usgs.gov/viewer.htm; and (3) the 1982 USGS 7.5-Minute Series, Kawaihae, Hawaii Topographic Quadrangle Map, which includes the subject and adjoining properties.

Based on these sources, the Pacific Ocean was depicted near the subject parcel/property and adjoining properties. However, the soil consists of fill land and Bureau Veritas did not observe evidence (e.g., hydrophytic vegetation, standing water, or other hydrologic indicators) that would indicate the presence of wetlands on the subject property/parcel at the time of the site inspection.

Bureau Veritas also contacted the USACE, Honolulu District Office regarding wetland permitting for the subject property/parcel. According to Mr. George Young of the USACE, Honolulu District Office, a Department of the Army permit is not required for the proposed project at the subject property/parcel. A copy of the correspondence from the USACE is presented in Appendix G, Section 3.

6.2.1.2 Proposed Action Impacts and Mitigation

According to the baseline conditions described in the previous section, the subject property is not located in a designated Wetland; therefore, the Proposed Action will have no effects on wetlands. No mitigation measures are necessary, since there will no impact to this resource.

6.2.2 Wilderness Area (47 CFR § 1.1307 [A] [1])

6.2.2.1 Baseline Conditions

The subject parcel, currently owned by the State of Hawaii, is an unpaved lot without structures located in an industrial-marine setting on the southeastern-most portion of Kawaihae Harbor. The subject parcel is currently used for temporary storage of shipping containers; however, no stored items were observed on the subject property during Bureau Veritas' site visit.

Bureau Veritas also reviewed http://www.wilderness.net, the National Wilderness Preservation System website for information on whether the proposed project site is located within an officially designated wilderness area. According to this website, four federal agencies (the National Park Service, Forest Service, Fish and Wildlife Service, and Bureau of Land Management) manage a total of 702 designated wilderness areas in the US. Two of these Wilderness areas are located in the state of Hawaii, including



Hawaii Volcanoes National Park on the island of Hawaii and Haleakala National Park on the island of Maui. Neither area encompasses the subject parcel/property.

6.2.2.2 Proposed Action Impacts and Mitigation

According to the baseline conditions, the project is not located in a wilderness area. Therefore, there will be no impacts and therefore, no mitigation measures are necessary.

6.2.3 Wildlife Preserve (47 CFR § 1.1307 [A] [2])

6.2.3.1 Baseline Conditions

Bureau Veritas reviewed the website http://www.fws.gov/refuges/refugeLocatorMaps/Hawaii.html, maintained by USFWS, for information on whether the proposed project site is located within a designated wildlife preserve. According to this website, there are a total of nine wildlife preserves located within the Hawaiian Islands, including:

- 1. Hakalau Forest National Wildlife Refuge
- 2. Hanalei National Wildlife Refuge
- 3. Huleia National Wildlife Refuge
- 4. James Campbell National Wildlife Refuge
- 5. Kakahaia National Wildlife Refuge
- 6. Kilauea Point National Wildlife Refuge
- 7. Kealia Pond National Wildlife Refuge
- 8. Oahu Forest National Wildlife Refuge
- 9. Pearl Harbor National Wildlife Refuge

None of the nine listed wildlife preserves identified encompasses the subject parcel/property.

6.2.3.2 Proposed Action Impacts and Mitigation

According to the baseline conditions, the project is not located in a wildlife refuge. Therefore, there will be no impacts and no mitigation measures related to this resource.

6.2.4 Listed or Proposed Threatened or Endangered Species and Designated or Proposed Critical Habitats (47 CFR § 1.1307 [A] [3])

6.2.4.1 Baseline Conditions

Bureau Veritas reviewed the USFWS, Honolulu Branch Pacific Islands Endangered Species Index at the website http://www.fws.gov/pacificislands/wesa/endspindex.html to assess the potential for designated or proposed critical habitats and proposed endangered or threatened species to be affected by the Proposed Action. Lipochaeta venosa and Isodendrion hosakae are two endangered plants found in South Kohala; however, since the monopole is to be placed in a previously paved area, these species will not be affected by the Proposed Action. No critical habitats were identified in this review.

Bureau Veritas also contacted the USFWS, Honolulu Office and State of Hawaii, Department of Land and Natural Resources-Division of Forestry and Wildlife (DLNR-DOFAW), Administrator and Hawaii District



Office, regarding the presence of listed or proposed threatened or endangered species and designated or proposed critical habitats on the subject property.

The USFWS provided the following comment on the proposed project in a response letter dated September 6, 2007:

"We searched our databases, including data compiled by the Hawaii Biodiversity and Mapping Program and there is no critical habitat, Wildlife Refuge, or wildlife preserve in the vicinity of your project footprint. However, four animal species federally listed as either endangered or threatened are known to utilize that area. The federally endangered Hawaiian petrel (Pterodroma sandwichensis) and the threatened Newell's shearwater (Puffinus auricularis newelli) have been detected during surveys from Kawaihae Harbor using modified radar (Day et al. 2003). The endangered Hawaiian hoary bat (Lasiurus cinereus semotus) has been observed at Kawaihae Harbor, and the endangered Hawaiian hawk (Buteo solitarius) is widely distributed over Hawaii Island...We recommend you gather more biological information about this site including the height of surrounding vegetation and buildings, sources of night-time lighting in the project vicinity and night-time avian surveys using ornithological radar and night vision equipment, following the methods described in Day et al. 2003. Recommended time periods for conducting radar surveys are late May to early June for adult birds, and late October to November for fledgling birds. Similarly, bats are known to collide with these same objects, so we recommend you survey for bats concurrently with the nocturnal bird surveys. We recommend you enter into informal consultation with us to ensure FCC compliance with section 7 of the ESA."

Bureau Veritas conducted a spring survey on the endangered birds and bat mentioned by USFWS at the proposed cell site. The report, *Endanagered Bird and Bat Surveys at a Proposed Verizon Cell Site, Kawaihae Harbor, Hawaii*, was sent to the USFWS and a response, dated August 19, 2008, stated the following:

"In a letter dated September 5, 2007, we recommended that additional biological information be collected, including data from night-time avian surveys. In your July 29, 2008, letter, you attached a report on night-time bird and bat surveys at the site conducted by Hamer Environmental, L.P., on your behalf. No endangered birds or bats were observed visually or using modified marine radar. Because this project is an unquyed monopole, and because the Hawaiian Hawk is a diurnal species that would be unlikely to collide with an unquyed monopole, should it occasionally occur in the project area, we concur with your determination that the project may affect, but is not likely to adversely affect the Hawaiian hawk. Based on the project description and because current information indicates Hawaiian hoary bats are able to avoid colliding with objects, we concur with your determination that the project may affect, but is not likely to adversely affect the Hawaiian hoary bat. The Hawaiian petrel or Newell's shearwater are nocturnal species known to collide with objects when moving between feeding areas at sea to upland nesting areas. However, neither of these birds were detected during night-time surveys, therefore we concur with your determination that the project may affect, but is not likely to adversely affect the Hawaiian petrel or Newell's shearwater. Therefore, unless the project description changes, or new information reveals that the effects of the proposed action may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary."

The DLNR-DOFAW Administrator provided the following comment on the proposed project in a response letter dated July 26, 2007:

 "DOFAW does not have any management areas near your proposed project but will comment on the impacts your project will have on seabird's attraction to lights. We recommend that your



project design include fully shielded, low profile outdoor lighting to reduce the impacts to endangered seabird's attraction to lights (brochure sent in your previous requests). In addition, all guy-wires shall be covered with fluorescent foam wraps and 'bird diverters.' If lighting cannot reduce the impacts to seabirds, the project may need to proceed through a Habitat Conservation Plan for that seabird species."

In accordance with suggested measures, the lights on the Proposed VZW HI3 Kawaihae Harbor Cell Site will be low pressure sodium (Allscape) and pointed downward. The International Dark Sky's website lists the Allscape light, model AL-9, as dark-sky friendly because it is fully shielded (http://www.darksky.org/lighting/manufacturers/allscape.php). Therefore, Bureau Veritas believes that the Proposed VZW HI3 Kawaihae Harbor Cell Site is not likely to adversely effect to the Hawaiian petrel or Newell's shearwater.

The DLNR-DOFAW, Hawaii District Manager provided the following comment on the proposed project in a response dated August 2, 2007:

• "The proposed VZW HI3 Kawaihae Cell Site (TMK Number: (3) 6-1-003: Parcel 034) is not located within federally designated critical habitat for either plant species or the Blackburn's sphinx moth (Manduca blackburni). There are no records of endangered plant species locations within the proposed cellular site though there may be resident endangered Hawaiian hawk or 'io (Buteo solitarius) in the vicinity and care should be taken not to disturb potential roosting trees in the area during construction activities."

The project site is located in an industrial area where there are no trees in which the Hawaiian hawk may be roosting; therefore, the Proposed Action will not affect the Hawaiian hawk.

Based upon the inquiries, responses, and evaluations noted in this Section, the Proposed Action will not affect listed or proposed threatened or endangered species and is not located in a designated or proposed critical habitat. Copies of correspondence from the USFWS and DLNR-DOFAW can be found in Appendix G, Sections 1 and 2, respectively.

6.2.4.2 Proposed Action Impacts and Mitigation

According to the USFWS and the DLNR-DOFAW, the proposed project will not adversely affect any endangered species on or near the vicinity of the proposed site. Therefore, no mitigation measures are necessary.

6.3 NOISE

Noise is generally regarded as unwelcome sound that can distract from normal activities. The negative impacts of noise on the environment are collective known as noise pollution. Noise pollution is usually generated from cars, aircrafts, humans, animals, and industrial sites. Areas with an excess of noise pollution are generally caused by poor planning. NEPA regulations indicate that projects should be analyzed for potential noise pollution so that good planning and mitigation takes place before they are implemented.

Depending on the level and duration of the noise pollution, it may have a harmful effect on human health. Minor levels of noise pollution can cause agitation or annoyance, while significant levels may cause hearing loss. The DOH, under Title 11, Chapter 46 of the HAR, sets the maximum permissible sounds level for a Class C zone, which includes "industrial" zones at 70 A-weighted decibels (dBa) for daytime (7 a.m. to 10 p.m.) and 70 dBa for nighttime (10 p.m. to 7 a.m.). This standard does not apply to emergency generators. If noise is to be emitted above the permissible sounds level, then a permit must be obtained prior to the related activities.



6.3.1 Baseline Conditions

Kawaihae Harbor is subject to frequent amounts of noise due to regular harbor and road activity. Activities that produce noise include the movement of ships in and out of the harbor, loading and unloading crates, and traffic from cars on the road.

6.3.2 Proposed Action Impacts and Mitigation

The site will include a 60 kilowatt emergency generator with 220-gallon diesel tank. The generator will be enclosed in the equipment shelter to mitigate any noise considerations. The site is located at the Harbor's Port-of-Call. Large ships are continually docking at the Harbor with large containers and vehicles being loaded and off-loaded. There are no residential units nearby. Any noise from the generator will be minimal and occur infrequently.

During construction and installation activities, noise levels might increase slightly. If the noise levels are to be above the standards stipulated in Title 11, Chapter 46 of the HAR, then a permit will be acquired. Subsequent to construction activities, the Proposed Action will not have a significant impact on noise levels since the generator will run only during a power outage and for short periods during maintenance activities. The emergency generator will be enclosed in the equipment shelter, which will help to reduce the noise it produces. Emergency generators are exempt from the maximum permissible sounds levels under Title 11, Chapter 46 of the HAR.

6.4 VIEW AND VISUAL IMPACTS

6.4.1 Baseline Conditions

The Proposed Action is to take place in a developed industrial area. The subject property is bordered by industrial shipping containers, stockpiles, and telephone poles. Beyond these structures is undeveloped land. Photographs of the subject site are included behind the *Photos* tab.

6.4.2 Proposed Action Impacts and Mitigation

The Proposed Action involves the installation of a monopole in an area with industrial development and near a line of telephone poles. The height of the monopole will be comparable to the height of the nearby telephone poles. Also, since the project site is located in an industrial harbor, it is not commonly used as a scenic vista. Therefore, the Proposed Action will not have a significant adverse visual impact and no mitigation measures are necessary.

6.5 UTILITIES

6.5.1 Baseline Conditions

There are no structures on the subject parcel and it is not known if county water or sewer services are provided to the subject parcel. Electricity is provided directly to the subject property by HELCO. Storm water at the subject property infiltrates into the unpaved ground surface and flows via sheet flow to the southwest toward Kawaihae Harbor. Overhead lines along Akoni Pule Highway supply electricity and telephone services to the area.



6.5.2 Proposed Action Impacts and Mitigation

Overhead lines will be dropped from Kawaihae Road. Since electricity and telephone lines currently run along the boundary of the project area and will only have to be minimally diverted to supply services to the project site, effects to utilities from the Proposed Action are expected to be insignificant. Impacts will be mitigated by running the utility lines underground within the parking compound.

6.6 CULTURAL RESOURCES

Cultural resources include districts, sites, buildings, structures, or objects significant in Hawaiian and American history, architecture, archeology, engineering, or culture that are listed, or are eligible for listing, in the National and/or State Register of Historic Places, which may be impacted by the Proposed Action's Area of Potential Effects (APE) for direct or visual effects.

The APE for direct effects is defined by the Nationwide Programmatic Agreement (NPA) as "the area of potential ground disturbance and any property, or any portion thereof, that will be physically altered or destroyed" by the Proposed Action. The APE for visual effects is defined by the NPA as "the geographic area, in which the (Proposed Action) has the potential to introduce visual elements that diminish or alter the setting, including the landscape, where the setting is a character-defining feature of a Historic Property that makes it eligible for listing in the National Register." In the case of the subject property, the APE for visual effects is ½ mile from the Proposed Action.

6.6.1 Baseline Conditions

According to an archaeological assessment of the proposed cell site, conducted by T.S. Dye & Colleagues, Archaeologists, Inc. (T.S. Dye), the proposed cell site is located where Lonoikamakahiki resided and engaged in battles with his rebellious brothers. The area was also important to Kamehameha the Great, who built a heiau (Hawaiian temple) in the region and deceived his rival into coming to the dedication, where he was promptly sacrificed. This event helped lead to Kamehameha's successful conquering of the whole island of Hawaii.

Kawaihae was also where the first cattle arrived in the Hawaiian islands, which launched the beginning of cattle ranching on the islands. As the years passed, Kawaihae became a successful harbor for trading goods with other nations. As a result, Kawaihae Harbor has undergone significant alteration and development.

Several historical archeological assessments have been conducted in the general area, including archaeological investigations at 165 sites within one half mile of the Proposed VZW Kawaihae Harbor Cell Site. No sites of historical or cultural significance have been recorded within the industrial region of the Harbor and it has been stated that due to the alterations that have occurred in that area, any sites that may have occurred in the area have likely been destroyed during previous development. A copy of T.S. Dye's Archaeological Assessment Report is included in Appendix B.

A portion of the Pu'ukohola Heiau, which is listed on the Register of Historic Properties, is located within 0.5 miles of the proposed VZW project site. Therefore, Bureau Veritas requested input from various agencies to determine if the proposed project may have a negative impact this historic property.

6.6.2 Proposed Action Impacts and Mitigation

Bureau Veritas contacted the DLNR-State Historic Preservation Division (SHPD), Office of Hawaiian Affairs (OHA), DPP, Historic Hawaii Foundation (HHF), and the native Hawaiian group "Hui Malama," regarding districts, sites, buildings, structures, or objects significant in Hawaiian history, architecture,



archeology, engineering, or culture that are listed, or are eligible for listing, in the National Register of Historic Places and may be located on the subject parcel/property. Responses from these agencies are as follows:

- The State Historic Preservation Officer (SHPO) provided the following comment on the proposed project in a response letter dated March 25, 2008, "The archaeological assessment report for this project found that no historic properties occur within the APE. This includes the APE for both direct and visual effects. We concur with these findings and concur with the determination that the project will have no effect on historic properties. In the event that historic resources, including human skeletal remains, lava tubes, and lava blisters/bubbles are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, Hawaii Island Section, needs to be contacted immediately." A copy of correspondence from the SHPO is located in Appendix E, Section 1.
- In a response letter dated April 1, 2008, the OHA provided the following comment on Bureau Veritas' notification, "We have concluded from our available records that it appears no known Native Hawaiian historic properties or burials are located in the Area of Potential Effect of the proposed project. Since the proposed cell site is located in an area that has been heavily impacted, our office has no other immediate concerns at this time. If the project moves forward, and if any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division (SHPD/DLNR) shall be contacted. OHA would also like to be notified." A copy of correspondence from the OHA is located in Appendix E, Section 2.
- In a response letter dated December 3, 2007, the DPP provided the following comment on the proposed project, "Since the subject parcel has previously been graded and is located in an industrial area it is unlikely that any historic, religious, or cultural resources remain, if there were ever any on the site. In addition, there are no historic resources identified in the County of Hawaii General Plan on the subject property." A copy of correspondence from the DPP is presented in Appendix F, Section 2.
- In a response letter dated September 20, 2007, the HHF stated, "HHF is currently unaware of any historic resources that would be affected by the proposal. Unless historic resources are discovered during additional research or construction, HHF does not have any concerns about this proposal. If additional research determines that historic or cultural resources are present, HHF would like to be informed and may have additional input at that time." A copy of correspondence from the HHF is presented in Appendix E, Section 2.
- Notices were sent to the Native Hawaiian Organization (NHO) Hui Malama on July 20, 2007 and October 31, 2007. As of the date of this report, Bureau Veritas has not received a response from Hui Malama. However, this group typically does not respond to such inquiries. A copy of correspondence to Hui Malama can be found in Appendix E, Section 2.

Based on these inquiries and clearance from the SHPO, dated January 24, 2007, the proposed project will not affect any historic places. However, in the case that cultural resources are found during construction activities, effects will be mitigated by ceasing work and notifying the DLNR-SHPD. Therefore, should historic resources, including human skeletal remains, be identified during construction activities associated with the proposed action, all work will cease in the immediate vicinity of the find until additional consultation with the DLNR-SHPD is conducted and appropriate evaluation of the resources has been completed.



6.7 SOCIOECONOMICS

Socioeconomics describes the link between economic activity and social life, where one has an effect on the other. Many things can affect socioeconomic activities such as new technology, a change in the environment, and development. Effects of economics on social life can include redistribution of wealth and an alteration in quality of life.

6.7.1 Baseline Conditions

According to the United States Census Bureau (USCB) website, the town of Kamuela (zip code 96743) had a population of 51,081 during the 2000 census. Approximately 9,866 of homes were owner-occupied, the average income was \$26,473; and 5.4 percent of individuals were living below the poverty line.

6.7.2 Proposed Action Impacts and Mitigation

The proposed project will benefit the community at large by providing better telecommunications coverage and service to customers within and passing through the general surrounding area. Under the Proposed Action, people in the Kawaihae area will be able to communicate better with others when using their VZW phones. Therefore, no mitigation is necessary.

6.8 ENVIRONMENTAL JUSTICE

Environmental justice is a movement that defines the environment as "where people live and work." The movement seeks to balance the burden that is borne by minorities, women, the poor, and those who are generally discriminated against by redistributing these burdens (such as industrial developments that pollute the area) out of a select group of neighborhoods and making various goods more accessible.

6.8.1 Baseline Conditions

The USCB website has estimated percentages of people with various backgrounds residing in Kamuela from the 2000 Census. According to the website, in 2000 the population of Kamuela was approximately 53 percent minority (non-Caucasian) and 3.6 percent of families and 5.4 percent of individuals were living below the poverty line.

6.8.2 Proposed Action Impacts and Mitigation

The Proposed Action would provide no environmental burden to minorities, women, or the poor since the nearest residence is greater than one-half mile away. The Proposed Action will in fact have a positive impact on environmental justice because all people with VZW phones will benefit from increased cell phone reliance in the Kawaihae area and no mitigation measures are necessary.

6.9 AIR QUALITY

The US Congress passed the Clean Air Act (CAA) in 1963 to reduce air pollution and regulate emissions. Several amendments have been passed since its inception that stipulates specific emission regulations according to industry. The CAA mainly focuses on the following points: cleaning commonly found air pollutants, regulating automobile emissions, regulating interstate and international air pollution, cleaning the air in national parks, reducing acid rain and toxic pollutants, protecting the ozone layer, enforcing permits, and providing a pathway for public participation. Various states, including Hawaii, have since developed their own set of air quality standards that must, at a minimum, match those of the CAA.



6.9.1 Baseline Conditions

The DOH, Clean Air Branch has seven air monitoring stations set up on the island of Hawaii. These stations monitor for levels sulfur dioxide (SO₂) and hydrogen sulfide (H₂S), as stipulated in the National Ambient Air Quality Standards (NAAQS) set by the EPA. The State of Hawaii has stricter standards for carbon monoxide and nitrogen dioxide than are set by the NAAQS, and also requires levels of H₂S to be regulated. According to the "Annual Summary 2007 Hawaii Air Quality Data", none of the monitoring stations reported concentrations above Hawaii standards for any of the materials monitored. The Hawaii standards for these substances are listed in the table below.

Pollutant	СО	NO ₂	SO ₂	Pb	O ₃	PM ₁₀	PM _{2.5}	H ₂ S
Averaging Time	1-hour 8-hour	Annual	3-hour 24-hour Annual	Quarterly	8-hour	24-hour Annual	24-hour Annual	1-hour
Standard (µg/m³)	10,000 5,000	70	1,300 365 80	1.5	150	150 50	35 15	35

Source: DOH, Clean Air Branch Website

6.9.2 Proposed Action Impacts and Mitigation

The cell site will not be equipped with any devices that would release emissions once construction is complete, except in rare instances during a power outage or routine maintenance. During construction, there will be an increase in the amount of airborne particulate matter in the form of dust; however, workers will adhere to applicable regulations to reduce dust resulting from normal construction activities. Any emissions would be minimal and for a limited duration. Therefore, no mitigation measures are necessary.

6.10 PUBLIC ACCESS

Hawaii is known for its beautiful shoreline and mountain areas. These resources are important to both the Hawaiian culture and the tourism industry, so it is important to maintain easy public access to these areas.

6.10.1 Baseline Conditions

The project site is located in Kawaihae Harbor and commonly used for industrial purposes. Due to the harbor industrial use, the waters in this area do not include recreational beaches. Kawaihae Harbor also does not include any public access to mountain areas.

6.10.2 Proposed Action Impacts and Mitigation

Since the project site is located in an industrial area, the Proposed Action is not expected to affect public access to the shoreline or to mountain areas. Therefore, no mitigation measures are necessary.

6.11 TRAFFIC IMPACTS

Bureau Veritas contacted the County of Hawaii, Department of Public Works (DPW), Traffic Division and the DOT-Highways Division, Traffic Branch for information as to whether a traffic impact survey would be required for the Proposed Action. The notices stated that since the proposed cell site will not be used as a regular public or private gathering area, and traffic to and from the site will only be for small, routine maintenance operations, Bureau Veritas believes that traffic will not be affected by the project and a traffic impact survey is, therefore, not necessary. Below is a summary of the agency responses.



- In an email response dated November 6, 2007, the DPW Director stated, "This location and the roadway it accesses is owned and operated by the State of Hawai'i so the County will defer all traffic issues to the State of Hawai'i."
- Bureau Veritas contacted the DOT-Highways Division, Traffic Branch regarding the traffic impact study. Three letters were sent and Bureau Veritas has not received a response on whether a traffic impact study was required.

Based on the inquiries and responses noted in this Section, the Proposed Action will not affect traffic and does not require a traffic impact survey. Copies of correspondence from the DPW and DOT are included in Appendix F, Section 1.

6.12 LAND USE

Land use pertains to the human modification of the natural environment, including deforestation, soil degradation, water usage, etc. Human-created land use divides land according to zones, land ownership, parcels, etc. The human division of land use is targeted towards a goal for the region and to promote smart growth of a particular area.

6.12.1 Baseline Conditions

The subject parcel is described by the County of Hawaii, Real Property Tax Assessment Office as the land lying in TMK Number: (3) 6-1-3: Parcel 34. According to the DPP, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use Ordinance designation is "Urban." The subject property (proposed VZW Kawaihae Harbor Cell Site) consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most corner of the subject parcel. The subject property is empty and the surrounding area is an unpaved parking lot with industrial containers, two stockpiles, and telephone poles.

6.12.2 Proposed Action Impacts and Mitigation

According to the DPP, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use Ordinance designation is "Urban." The subject property is not currently being used for harbor purposes and the Proposed Action is not expected to inhibit any industrial activities, as the HI3 Kawaihae Harbor Cell Site's functions will be limited to the subject property. Therefore, no mitigation is necessary.

6.13 ACCESS TO THE AREA

6.13.1 Baseline Conditions

Access to the project site is provided from Akoni Pule Highway through the security gate at Kawaihae Harbor. The site is located approximately 410 yards northeast of the security gate on an unpaved portion of land near the north entrance, which is currently not being used. The access road is asphalt-paved and is approximately 32 feet wide. The asphalt on the road is currently in fair condition.

6.13.2 Proposed Action Impacts and Mitigation

The Proposed Action does not include any alternations or direct impacts to the road as construction will be limited to the parking lot area. The ground surface may be disturbed during construction activities; however, any potential effects are expected to be minor and short-term. The operation phase of the

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Proposed Action will not have a significant affect on access to the area as travel to the project site will be only for periodic maintenance activities. Therefore, no mitigation is necessary.

6.14 HEALTH AND SAFETY

The National Council on Radiation Protection and Measurements (NCRP) has established limits for human exposure to radio frequency (RF). The maximum permissible level for RF exposure is 580 microwatts per square centimeter over a 30 minute period. Federal Communications Commission (FCC) guidelines for RF exposure limits are identical to that of the NCRP guidelines.

6.14.1 Baseline Conditions

The project site is located in an industrial area with health and safety concerns related to harbor activities. Health may be adversely affected from emissions from boats in Kawaihae Harbor, and safety concerns are associated with activities such as moving large crates from ships onto land. The area directly around the subject property has safety concerns with vandalism.

6.14.2 Proposed Action Impacts and Mitigation

The levels of RF typically found near cellular base station transmitters are significantly lower than the exposure limit established by the FCC and NCRP. Calculations for a worst-case scenario show that to be exposed at levels near the limit, a person would have to remain in the main transmitting beam, at the height of the antenna and within a few feet of the antenna. The height of the monopole will be 60 feet agl; therefore, it is extremely unlikely that a person will be exposed to RF levels in excess of the guidelines.

The Proposed Action is expected to increase safety in the project area because a light will be positioned on the monopole. This will allow for vandals in the area to be visible and, therefore, lower the amount of crime. Also, better cellular coverage in the area will allow crimes to be reported immediately, thereby increasing public safety. Therefore, no mitigation is necessary.

7.0 COMPLIANCE WITH PLANS AND PROGRAMS

7.1 HAWAII STATE PLANNING ACT

The Hawaii State Planning Act (HSPA) was created to guide for future long-range development of the state, to provide for wise use of Hawaii's resources, and to improve coordination among different agencies and levels of government in the planning process. The goals of the HSPA are to, "create a strong, viable economy; a desired physical environment; and physical, social, and economic well-being for the people of Hawaii."

7.1.1 Population

The HSPA provides for objectives in planning population growth so that it is "consistent with the achievement of physical, economic, and social objectives." The Proposed Action is for a telecommunications site that neither provides a facility for populations to gather nor presents a significant environmental effect that would deter people from living in the area; therefore, the Proposed Action is not expected to impact population.



7.1.2 Economy – In General

Objectives for general economic matters in the HSPA include increasing and diversifying employment and the economic base of the state, especially on neighbor islands. While the VZW Kawaihae Harbor Cell Site will not directly increase employment or economic bases, it will allow for better business communications during the planning and operation phases of achieving these objectives.

7.1.3 Economy – Agriculture

Hawaii's objectives for the agriculturally-related economy include developing diversified agriculture while maintaining the sugar and pineapple industries. The Proposed Action is not located in an agriculturally zoned area; therefore, it will not affect agriculturally-related economic goals.

7.1.4 Economy – Visitor Industry

The HSP plans for the continued growth of the visitor industry as part of Hawaii's economy. While the Proposed Action will not affect the growth of the visitor industry either adversely or beneficially, it will provide for better telecommunications for those visitors in the Kawaihae area.

7.1.5 Economy – Federal Expenditures

The Proposed Action does not involve federal expenditures; therefore, it will not affect the objectives set forth in this section of the HSPA.

7.1.6 Economy – Potential Growth Activities

Objectives for potential growth activities discussed in the HSPA pertain to achieving the increase and diversification of Hawaii's economic base. One of the policies for achieving this objective is to "increase research and development of businesses and services in the telecommunications and information industries." The development of the Proposed VZW HI3 Kawaihae Harbor Cell Site helps to carry out this policy and achieve the objective for potential growth activities by expanding the cellular coverage in the area.

7.1.7 Economy – Information Industry

The objective for the information industry is to position "Hawaii as the leading dealer in information businesses and services in the Pacific Rim." To help achieve this goal, one of the listed policies is to "encourage the continued development and expansion of telecommunications infrastructure serving Hawaii to accommodate future growth in the information industry." The Proposed Action is to develop a telecommunications site, which will help Hawaii attain its objective for the information industry.

7.1.8 Physical Environment – Land-Based, Shoreline, and Marine Resources

The objectives for land based shoreline and marine resources are for "prudent use of Hawaii's land-based, shoreline, and marine resources; and effective protection of Hawaii's unique and fragile environmental resources." The subject parcel is in a Coastal Zone Management Area, for which regulations are set in place under the Coastal Zone Management Program (CZMP). Section 7.2 of this report describes how the Proposed Action is in compliance with the CZMP; consequently, it is also in compliance with this section of the HSPA.



7.1.9 Physical Environment – Scenic, Natural Beauty, and Historic Resources

The objective for scenic, natural beauty and historic resources is for "enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources." The Proposed Action will comply with this objective because:

- It will be constructed in an area that was already altered by industrial development; therefore it will not be disturbing native vegetation or scenic views;
- It will not alter any existing waterways:
- It will not cause a significant increase in noise, water, or air pollution;
- According to the DLNR-DOFAW and USFWS, it will not affect any critical habitats or endangered species;
- It will have no impact on trees in the area; and
- If any historic resources are discovered during construction activities, work will cease and the DLNR-SHPD will be contacted immediately to ensure preservation of the find.

7.1.10 Physical Environment – Land, Air, and Water Quality

The State of Hawaii is striving to maintain and improve good land, air, and water quality within the physical environment while developing a greater public awareness of these resources. According to the analyses and conclusions discussed in Sections 6.1, 6.2, and 6.9 of this report, the Proposed Action is not expected to significantly impact these aspects of the physical environment because air quality will only be impacted temporarily during the construction phase and potential contact with groundwater will be limited to non-drinking water.

7.1.11 Facility Systems – In General

Arrangements for facility systems developments in the HSPA includes, "Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives." Later sections in the HSPA discuss each topic in more detail.

7.1.12 Facility Systems - Solid and Liquid Wastes

Objectives for solid and liquid waste facility systems outlined in the HSPA include maintaining public health and sanitation standards and providing for sufficient sewer facilities. The Proposed Action is only expected to produce solid wastes during the construction phase; therefore, impacts will be minimal and the project will be in compliance with the HSPA's objectives.

7.1.13 Facility Systems – Water

The HSPA provides an objective for water facility systems to adequately accommodate water resource needs of the State. The Proposed Action will not consume or affect the distribution of water; therefore, it is in compliance with the outlined objective.

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7.1.14 Facility Systems – Transportation

According to the HSPA, the State should strive to achieve current and future transportation needs for both people and goods. In analyzing compliance with the Hawaii Commercial Harbors 2020 Master Plan, as described in Section 7.5 of this report, it was found that the project site is not scheduled for development and, therefore will not interfere with the planned Kawaihae Harbor development. Therefore, the Proposed Action is in compliance with transportation objectives described in the HSPA.

7.1.15 Facility Systems – Energy

Under the HSPA, Hawaii should strive towards dependable energy facility systems, increasing energy self-sufficiency, providing energy security, and reducing greenhouse gas emissions. The Proposed Action will not impede the first three objectives and is in compliance with the fourth objective because no emissions will be released from the cell site.

7.1.16 Facility Systems – Telecommunications

According to the HSPA, "Planning for the State's telecommunications facility systems shall be directed towards the achievement of dependable, efficient, and economical statewide telecommunications systems capable of supporting the needs of the people." The Proposed Action is for a telecommunications site that is intended to increase communication for those in the Kawaihae area with VZW telephones; therefore, the Proposed Action is in compliance with the HSPA telecommunications facility systems objective.

7.1.17 Socio-Cultural Advancement – Housing

The objectives for housing outlined in the HSPA include "greater opportunities for people to secure reasonably priced, safe, sanitary homes; orderly development of residential areas sensitive to community needs; and development and provision of affordable rental housing by the State." The Proposed Action will not provide new housing or take away existing housing; therefore, it will not affect the housing objectives for the State of Hawaii.

7.1.18 Socio-Cultural Advancement – Health

Objectives for health outlined in the HSPA include fulfilling basic individual health needs and maintaining a healthy environment. According to the various descriptions in Section 6.0 of this report, the Proposed Action will not significantly impact the environment or create a health risk for the people of Hawaii; therefore, health objectives will not be hindered by the Proposed Action.

7.1.19 Socio-Cultural Advancement – Education

Objectives for education outlined in the HSPA are that "education shall be directed towards achievement of educational opportunities to fulfill the needs, responsibilities, and aspirations of the people of Hawaii." The Proposed Action is for a telecommunications site to be located in an industrial area; therefore, it will not adversely affect objectives associated with education.

7.1.20 Socio-Cultural Advancement – Social Services

The objective outlined for social services is to "improve public and private social services to enable citizens to become more self-reliant." The Proposed Action will allow for people in the Kawaihae area with VZW to communicate better with others, thereby increasing self-reliance. Therefore, the Proposed Action helps achieve the objective for social services advancement.



7.1.21 Socio-Cultural Advancement - Leisure

The objective outlined for advancement- leisure is to "allocate an adequate provision of resources to accommodate diverse cultural, artistic, and recreational needs for present and future generations." The Proposed Action is located in an industrial area; therefore, it will not affect any objectives associated with leisure.

7.1.22 Socio-Cultural Advancement – Individual Rights and Personal Well-Being

The objective outlined in the HSPA is for "increased opportunities and protection of individual rights, to enable individuals to fulfill their socio-economic needs." The Proposed Action is expected to help individuals fulfill their socio-economics needs and aspirations by providing more reliable cellular phone service in the Kawaihae area. More details on how this will be achieved are described in Section 6.7 of this report.

7.1.23 Socio-Cultural Advancement – Culture

The objective outlined for Advancement - Culture is to "enhance cultural identities, traditions, values, customs, and arts of Hawaii's people." Based on information provided in Section 6.6 of this report, no cultural resources will be affected by the Proposed Action.

7.1.24 Socio-Cultural Advancement – Public Safety

Objectives in this section of the HSPA are targeted towards maintaining public safety and increasing awareness of public safety concerns among citizens. The Proposed Action is expected to increase public safety in the area through the addition of the light on the monopole. Potential impacts to public safety are further described in Section 6.14 of this report.

7.1.25 Socio-Cultural Advancement – Government

Objectives outlined for government are for "efficient, effective and responsive government services at all levels of the State; and fiscal integrity, responsibility and efficiency in the State and County Governments." The Proposed Action is located in an industrial area and is not related to government activities; therefore, it will not affect any objectives associated with the government.

7.2 COASTAL ZONE MANAGEMENT PROGRAM

The Coastal Zone Management Act was passed by the US Congress in 1972 to encourage coastal states to develop programs to protect coastal areas. Participation by states is voluntary and incentives, such as grants, are set up to encourage the development of a CZMP.

Hawaii has 750 linear miles of coastline that are important to maintaining unique ecosystems and the state's economy through tourism. Due to the significance of Hawaii's coastline, the state began developing a CZMP in 1974 and it was enacted in 1977. The lead agency for the policies of the CZMP is the State of Hawaii, Department of Business, Economic Development and Tourism (DBEDT)-Office of Planning (OP). The following subsections evaluate the Proposed Action with the objectives and policies set forth by the CZMP under Chapter 205A of the HRS, as revised on January 31, 2006.

Bureau Veritas contacted the DBEDT-OP for any information on potential environmental impacts the Proposed Action may have on the coastal area of Kawaihae. In an email response dated October 31, 2007, Mr. Douglas Tom replied, "We are informing you that we no longer comment on projects before they are decided. According to the CZMP concept and legal provisions, state and county agencies

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having functional responsibilities are expected and required to address CZMP implications within the scopes of their authorities. Our direct comments may be regarded as usurping their authority or precluding their independent analyses. Hence, we limit our involvement to monitoring their decisions for consistency and compliance with the state CZMP statute." A copy of correspondence from the DBEDT-OP can be found in Appendix F, Section 2.

The following subsections analyze the Proposed Action's compliance with CZMP rules under Chapter 205A-2 of the HRS.

7.2.1 Recreation Resources

The first objective of the CZMP is to "provide coastal recreational opportunities accessible to the public." This objective is especially important to Hawaii because the tourism industry, which provides many economic opportunities, is dependent on coastal recreation. The Proposed Action is to take place in an industrial area where, according to the research conducted by Bureau Veritas, no recreational opportunities are planned to be developed.

7.2.2 Historic Resources

Under the CZMP, historic properties important to Hawaiian and/or American culture must be preserved. In conducting this EA, Bureau Veritas characterized existing historic resources in the project area by subcontracting T.S. Dye to conduct an archaeological assessment. A description of existing historic resources and agency and NHO consultation concerning these resources are included in Section 6.6 of this EA.

7.2.3 Scenic and Open Space Resources

The CZMP strives to "protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources." The Proposed Action is located within the Kawaihae Harbor, which has been altered significantly to incorporate various industrial developments; therefore, the project site is neither a coastal scenic nor an open space resource.

7.2.4 Coastal Ecosystems

Under the objectives and policies established for coastal ecosystems, all ecosystems valuable biologically or economically must be preserved. The Proposed Action is to take place at Kawaihae Harbor where significant alterations to the land have already taken place. Vegetation at the subject property has been removed by previous grubbing and grading activities so that a unique coastal ecosystem is not present in the area. Additionally, the Proposed Action will not divert or channelize any streams that are important to sustaining a coastal water ecosystem.

Another goal of the CZMP is to "promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures." During the construction and operation phases of the Proposed Action, the project will not affect water quality or quantity because it will not consume or adversely affect the water supply. The operation phase will not produce any point or nonpoint sources of runoff. The construction phase may produce minor levels of excess dirt that will be removed from the site.



7.2.5 Economic Uses

The objectives and policies for economic uses in coastal areas stipulate that facilities important to the State's economy should be located so as to minimize environmental impacts. The Proposed Action will take place in Kawaihae Harbor, whose daily operations are very important to the County and State's economy; however, as described in Section 7.5, the Proposed Action will not have an effect on the development of Kawaihae Harbor as the Master Plan does not outline growth at the subject parcel.

7.2.6 Coastal Hazards

Coastal hazards are a concern for any project that is to be located near the shore; as such, the objectives and policies for this section are to control development in these areas and ensure that structures are designed with attention to potential coastal hazards. The proposed monopole is designed to withstand up to 120 mile-per-hour winds in consideration of various coastal hazards.

Additionally, the CZMP states that developments must "comply with requirements of the Federal Flood Insurance Program." According to the FEMA/FIRM map, the subject property is located in Zone X, which denotes areas determined to be outside the 500-year floodplain (FEMA/FIRM Map No. 155166-0137 C, revised September 16, 1988). Therefore, the Proposed Action is in compliance with the Federal Flood Insurance Program.

7.2.7 Managing Development

The objectives and policies outlined for managing development in coastal zones were developed as guidelines for regulators to effectively communicate and enforce applicable coastal policies. Therefore, the section on managing development does not affect the Proposed Action.

7.2.8 Public Participation

Several of the policies in the CZMP were developed to help the DBEDT-OP increase public awareness of and participation in coastal zone management activities. Bureau Veritas has reached out to the community for participation in the EA process. Community consultation efforts are described in Section 5.0 of this report.

7.2.9 Beach Protection

The CZMP strives to restrict development within the shoreline setback in order to conserve open space and minimize shoreline and improvement losses. According to Chapter 505A-43 of the Hawaii Revised Statutes, the shoreline setback is between 20 and 50 feet inland from the shoreline. The distance from the shoreline to the closest point of construction for the Proposed Action is approximately 550 feet; therefore, it is not within the shoreline setback.

According to the CZMP, the beach should also be protected by minimizing erosion-protection structures. The Proposed Action does not occur in a beach area nor will it affect erosion protection structures.

7.2.10 Marine Resources

Marine resources are important to Hawai'i's ecosystem; as such, the CZMP seeks to "promote the protection, use, and development of marine and coastal resources to assure their sustainability." According to information discussed in the previous subsections, the Proposed Action will not affect marine resources. Effects to the environment are further discussed in the following section.



7.3 COUNTY OF HAWAII GENERAL PLAN

The Proposed Action was evaluated to confirm that it is in compliance with the GP, as amended in February 2005. According to the document, the GP was established to setup "the long term comprehensive development of the island of Hawaii." The following subsections analyze the Proposed Action's compliance with the GP's goals, policies, and standards.

7.3.1 Economy

The economic goals for the County of Hawaii are divided according to district. The district where the Proposed Action is to take place is South Kohala. The proposed HI3 Kawaihae Harbor cell site will comply with the courses of action designated for South Kohala because the Proposed Action:

- Will not take place on agricultural land;
- Will not affect the economic and social assets of the natural resources in the area since the site is to be placed in an industrial zone;
- Will not affect resort development since the site is to be placed in an industrial zone;
- Will not affect the rural aspects of Waimea; and
- Does not inhibit the growth of astronomical research.

7.3.2 Energy

The County of Hawaii is dependent on imported petroleum for its energy needs, which makes the island vulnerable in instances of shortage and/or emergency. Also, energy produced from petroleum generates pollution that is harmful to both the environment and human health. Standards for energy listed in the GP include minimizing pollution from new power plants and complying with HAR for noise and air quality/pollution. Since the Proposed Action is not for a power plant, the first standard is not applicable to this project. Information on the Proposed Action's impacts on noise and air quality can be found in Sections 6.3 and 6.9 of this report.

7.3.3 Environmental Quality

The County of Hawaii strives to maintain high environmental quality in the midst of increasing development. A set of standards was established to ensure that the county's environment stays healthy. The Proposed Action is in compliance with these standards because:

- It will comply with existing Federal, State, and County pollution standards;
- The acceptance of this EA by the County of Hawaii is a condition of approval to move forward with construction; and
- It will adhere to all Federal and State environmental regulations.

7.3.4 Flooding and Other Natural Hazards

Standards for control of flooding and other natural hazards are divided according to district. According to the profile for South Kohala, Kawaihae is occasionally subject to flash floods, tsunamis, and storm surge wave inundation. The courses of action listed for the South Kohala district include updating and implementing the "Drainage Master Plan," as well as conducting a flood study of the Auwaiakeakua Stream. The Proposed Action will not affect these goals set into place by the County of Hawaii.

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Additionally, the FEMA/FIRM was reviewed to determine if the subject property was located in a flood hazard area. The subject property is located in Zone X, which denotes areas determined to be outside the 500-year floodplain (FEMA/FIRM Map No. 155166-0137 C, revised September 16, 1988). Consequently, flooding will be a low potential hazard for the subject property.

7.3.5 Historic Sites

Information and proposed courses of action for historic sites are divided according to district. According to the profile for North and South Kohala, the Kohala coast is the site of many historic events, including the birth of Kamehameha I. The only course of action listed for South Kohala is for the County of Hawaii to "support the establishment of Hawaiian Heritage Corridors." The Hawaiian Heritage Corridor Program would allow groups from the various districts in the County of Hawaii to preserve historic sites within that district. The Proposed Action will not interfere with the establishment of this program. Additionally, according to concurrence from the SHP, no historic properties are within the APE for direct or visual effect.

7.3.6 Natural Beauty

Descriptions and lists of sites exhibiting natural beauty are divided according to district. According to this section of the GP, South Kohala is considered a natural beauty because of mountains, lava flows, pastures, coastline, and contrasting colors. None of the areas listed as Natural Beauty Sites in the District of South Kohala are at or adjacent to the subject property/parcel.

7.3.7 Natural Resources and Shoreline

The GP strives to protect the natural resources and shoreline Hawaii offers by implementing a list of standards. The Proposed Action is in compliance with these standards because:

- Areas of potential significance to endangered species and conservation were considered for this project and are described in Section 6.2.4 of this report;
- It will not affect forests, park lands, wilderness, or beach areas since construction is to take place in an industrial zone:
- The land at the Proposed Action is at less than a 20 percent slope;
- The project site has been assessed for effects to water resources and the analyses are discussed in Sections 6.1.2 and 6.2.1 of this report;
- The land is adaptable to its proposed purpose because it is flat, the soil is fill land and therefore designed for development, and the location is in a developed area (more details on these factors are contained in Sections 6.1.1 and 6.12); and
- The acceptance of this EA by the County of Hawaii is a condition to build in this SMA.

7.3.8 Housing

Profiles and courses of action for housing development in the County of Hawaii are divided according to district. According to South Kohala's profile, the population in this district nearly doubled between 1990 and 2000, and the number of housing units rose 23 percent between 1992 and 1997. The Proposed Action will not affect the courses of action outlined for South Kohala because the subject property/parcel lies in an industrial zone.

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7.3.9 Public Facilities

7.3.9.1 Education

According to the GP, courses of action in the South Kohala district strive to expand public facilities related to education such as schools, libraries, improvements to existing facilities, installation of walkways, development of higher education facilities, development of a middle school and library in Waikoloa, and establishing a high school in the district. Since the Proposed Action is to take place in an industrial zone, it will not affect the county's goals for educational public facilities.

7.3.9.2 Protective Services

According to the GP, the only course of action pertaining to the South Kohala district is improving service facilities to meet needs. Since the Proposed Action is in an industrial zone, it will not affect protective service facilities.

7.3.9.3 Government Operations

According to the GP, the government operations facilities currently in South Kohala include a district court, three post offices, and two baseyards. The courses of action for South Kohala include improving and expanding the existing facilities and establishing a civic center in Waikoloa. The Proposed Action will not affect either of these goals for the district.

7.3.9.4 Health and Sanitation

According to the GP, the only course of action listed for the South Kohala district in relation to health and sanitation is to establish a means of refuse collection for Waikoloa. Since the Proposed Action is to take place in Kawaihae and not Waikoloa, it will not affect health and sanitation facilities.

7.3.10 Public Utilities

7.3.10.1 Water

South Kohala has a series of wells and five reservoirs that supply water to the district. The courses of action established by the GP for this district target are improving water quantity in the area to match demand. The Proposed Action will not affect the goals for South Kohala because it will not impede:

- The search for alternative sources of water;
- The improvement of inadequate distribution mains and steel tanks; and
- The search for additional groundwater sources for the Waimea System.

7.3.10.2 Telecommunications

The standard for telecommunications by the GP is that new facilities should take into account the existing environment and that scenic views should be preserved. Since the Proposed Action is to take place in an industrial zone, no scenic views will be disturbed.

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7.3.10.3 Electricity

The standards for electricity in the GP pertain to electrical facilities, not to telecommunications towers such as the proposed VZW HI3 Kawaihae Harbor cell site.

7.3.10.4 Gas

The standards for gas in the GP pertain to gas facilities, not to telecommunications towers such as the proposed VZW HI3 Kawaihae Harbor cell site.

7.3.10.5 Sewer

The standards for sewage in the GP pertain to sewer systems, not to telecommunications towers such as the proposed VZW HI3 Kawaihae Harbor cell site.

7.3.11 Recreation

According to the GP, recreational areas in the South Kohala district are limited; therefore, the standards set for this area target improving existing and creating new facilities. The Proposed Action will not affect the courses of action for South Kohala because it:

- Is not located in Hapuna Beach State Park;
- Is not located at Samuel M. Spencer Beach Park;
- Will not impede the development of shoreline recreation areas since it is in an industrial zone;
- Will not discourage the establishment of neighborhood parks;
- Will not inhibit public use of or access to beach areas;
- Will not inhibit any plans for the Waimea area; and
- Will not affect the use of Church Row Park.

7.3.12 Transportation

7.3.12.1 Roadways

The Proposed Action does not affect the County of Hawaii's plans to construct new or improve existing roadways.

7.3.12.2 Transportation Terminals: Airports & Harbors

South Kohala has a boat harbor located in Kawaihae and an airport in Waimea that supports traffic other than passenger planes. The Proposed Action will not affect the courses of action for South Kohala because it will not affect:

- Improvements to the Waimea-Kohala airport;
- Improvement of facilities at Kawaihae Harbor in order to support increases commercial activities;
 or

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• The development of a small boat harbor at Kawaihae.

7.3.12.3 Mass Transit

The Proposed Action will not affect the GP's goals to institute bicycle paths, improve or create new mass transit systems, or enhance the mobility of minors, the elderly, the poor, or the disabled.

7.3.13 Land Use

The Proposed Action is to take place in an area zoned as industrial. The VZW HI3 Kawaihae Harbor cell site will not affect the courses of action for industrial land use established by the GP for South Kohala because it does not:

- Discourage the development of an industrial park in Kawaihae;
- Inhibit surrounding environmental use, as described in Section 6.0; or
- Inhibit identifying sites for future industrial activities.

7.4 COMMUNITY DEVELOPMENT PLAN (CDP)

The GP also sets forth the intention of implementing CDPs. The purpose of a CDP is to take the broad statements in the GP and apply them to goals within individual communities. The CDPs will help communities to manage growth and ensure that the courses of action addressed in the GP are appropriately applied to the individual communities.

Communities in this case are divided into geographical areas, and Kawaihae is included in the South Kohala region. The CDP for South Kohala is currently in the development stage and once complete will address the following issues:

- Economy
- Energy
- Environmental quality
- Flooding and natural hazards
- Historic sites
- Natural beauty
- Natural resources and shoreline
- Housing
- Public facilities
- Public utilities
- Recreation
- Transportation
- Land use

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Bureau Veritas contacted Mr. Alex Frost, CDP Coordinator for the South Kohala region on October 26, 2007 and December 5, 2007 for information with regards to any potential environmental, historical, cultural, or other impacts the proposed wireless telecommunications facility may have. As of the date of this report, no responses have been received on this matter. It is believed that since the Proposed Action is in compliance with the GP, that it is also in compliance with plans for the South Kohala community.

7.5 HAWAII COMMERCIAL HARBORS 2020 MASTER PLAN

The Proposed Action was evaluated to confirm that it is in compliance with the Hawaii Commercial Harbors 2020 Master Plan (Harbors Plan). According to the document, the Harbors Plan was established to "enhance the island's commercial harbor system to ensure its efficient, safe, accessible and economical operations." This section analyzes the Proposed Action's compliance with the Harbors Plan as it is applicable to the goals for Kawaihae Harbor.

The Harbors Plan outlines the importance of Hawaii's harbors for basic needs, as 80 percent of the island's food and merchandise are imported, and of these items, 98.6 percent are shipped by sea. This makes utilizing, organizing, and expanding Hilo and Kawaihae Harbors very important to sustaining Hawaii's economy. The Master Plan specifically outlines the need to expand the acreage around Piers 3, 5, and 6 with various changes to the accommodations of other piers at Kawaihae Harbor.

Under the "Additional Recommendations" section of the Master Plan, it is noted that the southeast corner of Kawaihae Harbor, where the proposed VZW Kawaihae Harbor Cell Site is to be located, is not to be developed for commercial harbor use at this time. The reason given are concerns that the area may be potentially significant historically and that before developing in that area "proper archaeological and environmental studies [should be] conducted." This Final EA is in compliance with environmental impact assessment standards. Section 6.6 of this report describes the affected environment, including any culturally or historically significant aspects of the site. Since under the Harbors Plan the subject property is not to be developed and this Final EA includes historical and cultural assessments, the Proposed Action is in compliance with this plan.

8.0 <u>FINDINGS</u>

We have prepared this Final EA for the proposed VZW HI3 Kawaihae Harbor Cell Site (subject property) in conformance with the NEPA and DLNR-OEQC requirements. The findings presented in this Section are based on Bureau Veritas' understanding of the subject property location and the Proposed Action at the subject property, as such action is described in Section 3.0. Should modifications to the location of the subject property or Proposed Action be made in the future, then additional inquiries may be prudent.

According to the DOH Rules (I 1-200-12), an applicant or agency must determine whether an action may have significant impact on the environment, including all phases of the project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short- and long-term effects.

In making the determination, the Rules establish "Significant Criteria" to be used as a basis for identifying whether significant environmental impacts will occur. According to the Rules, an action shall be determined to have significant impact on the environment if it meets any one of the following criteria:

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

The proposed project site is located at an industrial harbor. This area was extensively altered during previous development and available photographs of the site show obvious disturbances



and clearings. In addition, according to the SHPO, no archaeological or historical sites are known to exist within the immediate area of the proposed project site.

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

The proposed cell site will be located in an industrial harbor and will use existing utilities located on the subject parcel; therefore, the proposed cell site will not affect the existing use of the harbor and will not reduce the beneficial uses of the environment.

(3) Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders:

The proposed project is not expected to have a significant impact on the surrounding natural environment, historical areas or the existing community. Additionally it will have no negative economic or social impacts on the area. Therefore, it is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

(4) Substantially affects the economic or social welfare of the community or state;

The proposed project will benefit the community at large by providing better telecommunications coverage and service to customers within and passing through the general surrounding area.

(5) Substantially affects public health;

Impacts to public health may be affected by air and noise during construction; however, these will be insignificant or not detectable. The water quality impact will not have an effect on public health since the groundwater in the area is not used for consumption.

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

The proposed project is anticipated to have no growth impact to the regional population. The proposed monopole will be placed in an industrial area and will, therefore, have no effect on public facilities.

(7) Involves a substantial degradation of environmental quality;

The proposed project is located in an area with existing power. The proposed activities will be limited to the immediate area of the proposed cell site; therefore, the Proposed Action will not involve substantial degradation of environmental quality.

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

The Proposed Action is designed to maintain the given space and benefit the community at large. No views will be obstructed or be visually incompatible with the surrounding area since the monopole will be located in an industrial area.

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Project No. 17007-007129.00



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

According to USFWS determinations, the subject property does not lie within or immediately adjacent to any proposed or designated critical habitat, wetland, or coral reef. Moreover, USFWS has responded that federally listed endangered, threatened, or proposed species are not likely to be adversely affected by the Proposed Action.

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

The proposed project is not anticipated to detrimentally affect air or water quality or ambient noise levels of the area.

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

The Federal Emergency Management Agency Flood Insurance Rate Map was reviewed to determine if the subject property was located in a flood hazard area. The subject property is located in Zone X, which denotes areas determined to be outside the 500-year floodplain (FEMA/FIRM Map No. 155166-0137 C, revised September 16, 1988).

In addition, the USACE has determined that there are no waters of the US at the proposed project site and, therefore, a Department of the Army permit will not be required for this project.

Based on the above criteria, there are no environmentally sensitive areas associated within the proposed project.

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

The proposed project site is located in an industrial area in which scenic views were previously altered. Therefore, scenic views and view planes will not be significantly impacted by the Proposed Action.

(13) Requires substantial energy consumption.

The construction and operation phases of the proposed project will not require substantial energy consumption relative to other similar projects.

None of the inquiries made or documents reviewed during this EA indicated direct evidence of significant negative environmental conditions with respect to the Proposed Action at the subject property.

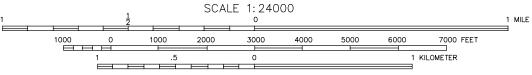
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Project No. 17007-007129.00



FIGURES



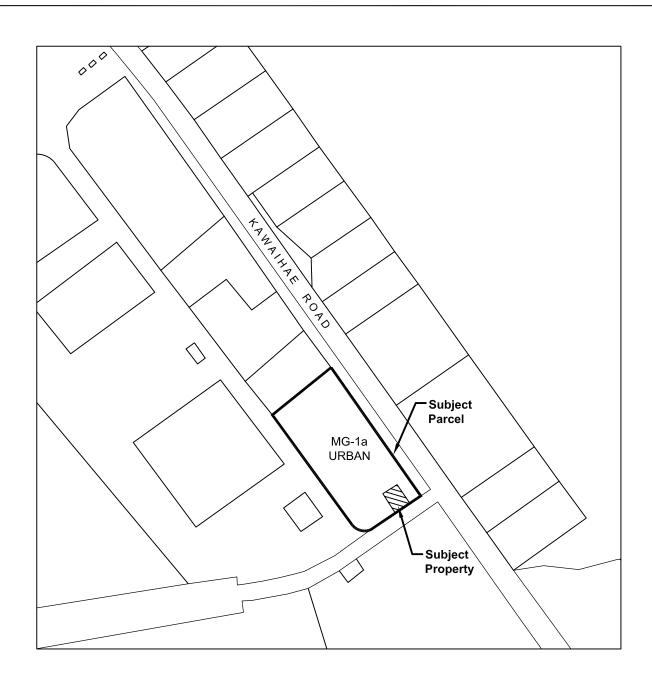




Portion of 7.5-minute Series (Topographic) Maps United States Drpartment of Interior United States Geological Survey Kawaihae Quadrangle, Kawaihae, Hawaii 1998



Project No.: 17007-007129.00	Site Location Map	
Date: 09/04/08	AKOHI I GIC HIGHWAY	FIGURE
Revised By: DG	TMK: (3) 6-1-003: Parcel 034 Kawaihae Harbor, Kawaihae, Hawaii	1
Checked By: MLT	Cade Schutte, LLC	





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Project No.:	Site Vicinity Map	
17007-007129.00	Site vicinity map	
Date:	VZW HI3 Kawaihae Harbor Cell Site	FIGURE
09/04/08		IIGUIL
Revised By:	TMK: (3) 6-1-003: Parcél 034	2
DG	Akoni Pule Highway TMK: (3) 6-1-003: Parcel 034 Kawaihae Harbor, Kawaihae, Hawaii	
Checked By:	Client:	
MLT	Cade Schutte, LLC	



PHOTOGRAPHS



Project	Description	ription The area of the subject property/proposed action as viewed from the west	
Number	Site Name	VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project Number	Project	Description	View of subject property/proposed actions from the southeast, across Kawaihae Road	Photo 2
	Site Name	VZW Kawaihae Cell Site	Photo Date	
	17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project	Description	Gravel and soil stockpiles located approximately 40 feet southwest of the subject property	Photo 3
Number	Site Name	VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project	Description	View of the area northeast and upgradient from the subject property/proposed action	Photo 4
Number Site Name		VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project	Description	Portable water tankers located south of the subject property, across the access road	Photo 5
Number	Site Name	VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project	Description	Older portable water units located south of the subject property, across the access road	Photo 6
Number	Site Name	VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project	Description	View of Kawaihae Road, looking southeast	Photo 7
Number	Site Name	VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



Project	Description	View of Kawaihae Road, looking northwest	Photo 8
Number	Site Name	VZW Kawaihae Cell Site	Photo Date
17007-007129.00	Client	Cades Schutte, LLP	6/15/2007



APPENDIX A LIST OF SOURCES/REFERENCES



LIST OF SOURCES/REFERENCES

CONTACTS:

Agency and division/source: County of Hawaii, Department of Planning & Permitting

Name/title of representative: Mr. Chris Yuen, Director

Ms. Alice G. Kawaha, Planning Program Manager

Ms. Bethany Morrison, Zoning Clerk

Location of Agency: Hilo, Big Island, Hawaii

Agency Telephone Number: (808) 961-8288

Agency and division/source: United States Fish & Wildlife Service (USFWS)

Name/title of representative: Mr. Patrick Leonard, Ph.D., Field Supervisor

Megan Laut, Staff Biologist

Location of agency: Honolulu, Oahu, Hawaii

Agency telephone number: (808) 792-9400

Agency and division/source: Honolulu Star Bulletin / Legal Notices Department

Name/title of representative: Ms. Casey Asuncion, Staff Location of Agency: Honolulu, Oahu, Hawaii

Agency Telephone Number: (808) 529-4825 Phone; (808) 529-4829 Fax

Agency and division/source: Department of Land and Natural Resources (DLNR) – State

Historic Preservation Division (SHPD)

Name/title of representative: Ms. Laura H. Thielen, Interim Chairperson

Ms. Julie M. Endicott-Taomia, Hawaii Island Archaeologist

Location of agency: Honolulu, Oahu, Hawaii

Kailua-Kona, Big Island, Hawaii

Agency telephone number: (808) 692-8015

(808) 327-3690

Agency and division/source: Office of Hawaiian Affairs (OHA); Hawaiian Rights Division

Name/title of representative: Mr. Clyde W. Namu'o, Administrator

Location of Agency: Honolulu, Oahu, Hawaii

Agency Telephone Number: (808) 594-1888

Agency and division/source: United States Army Corp of Engineers (USACE), Honolulu District

Name/title of representative: Mr. George Young, Director

Ms. Paulette Choy, Staff

Location of Agency: Honolulu, Oahu, Hawaii

Agency Telephone Number: (808) 438-1091



Agency and division/source: Historic Hawaii Foundation (HHF)
Name/title of representative: Ms. Kiersten Faulkner, Director

Location of Agency: Honolulu, Oahu, Hawaii

Agency Telephone Number: (808) 523-2900

Agency and division/source: Hui Malama I Na Kupuna O Hawai'i Nei

Name/title of representative: Mr. Charles K. Maxwell, Sr. – Po'o (President)

Location of Agency: Makawao, Maui, Hawaii

Agency Telephone Number: (808) 553-5738

Agency and division/source: DLNR-Department of Forestry & Wildlife (DOFAW)

Name/title of representative: Mr. Paul J. Conry, Administrator

Mr. Roger Imoto, Hawaii District Manager

Location of agency: Honolulu, Oahu, Hawaii

Hilo, Big Island, Hawaii

Agency telephone number: (808) 587-0166

(808) 974-4221

Agency and division/source: State of Hawaii, Department of Business, Economic Development

and Tourism (DBEDT)-Office of Planning (OP)

Name/title of representative: Mr. Douglas Tom

Location of agency: Honolulu, Oahu, Hawaii

Agency telephone number: (808) 587-2875

Agency and division/source: County of Hawaii, Department of Public Works (DPW)

Name/title of representative: Mr. Bruce McClure, Director Location of agency: Hilo, Big Island, Hawaii

Agency telephone number: (808) 961-8341

Agency and division/source: State of Hawaii, Department of Hawaiian Home Lands (DHHL)

Name/title of representative: Ms. Linda Chinn, Administrator

Mr. Peter "Kahana" Albinio, Jr., Property Development Agent

Location of agency: Honolulu, Oahu, Hawaii

Agency telephone number: (808) 586-3840



Agency and division/source: State of Hawaii, Department of Transportation (DOT)
Name/title of representative: Mr. Alvin Takeshita, Engineering Program Manager

Mr. Mike D. Formby, Deputy Director

Location of agency: Kapolei, Oahu, Hawaii

Honolulu, Oahu, Hawaii

Agency telephone number: (808) 692-7671

(808) 587-3651

Agency and division/source: DBA John Allen Sign Company

Name/title of representative: Mr. John S. Allen

Location of agency: Kamuela, Big Island, Hawaii

Agency telephone number: (808) 882-8244

Agency and division/source: County of Hawaii, Department of Research and Development

Name/title of representative: Mr. Alex Frost, CDP Coordinator

Location of agency: Hilo, Big Island, Hawaii

Agency telephone number: (808) 961-8012

Agency and division/source: Sierra Club, Hawaii Chapter

Name/title of representative: Mr. Gary Coffin, Chair/Conservation

Location of agency: Honolulu, Oahu, Hawaii

Agency telephone number: (808) 538-6616

Agency and division/source: University of Hawaii, Sea Grant Program

Name/title of representative: E. Gordon Grau, Ph.D., Director

Location of agency: Honolulu, Oahu, Hawaii

Agency telephone number: (808) 956-7031

REFERENCES:

Name of publication: Phase I Report of the Proposed Verizon Wireless (VZW) HI3

Kawaihae Cell Site (VZW Project ID# 2004070432), Located at Kawaihae Harbor, Highway (Portion of Tax Map Key [TMK] No.: [3]

6-1-003 Parcel: 034), Kawaihae, Hawaii, 96743

Author of publication: Bureau Veritas North America, Inc.

Date of publication: September 29, 2008

Name of publication: U.S.G.S. 7.5-Minute Series Kawaihae, Hawaii Author of publication: United States Geological Survey (USGS)

Date of publication: 1995



Name of publication: United States Department of Agriculture – Natural Resources

Conservation Service Soil Survey of the State of Hawaii

Author of publication: http://www.ctahr.hawaii.edu/soilsurvey/soils.htm

Name of publication: Map Number 155166-0137 C

Author of publication: Federal Emergency Management Agency

Date of publication: September 16, 1988

Name of publication: United States Fish and Wildlife Service

Author of publication: http://www.fws.gov/refuges/refugeLocatorMaps/Hawaii.html

Name of publication: Tower Construction Notification System (TCNS) online website

(http://wireless2.fcc.gov/TribalHistoricNotification/login-notifier.htm)

Author of publication: Federal Communications Commission (FCC)

Date of publication: 2005

Name of publication: National Programmatic Agreement

Author of publication: FCC

Date of publication: September 2004 / March 7, 2005

Name of publication: National Map Viewer – Wetland information

Author of publication: http://nationalmap.usgs.gov

Name of publication: National Scenic Trails Map and Guide

Author of publication: BLM, Federal Highway Administration, USFS, National Park

Service

Date of publication: Revised June 2004

Name of publication: Chapter 205A, Hawaii Revised Statues (HRS)

Author of publication: State of Hawaii
Date of publication: January 31, 2006

Name of publication: Chapter 226, HRS (Hawaii State Planning Act)

Author of publication: State of Hawaii

Date of publication: 2005

Name of publication: County of Hawaii General Plan

Author of publication: County of Hawaii, Department of Planning and Permitting

Date of publication: Amended February 2005



Name of publication: Information on Human Exposure to Radiofrequency Fields From

Cellular and PCS Radio Transmitters

Author of publication: Federal Communications Commission Office of Engineering &

Technology

Date of publication: January 1998

Name of publication: Chapter 344 HRS (State Environmental Policy)

Author of publication: State of Hawaii, Department of Health

Date of publication: 1993

Name of publication: Chapter 200, Hawaii Administrative Rules (HAR)

Author of publication: State of Hawaii, Department of Health

Date of publication: 1996

Name of publication: Chapter 11-46, HAR

Author of publication: State of Hawaii, Department of Health

Date of publication: 1996

Name of publication: Hawaii Commercial Harbors Master Plan 2020 Author of publication: State of Hawaii, Department of Transportation

Date of publication: Unknown

Name of publication: Coastal Zone Management Program

Author of publication: Office of the Governor, Office of State Planning

Date of publication: Unknown

Name of publication: Annual Summary of the 2007 Hawaii Air Quality Data
Author of publication: State of Hawaii, Department of Health, Clean Air Branch

Date of publication: October 2008



APPENDIX B ARCHAEOLOGICAL ASSESSMENT REPORT

T. S. Dye & Colleagues, Archaeologists, Inc.

735 Bishop St., Suite 315, Honolulu, Hawai'i 96813

Historic Properties Assessment for the Proposed Verizon Wireless HI3 Kawaihae Cell Site (#2004005304), Located at Kawaihae Harbor, Kawaihae, Kohala District, Hawai'i Island, TMK:(3)6–1–003:034 por.*

Thomas S. Dye, Ph.D. Kristin M. Macak
March 10, 2008

Applicant: Bureau Veritas North America, Inc.

Applicant's Consultant: T. S. Dye & Colleagues, Archaeologists, Inc.

Location: Kawaihae Harbor, Kawaihae, Kohala, Hawai'i.

Tax map key: (3)6–1–003:034 por.

Request: Proposed Verizon Wireless HI3 Kawaihae Cell Site #2004005304.

Direct Effect: No historic properties in Area of Potential Effect (APE) for direct ef-

fects.

Visual Effect: "No effect" on historic properties in Area of Potential Effect (APE) for visual effects.

1 Introduction

At the request of Bureau Veritas North America, Inc., T. S. Dye & Colleagues, Archaeologists, Inc. conducted an historic properties assessment of a parcel for the proposed Verizon Wireless HI3 Kawaihae cell site. The primary focus of the project was on the discovery and appropriate treatment of historic properties within the area of potential effect. The goals of the investigation were to determine whether the installation of a new antenna and associated equipment shelter will have direct or visual effects on historic properties.

^{*}Prepared for Bureau Veritas North America, Inc., 970 North Kalāheo Avenue, Suite C-316, Kailua, HI 96734.

2 1 INTRODUCTION

1.1 Project Area

Verizon proposes to erect a monopole equipped with a light, and install an associated 12×26 ft. equipment shelter that contains an internal 60 kW generator. The proposed Verizon Wireless HI3 Kawaihae cell site is located within the existing Kawaihae Harbor facility, classified as an industrial-marine setting. The site is located in the southeastern-most portion of the 1.925 ac. Kawaihae Harbor parcel owned by the State of Hawai'i and identified as TMK:(3)6–1–003:034 (fig. 1).

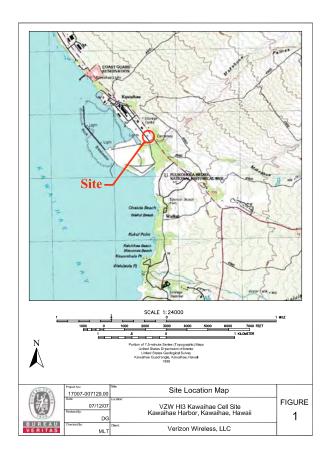


Figure 1. Proposed Verizon Wireless HI3 Kawaihae cell site on a portion of the USGS 1998 Kawaihae Quadrangle, courtesy of Bureau Veritas North America, Inc.

A 12×26 ft. equipment shelter will be installed at ground level by the base of the monopole, and the entire facility will be secured within a 40×50 ft. chain link fence enclosure. Ground disturbance is expected for the installation of the antenna pole and equipment facility (fig. 2).

According to the FCC Nationwide Programmatic Agreement, the APE for direct effects on historic properties includes the area of potential ground disturbance during

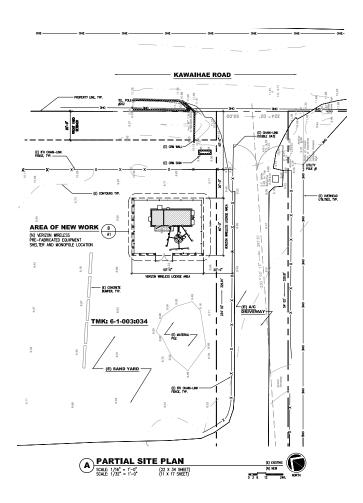


Figure 2. Proposed Verizon Wireless HI3 Kawaihae site plan. Adapted from site plan courtesy of Bureau Veritas North America, Inc.

the installation of the tower, equipment shelter and utilities. The APE for visual effects on historic properties for a tower 200 ft. or less is the area within ca. 0.5 mi. of the tower.

1.2 Background Research

This archaeological and historic properties assessment includes the review of historic documents, maps and archaeological reports on file at the State Historic Preservation Division library, the Hawai'i State Library and the State Bureau of Conveyances. A field inspection of the proposed site was conducted by T. S. Dye & Colleagues, Archaeologists, Inc. on October 16, 2007.

1.2.1 Natural Setting

The Verizon project site is located at Kawaihae Harbor, on the northwest coastline of the island of Hawai'i. The coastal topography is relatively flat and level for harbor use at an elevation of ca. 5 ft. above sea level. The soils are described as fill land, consisting of coral fill dredged from the Kawaihae Harbor. Soils on surrounding lands belong to the Kawaihae series, which consists of somewhat excessively drained extremely stony soils that formed in volcanic ash [20]. No perennial streams are present in the subject area. The proposed site receives between 0–10 in. of rainfall annually [6].

The area surrounding the subject parcel is taken up primarily by industrial-marine operations. The subject property is bordered by Kawaihae-Mahukona Road to the east, beyond which lies the county easement. To the south is a gated access road with unpaved lots. Two soil stockpiles and Kawaihae Bay extend to the west, and an unpaved lot with stored industrial shipping containers is located north of the property.

1.2.2 Traditional and Historic Land Use

The project site is located in Kawaihae I *ahupua* 'a in the traditional district of Kohala, on the northwest coast of Hawai'i Island. The physical environment, historic properties, and history of the area have been well documented in several studies [1; 7; 11]. The name Kawaihae, literally "the water [of] wrath," is derived from the belief that "people are said to have fought over water from a pool in this arid area" [18]. Handy and Handy [10] described Kawaihae as a place of both arid and wet agricultural environment:

The terrain immediately around it is dry and barren but formerly much dry taro was grown beyond in the lower forest zone, which formerly extended from the Kohala Mountains much farther to seaward over what is now open pasture land. Wet taro was grown also in small pockets of land wherever streams, even intermittent ones, flowed down from the mountains in the wet season. [10:531]

Kawaihae's natural harbor played an important role in several legendary accounts of the area, including the stories of Lonoikamakahiki, also known as Lono, the grandson of the great Hawai'i Island *ali'i*, 'Umi. In a fight against his rebel brothers,

Lono's men descended to Kawaihae and occupied Pu'ukoholā heiau. The battle called Kawaluna followed, and the rebel general Kanaloapulehu was taken prisoner. The rest of the rebels under Kanaloakuakawaiea were repulsed and fled to Pu'u 'Ainako in Kohala. Kanaloapulehu—despite being Lono's half brother—"was killed and laid upon the altar." [5:227–228]

In another story, Lonoikamakahiki travels to Maui and visits with Kamalālāwalu, Maui's *ali'i nui*, who later plans an invasion of Hawai'i. Kamalālāwalu sent his halfbrother, Ka-uhi-o-ka-lani, to Hawai'i to investigate how large the population was. They landed in Kawaihae.

These spies of Kama-lala-walu went around Hawai'i to see how many people there were. After they had been around, they returned to report

ahupua'a

ali'i

to their chief, saying, "We went all around Hawai'i. There were many houses, but few men. We went to Kohala and found the men only on the shores." These spies were mistaken when they denied that there were many men on Hawai'i... When Kama-lala-walu, ruler of Maui, heard the report of his spies, he was eager to stir his chiefs, his sons, and warriors to make war on Hawai'i. [13:56–57]

Kamalālāwalu and his army landed at Puakō where Lono's brother, Kanaloakua'ana resided. Before Lonoikamakahiki could arrive, Kanaloakua'ana was taken prisoner and tortured to death. Kamalālāwalu's army then moves to Waimea where a battle ensued just outside the Waimea plains, the battle of Pu'u'oa'oaka. After many days,

[t]he warriors of Maui were put to flight, and the retreat to Kawaihae was long. [Yet] there were many who did reach Kawaihae, but because of a lack of canoes, only a few escaped with their lives. Most of the chiefs and warriors from Maui were destroyed. Those who escaped on bait-carrying canoes [malau] were sunk and destroyed by the Hawai'i warriors. Some escaped by way of Kohala, found canoes, and returned to Maui. Kamalalawalu's warriors retreated to Kawaihae and others to Kohala. [13:60]

Kamalālāwalu was slain on the plain of Puakō and his body taken to Ke'ekū *heiau* at Kahalu'u in North Kona.

Kawaihae also played an important role in early historic accounts of the island. The earliest description of Kawaihae was given by Lieutenant James King of the *Resolution*, under command of Captain James Cook. The *Resolution* first entered into Kawaihae Bay on February 6, 1779 where Lieutenant King noted the seemingly unpopulated green and lush nature of the shoreline [12; 15]. Additional visits by European voyagers described a small village consisting of houses along the shoreline. In 1823, Reverend Ellis estimated Kawaihae Village consisted of 100 houses [1].

Kawaiahae was an important location for Kamehameha during his campaigns to take control of the islands. In the early 1790s, Kamehameha I initiated construction of a *luakini heiau*, Pu'ukoholā. It was at Pu'ukoholā that Kamehameha's rival Keoua, was deceptively invited to the temple consecration, where he was subsequently sacrificed. The construction of the *heiau* was a "massive effort that called for 'thousands of people encamped on the neighboring hillsides, and taking turns at work" [4:44]. It is unclear whether Kamehameha built Pu'ukoholā on the site of an earlier *heiau*. Removal of Kamehameha's rival initiated a sequence of events that ultimately led to Kamehameha's political control over the whole of Hawai'i Island.

Two other *heiau* located near Pu'u Kohala are Mailekini Heiau and Hale o Kapuni, dedicated to the shark 'aumakua, which is located offshore from the two land *heiau* [12:10].

Kamehameha's success in his campaigns was made possible by the use of western cannons and guns, made possible by the expertise of Isaac Davis and John Young. The two English seaman arrived aboard the *Eleanora* and the accompanying *Fair American* in March 1790. Kame'eiamoku, a chief of Kona, boarded the *Eleanora* and was beaten.

In retaliation for this abuse, he took the *Fair American*, a cannon, muskets, swords, and the like, and slew all aboard, except for the master Isaac Davis.

heiau

luakini

ʻaumakua

6 1 INTRODUCTION

These weapons and Davis were passed to Kamehameha, who quickly captured a member of the *Eleanora's* crew who was wandering ashore, John Young. [5:330]

Kamehameha took the captives under his care.

Finding their lives secure, and being watched closely and unable to escape, Young and Davis became reconciled to their lot. Their fortunes became quickly and closely linked to those of the king. They would play a significant role in Kamehameha's rise to dominance, and Young, especially, who quickly gained the king's trust and became his principal advisor, would be visited, consulted, or at least mentioned by every visitor to the islands for the next forty years ... [7]

One such visitor, Captain George Vancouver, landed Hawai'i's first cattle at Kawaihae in 1793. At the urging of Kamehameha I's advisor, John Young, cattle were subsequently turned loose on the Waimea plateau to multiply, setting the stage for cattle ranching which would directly impact Kawaihae Harbor activity in the coming decades.

Young and Davis became an integral part of this early period of modern Hawaiian civilization, and for their efforts Kamehameha rewarded them by making them high chiefs and endowing them with large tracts of land on which they settled and raised families. This property was given particularly for their services in helping conquer the islands of Hawai'i, Maui, Moloka'i, and O'ahu ... The land given to Young included Mailekini and Pu'ukohala heiau. Near their homes in Kawaihae, Young and Davis raised fruits and vegetables new to Hawai'i from seeds procured from foreign ships. Their residence in this area made it a required port of call for sea captains who had to obtain Young's blessing before conducting business with the Hawaiian government. [7]

By the mid-1800s ranching became a flourishing economic factor in the Kohala and North Kona areas with cattle being shipped out of Kawaihae [21:11]. Kawaihae became a popular anchorage for foreign vessels. Hawaiian chiefs were actively involved in foreign trade; food, sandalwood, firewood, *pulu*, and fresh water were exchanged for imported goods [2]. A well-developed salt production system was maintained near the beach and provided an important traditional exchange item for Kawaihae residents. However, the economic progress of the region was disrupted when Kamehameha died on May 8, 1819. The culture of Hawai'i took a radical change.

After Kamehameha's death, a degree of unrest existed among some of the principal chiefs regarding several economic matters, including the king's monopoly of the sandalwood trade. This tension in the political situation disturbed the elderly Young, who entreated de Freycinet to stress to the Hawaiians that peace and unity were essential for the future of the country and could only be attained by continuing loyalty to the Kamehameha dynasty. De Freycinet's draftsman, Jacques Arago, noted that this request

pulu

of Mr. Young's could only have been dictated by generosity of sentiment; personal interest had no share in it; the poor old man has but a few days to live; extended on a bed of sickness, he perceives the rapid approach of death, and, little regarding his own sufferings, his last prayers are offered up for a country, which the beneficence of Tammeamah makes him grieve to leave a prey to the factions which are about to divide it. [7]

In the following years, Hawai'i witnessed a degree of political unrest, detrimental effects of the sandalwood trade on the leeward coast, and the assimilation of Western ways into Hawaiian culture. The first missionaries to port in Kawaihae arrived in 1820 [1:15]. Elisha Loomis, the first resident missionary at Kawaihae, noted the desolation of the slopes of Kohala and Kawaihae Harbor caused by sandalwood harvesting. In the late 1830s, journalist James J. Jarves described Kawaihae as

barren and almost destitute of inhabitants ... A well-built store and a few houses constituted the only appearance of a town. There was no vegetation to be seen ... Kawaihae is merely a depot for goods for the interior. A good coast-road leads to Waimea. [7:110]

George Washington Bates, visiting in 1853, noted:

The village of Kawaihae was the poorest and most cheerless I have ever seen. Everything around and in it wore an aspect of such stern desolation, that I could not but wonder that any human being, or even a wild goat, should find a place of abode there. [7:334]

During the *māhele*, neighboring *ahupua* 'a Kawaihae 2, was given to John Young (LCA 8515H), while Kawaihae 1 was retained as government land. Several *kuleana* claims were awarded throughout Kawaihae 1 and 2, most of which were concentrated toward the coast. There were no Land Commission Awards made for the proposed Verizon Wireless HI3 Kawaihae cell site location.

As a result of increased contact with Western ways, the mid-1800s witnessed the loss of subsistence-based living, a boom in the sugar industry, and associated epidemics of both measles and smallpox. By 1858, 2,119 foreigners lived in Hawai'i. In the 1860s, the Civil War limited access to southern sugar supplies, boosting sugar industry demand in Hawai'i. Increased production witnessed an influx of laborers from Europe, Asia, Oceania, and Africa to meet export demands [12:18].

Kawaihae Bay and the extending coastline have been substantially altered since the turn of the twentieth century. In the early 1930s, Kawaihae had weekly steamship arrivals and cattle, driven to the coast from Waimea, were the main export. Along with the corrals near the pier were dry docks to serve the fishing fleet based at Kawaihae. In 1950, Congress authorized dredging for a deep-water harbor. At the completion of construction in 1959, new facilities included an inter-island terminal, mooring areas, and a large harbor basin with a wide entrance channel [15:18].

In 1968, the State of Hawai'i Department of Transportation Harbor Division owned the 2.608 ac. Kawaihae Harbor subject parcel. The land has remained under State ownership and was subleased in the following years. In 2003, 4,000 ft.² was dropped from the 2.608 ac. parcel, with the State of Hawai'i retaining ownership of the remaining 1.925 ac.

māhele kuleana 8 1 INTRODUCTION

1.2.3 Archaeological Background

While no known archaeological investigations have been conducted of the proposed Verizon Wireless HI3 Kawaihae cell site, several investigations have been conducted *mauka* of Kawaihae Harbor and in the surrounding areas [1; 2; 4; 9]. Numerous historic sites were recorded during these investigations as well as during other investigations to the north and south. Among the sites recorded in the vicinity of the project area is Pu'ukoholā Heiau National Historic Site.

Early archaeological work in South Kohala focused on the larger cultural sites. One of the earliest archaeological surveys of the Kawaihae area was conducted by John F. G. Stokes for the Bishop Museum in 1906. Stokes recorded Pu'ukoholā and Mailekini heiau in Kawaihae amongst other sites in Kohala. In 1930, Reinecke [19] examined the western coast of Hawai'i island in another survey for the Bishop Museum. He "walked along the coast from Kalahuipua'a [near Puakō] to Kawaihae, but considered it not worthwhile to attempt a survey of this algaroba-covered [kiawe] coast unless ... [he] had a base there" [19].

Pu'ukoholā National Historic (Site 50–10–05–4139) Pu'ukoholā was designated a National Historic Landmark on June 10, 1966 and in August 17, 1972, the President of the United States authorized the establishment of Pu'ukoholā Heiau National Historic Site (NHS). The Pu'ukoholā Heiau NHS boundaries lie between 0.1–0.6 mi. southeast of the proposed Verizon Wireless HI3 Kawaihae cell site. The NHS includes Pu'ukoholā, Mailekini, and Hale o Puni *heiau*, the John Young Homestead and other archaeological sites connected with traditional Hawaiian occupation of the area (fig. 3). Greene summarizes the significance of the resources within the National Historic Site.

Pu'ukoholā and Mailekini are among the largest and most conspicuously located of the remaining heiau ruins on Hawai'i Island and are also the most accessible. They are especially interesting because references to them and to activities in Kawaihae and the surrounding area exist in both ancient Hawaiian mythology and in historical documents. Another extremely important component of the site is the homestead of John Young, the English advisor to Kamehameha who was instrumental in the latter's rise to power and continued thereafter to promote the interests of the Hawaiian people in every way he could.

The variety of resources present makes the park an ideal location in which to interpret Hawaiian religious practices, architectural styles, construction techniques, political activities, and lifestyles, in both prehistoric and historic times. The purpose of designating the area a national historic site was to preserve a vignette of both prehistoric and historic Hawai'i through restoration and stabilization of selected historical features and their settings. [7:Chapter VII]

This National Historic Site is significant for its association with events that have made a significant contribution to the broad patterns of our history and because it embodies the distinctive characteristics of a type, period, and method of construction.

mauka

kiawe

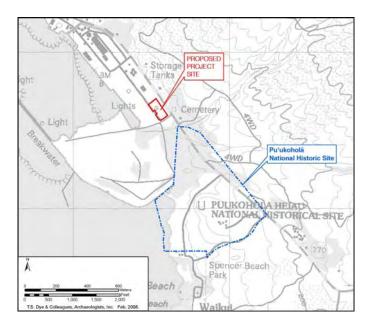


Figure 3. Proposed Verizon Wireless HI3 Kawaihae cell site and the Pu'ukoholā Heiau National Historic Site on a portion of the USGS 1998 Kawaihae Quadrangle

Other Cultural Sites Nearby Several archaeological investigations have been conducted in areas adjacent to Kawaihae harbor and the significance determinations for 165 sites located with 0.5 mi. of the proposed cell tower are given in the appendix (fig. 4, appendix A). In 1974, Barrera and Kelly [2] conducted the first reconnaissance survey for the proposed Mudlane-Waimea-Kawaihae Road alignment. The initial survey recorded 98 sites composed of over 531 individual features which were later investigated by Clark and Kirch [4]. In 1980-1981, Clark and Kirch [4] conducted the followup data recovery excavations along the 20 mi. Mudlane-Waimea-Kawaihae Road corridor. The survey was divided into four sections; Kawaihae, Lālāmilo, Waimea, and Mudlane. The Kawaihae section started just inland of the existing road at Kawaihae Harbor and ran parallel to the highway in a northwest-southeast direction to the junction of Highways 19 and 270 before it headed upland to Waimea. Twenty-six sites were located within a ca. 0.5 mi. radius of the proposed Verizon Wireless HI3 Kawaihae cell site. The sites included a wide variety of features including residential shelters, burial sites, walls, surface scatters, and features related to agricultural and military activities. None of the sites was located in the vicinity of the proposed Verizon Wireless HI3 Kawaihae cell site. The investigation by Clark and Kirch [4] determined that "as a result of construction of the harbor facility and existing highway, nearly all of the old shoreline settlement zone has been greatly disturbed, if not destroyed" [4:130].

In 1987, Allen [1] conducted an archaeological inventory survey on 23 Department of Hawaiian Home Lands lots in Kawaihae 1 *ahupua* 'a extending the length of the Kawaiahae 1 coast and inland up to the 600 ft. elevation. A total of 111 sites, comprised of 381 identified features, were found during the investigation. Portions of the survey

1 INTRODUCTION

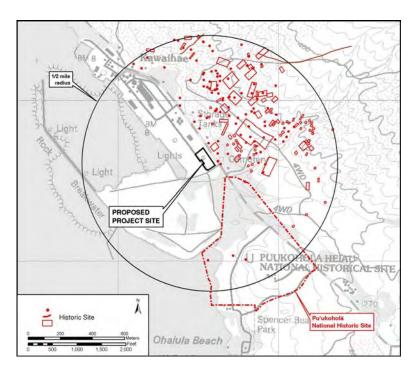


Figure 4. Locations of historic properties within 0.5 mi. of the proposed Verizon Wireless HI3 Kawaihae cell site. Compilation of site location based on Allen [1]; Barrera and Kelly [2]; Clark and Kirch [4] and Hammatt et al. [9]

area were included in the previous surveys by Barrera and Kelly [2] and Clark and Kirch [4]. A portion of the coastal survey was conducted on lands immediately *mauka* of the proposed Verizon Wireless HI3 Kawaihae cell site. Twelve historic sites were recorded within 0.5 mi. of the proposed Verizon cell site. All of these sites were located on the *mauka* side of the highway. None of the sites were recorded within the industrial section of the harbor in the vicinity of the proposed Verizon Wireless HI3 Kawaihae cell site

In 1991, Hammatt et al. [9] conducted an archaeological survey of ca. 2,600 ac. for the Department of Hawaiian Home Lands. Many of the sites recorded were included in previous surveys conducted in the area [1; 2; 4] (appendix A). Also in 1991, Hammatt and Shideler [8] provided an assessment of archaeological sites for over 10,000 ac. of the Department of Hawaiian Home Lands. The survey extended just *mauka* of Kawaihae Harbor to the 4,600 ft. elevation. Twenty-one pre-contact and historic-era sites were located in the *mauka* portion of the survey area between 1,000 ft. and 3,600 ft. above sea level.

In 2000, Borthwick et al. [3] conducted an archaeological assessment for the construction of a 1 Mgal. reservoir, a proposed access road and a waterline corridor. The project extended from the *mauka* side of Akoni Pule Highway to just below the 300 ft. elevation, ca. 1 mi. northwest of the proposed Verizon Kawaihae Harbor subject prop-

erty. The site inspection identified sites 50–10–05–5998, –13725, –13726, and –13913, recorded previously, as well as additional unrecorded features in the vicinity. The sites included temporary habitation and possible burial features. All of the sites were located in the *makai* portion of the proposed access road within the first 800 ft. *mauka* of Akoni Pule Highway.

In 2001, Nelson [16] conducted archaeological investigations for the removal of the historic Spencer Beach Park Road. Located ca. 1 mi. southeast of the proposed Verizon Wireless HI3 Kawaihae cell site, the project included the documentation of the history and development of the roadway as well as subsurface testing of the road alignment. According to Nelson,

[i]n addition to simply documenting the historic and development conditions of the Spencer Beach Park Road, this study has documented that the road construction techniques utilized in 1936 have had varying impacts on the pre-existing cultural sites and features. As noted, some features were destroyed, some relocated (when feasible), and some buried over. [16:60]

In 2003, Haun et al. [12] conducted an archaeological investigation of a 0.8 ac. parcel located along the coast, ca. 0.82 mi. northwest of the proposed Verizon Wireless HI3 Kawaihae cell site. Four historic-era sites were discovered, consisting of two concrete walls, a concrete building foundation, and the remnants of a concrete and mortared stone pier, and assigned State site numbers 50–10–05–23857 through –23860. The sites were presumed to date to the 1930s and the pier was largely destroyed by the 1946 tidal wave which swept the area. All four sites were considered significant for the information they contained for understanding the history of land use in the area. No further work was recommended because the inventory survey provided adequate documentation of the sites.

2 Field Inspection

A field inspection was conducted of the project site by T. S. Dye & Colleagues, Archaeologists, Inc. The limits of the project area were clearly defined and ground visibility was excellent. The proposed Verizon project site is located within the boundaries of the Kawaihae Harbor east paved lot, and has been extensively modified by the development and expansion of the modern harbor. A field inspection was also conducted by Bureau Veritas North America, Inc. and the information and photographs of the project site were also reviewed (figs. 5, 6).

No surface historic properties are located within the project site and no historic properties have been identified during the development of facilities in the project vicinity.

3 Discussion and Conclusions

A review of the archaeological literature, historic maps and information provided by Bureau Veritas North America, Inc. shows that the project site has been modified by makai



Figure 5. Proposed Verizon project site viewed from the west. Photo courtesy of Bureau Veritas North America, Inc.



Figure 6. View of subject property from the southeast, across Kawaihae Road. Photo courtesy of Bureau Veritas North America, Inc.

the development and expansion of the existing harbor activity. A field inspection determined that no surface historic properties exist within the area of potential effect for the proposed Verizon Wireless HI3 Kawaihae cell site. Archaeological investigations conducted for adjacent parcels showed that much of the area had been extensively disturbed during the recent historic period. Since the proposed Verizon Wireless HI3 Kawaihae cell site is located in an area that has been extensively modified and consists

of fill lands, it is unlikely that subsurface cultural deposits will be found. Therefore the construction of the cell tower will have no direct effect on significant historic properties.

A portion of the Pu'ukoholā Heiau NHS is located within 0.5 mi. of the project area. Because the introduction of a visual element such as the cellular tower does not diminish or alter the characteristics that make the Pu'ukoholā Heiau NHS significant, the undertaking will have no visual effect on this historic property.

Information on significance determinations for 162 historic properties outside of Pu'ukoholā Heiau NHS and within 0.5 mi. of the proposed cell tower (appendix A) indicates that 106 of the properties are eligible for listing on the State or National Registers of Historic Places the information on Hawaiian history and prehistory that they have yielded or are likely to yield and 20 are eligible for their cultural importance because they either contain or are likely to contain human burials. Because the introduction of a visual element does not alter the characteristics that make these properties eligible for listing on the State or National Registers of Historic Places, the undertaking will have no visual effects on these historic properties.

A Site Significance Determinations

			Significance			
Site Number	Name	A	В	C	D	E
50-10-02-02245	Lapakahi Complex				√	√
50-10-05-02296	John Young House Ruins		\checkmark	\checkmark	\checkmark	\checkmark
50-10-05-02298	Keolahou Church Foundation		\checkmark		\checkmark	\checkmark
50-10-05-02688						
50-10-05-02690					\checkmark	
50-10-05-02699	Road to Waimea				✓	
50-10-05-02700						
50-10-05-02701					✓	
50-10-05-02702						
50-10-05-02703					\checkmark	
50-10-05-02705						
50-10-05-02706					✓	
50-10-05-02707						
50-10-05-02708						
50-10-05-02709						
50-10-05-02710						
50-10-05-02711					\checkmark	
50-10-05-02712						
50-10-05-02713						
50-10-05-02714						
50-10-05-02715						
50-10-05-02716					✓	
50-10-05-02717						
50-10-05-02718					\checkmark	
50-10-05-02719						
50-10-05-02720						
50-10-05-02721						

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Site Number	Name	Significance					
		A	В	C	D	E	
50-10-05-02722	Ag/Burial/Habitation Complex				✓	√	
50-10-05-02723							
50-10-05-02724							
50-10-05-02725							
50-10-05-02726					✓		
50-10-05-02727	Burial/Habitation Complex				✓	√	
50-10-05-02728	•				✓		
50-10-05-02729	Ag Complex				✓		
50-10-05-02730	Burial Site				✓	✓	
50-10-05-02731					✓		
50-10-05-02732	Burial/Habitation Complex				✓	✓	
50-10-05-02733	•				✓	✓	
50-10-05-02734					✓		
50-10-05-02735					✓		
50-10-05-02736					✓		
50-10-05-02737							
50-10-05-02738							
50-10-05-02739							
50-10-05-02740							
50-10-05-02741							
50-10-05-02742							
50-10-05-02743							
50-10-05-02744							
50-10-05-02745	Habitation Complex				✓		
50-10-05-02746	•				✓		
50-10-05-02747					✓		
50-10-05-02748							
50-10-05-02749							
50-10-05-02750							
50-10-05-02751							
50-10-05-02752							
50-10-05-02753							
50-10-05-02754							
50-10-05-02755							
50-10-05-02756							
50-10-05-02757							
50-10-05-02758	Ag/Habitation Complex				✓		
50-10-05-02759	Ag/Habitation Complex				✓		
50-10-05-02760	•				✓		
50-10-05-02761							
50-10-05-02762							
50-10-05-02763							
50-10-05-02764							
50-10-05-02765							
50-10-05-02766							
50-10-05-02767							
50-10-05-02768					\checkmark		
50-10-05-04139	Pu'ukoholā Heiau National Historic Site	✓	\checkmark		✓	✓	
50-10-05-05923							
50-10-05-05924							
50-10-05-05925							

Continued on next page

Continued from previous page

Site Number	Name	Significance						
		A	В	С	D	E		
50-10-05-05934								
50-10-05-05937								
50-10-05-05980	Ag/Habitation/Burial Complex				✓	✓		
50-10-05-05981					/			
50-10-05-05982								
50-10-05-05983								
50-10-05-05984								
50-10-05-05985					✓			
50-10-05-06502	Habitation Site				✓			
50-10-05-06503					✓			
50-10-05-06504					✓			
50-10-05-06518								
50-10-05-06519								
50-10-05-06520								
50-10-05-06525								
50-10-05-07198	KAWAIHAE							
50-10-05-08822	Burial Site				/	_		
50-10-05-08823	Burial Complex				<i>\</i>	.,		
50-10-05-08824	Ag/Burial/Habitation Complex				<i>\</i>	.,		
50-10-05-08825	rig/Burial/Tuolation Complex				<i>\</i>	٠		
50-10-05-08826					<i>\</i>	.,		
50-10-05-09208	Roadway				√	•		
50-10-05-13735	Trail				√			
50-10-05-13748	Habitation Site				<i>\</i>			
50-10-05-13749	Habitation/Burial Complex				√			
50-10-05-13749	Habitation Site				✓ ✓			
50-10-05-13750	Habitation Site				<i>\</i>			
50-10-05-13752	Habitation Site				<i>\</i>			
50-10-05-13757	Historic Period Road				√			
50-10-05-13757	Habitation Complex				\ \			
50-10-05-13759	Habitation Complex				<i>\</i>			
50-10-05-13760	Habitation/Burial? Complex				\ \			
50-10-05-13779	Habitation Complex				√			
50-10-05-13779	Recent Graves				✓ ✓	,		
50-10-05-13782	Recent Graves				✓ ✓	~		
50-10-05-13784					✓ ✓			
50-10-05-13784					√			
50-10-05-13837	Ag Site				✓ ✓			
50-10-05-13839	Ag Site				✓ ✓			
50-10-05-13842					✓ ✓			
50-10-05-13843	Ag/Habitation Complex				√			
50-10-05-13844	Habitation Complex				✓ ✓			
50-10-05-13845	Habitation Complex				<i>\</i>			
50-10-05-13846	Habitation Complex				<i>✓</i>			
	Habitation Complex				✓			
50–10–05–13847 50–10–05–13848	Habitation Site							
50-10-05-13850	Habitation Site				√ √			
50–10–05–13851 50–10–05–13852	Habitation Complex				√ √			
	Habitation Complex Habitation Complex							
50-10-05-13853					✓			
50-10-05-13854	Habitation Complex				√			
50-10-05-13855	Habitation Complex				\checkmark			

Continued on next page

16 GLOSSARY

Continued from previous page

		Significance				
Site Number	Name	A	В	C	D	E
50-10-05-13856	Habitation Site				√	
50-10-05-13857	Habitation Site				✓	
50-10-05-13858	Habitation Site				\checkmark	
50-10-05-13859	Habitation Complex				\checkmark	
50-10-05-13860	Habitation Complex				\checkmark	
50-10-05-13861	Habitation Complex				\checkmark	
50-10-05-13862	WWII Defense Features				\checkmark	
50-10-05-13863	Ag/Habitation Complex				\checkmark	
50-10-05-13864	Ag/Habitation Complex				\checkmark	
50-10-05-13865	Habitation Site				\checkmark	
50-10-05-13866	Ag/Habitation Complex				\checkmark	
50-10-05-13867	Habitation Site				\checkmark	
50-10-05-13869	Habitation Complex				\checkmark	
50-10-05-13870	Habitation Complex				\checkmark	
50-10-05-13871	WWII Military Site				\checkmark	
50-10-05-13872	Ag/Habitation Complex				\checkmark	
50-10-05-13873					\checkmark	
50-10-05-13874					\checkmark	
50-10-05-13875	Ag/Habitation Complex				\checkmark	
50-10-05-13876	Habitation Complex				\checkmark	\checkmark
50-10-05-13877	Habitation Complex				\checkmark	
50-10-05-13878	Habitation Complex				\checkmark	
50-10-05-13879	WWI Military Site				\checkmark	
50-10-05-13881					\checkmark	
50-10-05-13882					\checkmark	
50-10-05-13883					\checkmark	
50-10-05-13884					\checkmark	
50-10-05-13885					\checkmark	
50-10-05-13886	Cattle Wall			\checkmark		
50-10-05-13887	Cattle Wall			\checkmark		
50-10-05-13888	Habitation Site				\checkmark	
50-10-05-13890	Habitation Site				\checkmark	\checkmark
50-10-05-13891	Habitation Site			✓		

Glossary

Entries for Hawaiian words are excerpted or paraphrased, where possible, from the *Hawaiian Dictionary* [17], or from Lucas [14].

'aumakua' Family or personal gods, deified ancestors who might assume the shape of animals, rocks, clouds, or plants.

ahupua'a Traditional Hawaiian land division usually extending from the uplands to the sea.

ali'i Chief, chiefess, officer, ruler, monarch, peer, head man, noble, aristocrat, king, queen, commander.

heiau Traditional Hawaiian place of worship.

kiawe The algaroba tree, *Prosopis* sp., a legume from tropical America, first planted in 1828 in Hawaii.

kuleana Right, title, property, portion, responsibility, jurisdiction, authority, interest, claim, ownership.

luakini Heiau of the ruling chiefs where human sacrifices were offered.

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māhele Land division of 1848.

makai Seaward.

mauka Inland, upland, toward the mountain.

pulu A soft, glossy, yellow wool on the base of tree-fern leaf stalks. It was used to stuff matresses and pillows and at one time was exported to California. Hawaiians stuffed bodies of their dead with it after removing vital organs.

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APPENDIX C NEIGHBORING LANDOWNER CONSULTATION CORRESPONDENCE



SECTION 1

Neighboring Landowner Responses

LINDA LINGLE GOVERNOR STATE OF HAWAII



MICAH A. KANE CHAIRMAN HAWAIIAN HOMES COMMISSION

BEN HENDERSON DEPUTY TO THE CHAIRMAN

KAULANA H. PARK EXECUTIVE ASSISTANT

STATE OF HAWAII

RECEIVED

DEPARTMENT OF HAWAIIAN HOME LANDS

P.O. BOX 1879

HONOLULU, HAWAII 96805

October 18, 2007

Ms. Christie Yott Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Avenue, Ste. C-316 Kailua, Hawaii 96734

Dear Ms. Yott:

Subject: Consultation for Proposed Verizon Wireless (VZW) HI3

Kawaihae Harbor Cell Site, Kawaihae, Island of Hawaii

Thank you for the opportunity to comment on the cellular wireless telecommunication project, proposed to be developed on property owned by the State of Hawaii - Department of Transportation, located in Kawaihae, Island of Hawaii.

After careful review of the information provided, and the fact that the immediate neighboring property is owned by the Department of Hawaiian Home Lands (DHHL), DHHL has no comment at this time. However, DHHL would like to be included in all future updates with the project.

If you have any questions, please contact Peter "Kahana" Albinio, Jr., Property Development Agent, Land Management Division at 808.587.6429 or email peter.k.albinio.jr@hawaii.gov.

Aloha and mahalo,

Linda Chinn, Administrator Land Management Division





STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS DIVISION

79 SO. NIMITZ HWY., HONOLULU, HAWAII 96813-4898

BRENNON T.MORIOKA ACTING DIRECTOR

Deputy Director
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

DEP-H/PM 3022.08

January 10, 2008

Ms. Christine Yott, Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Ave. Suite C-316 Kailua, Hawaii 96734

Dear Ms. Yott:

Subject: Request for Comments on the Proposed Verizon Wireless H13 Kawaihae

Harbor Cell Site, Situated at Kawaihae Harbor, County of Hawaii, Hawaii

We are in receipt of your letter of December 5, 2007, requesting comments with regards to any potential environmental, historical or cultural impacts that the proposed cell site may have on the property that it will be constructed on, or on any directly adjacent properties.

We would like to point out that you stated in your letter that the parcel measures 1.9250 acres in area, and is located on the southeastern most parcel of Kawaihae Harbor. While the location is correct, we would like to point out that Verizon Wireless has requested a revocable permit for 2,000 square feet as shown on Exhibit "B," enclosed with this letter. We suggest that you correct your exhibit. Once the revocable permit is issued, the County of Hawaii will create a parcel for the applicant of 2,000 square feet for taxation purposes only.

At this time, we are not aware of any potential environmental, historical or cultural impacts that the proposed cell site would have on the requested area or any impacts that the proposed project would have on any adjacent properties.

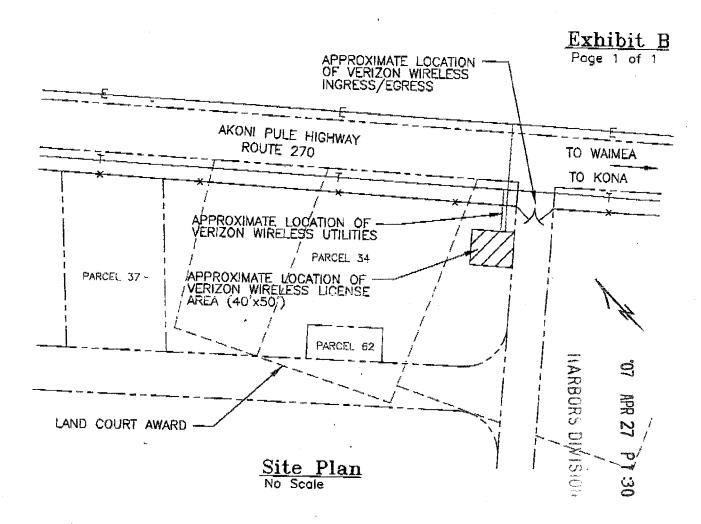
Very truly yours,

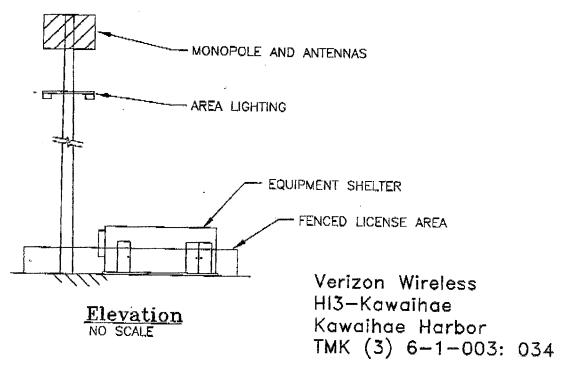
MICHAEL D. FORMBY

Deputy Director-Harbors

Enc.

RS 07.0807







SECTION 2

Neighboring Landowner Initial Notices (Owners Who Did Not Respond)



October 16, 2007

Mr. John S. Allen DBA John Allen Sign Company 59-553 Ka'ala Road Kamuela, Big Island, Hawaii 96743

Project No. 17007-007129.00

Subject: Immediate Neighboring Landowners Consultation for Proposed Verizon Wireless (VZW)

HI3 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, Highway (Tax Map Key

[TMK] No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Mr. Allen:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless to conduct a site evaluation for the Federal Communications Commission (FCC) of the above-reference proposed cellular wireless telecommunications project.

Pursuant to FCC rules regarding review under the National Environmental Policy Act (NEPA) and the State of Hawaii, Office of Environmental Quality Control (OEQC), we are contacting you for information with regards to any potential environmental, historical, or cultural impacts the proposed wireless telecommunications facility may have on immediate or directly adjacent properties. The parcel where the proposed cell site is to be located is northwest of your property.

Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Main: (808) 531.6708

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316 Fax: (808) 537.4084

Kailua, HI 96734 www.us.bureauveritas.com



Page 2

Project No. 17007-007129.00

Mr. John S. Allen DBA John Allen Sign Company October 16, 2007

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

The historical research presented in this section has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted area of the subject property as developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii and later listed as the State of Hawaii.

Information Request

Attached for your review, records and consideration as part of this request are (1) figures and construction drawings of the proposed VZW project site and (2) recent photographs taken at the proposed site.

Per FCC NEPA review process guidelines, please provide *written* documentation as to whether or not the proposed action has the potential to impact the immediate area within 30 days, either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com.

If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

hristine yoth

/cy

Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs

cc: Mr. Mike D. Formby, Deputy Director, DOT/Harbors Division

Department of Hawaiian Home Lands, Land Management Division



January 3, 2008

Brewer Environmental 311 Pacific Street Honolulu, Oahu, Hawaii 96817

Project No. 17007-007129.00

Subject: Neighboring Landowners Consultation for Proposed Verizon Wireless (VZW) HI3

Kawaihae Harbor Cell Site, located at Kawaihae Harbor, Highway (Tax Map Key [TMK]

No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Sir or Madame:

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Pursuant to FCC rules regarding review under the National Environmental Policy Act (NEPA) and the State of Hawaii, Department of Health (DOH)-Office of Environmental Quality Control (OEQC), we are contacting you for information with regards to any potential environmental, historical, or cultural impacts the proposed wireless telecommunications facility may have on properties within 300 feet of the perimeter boundary of the proposed action. The parcel where the proposed cell site is to be located is southeast of your property.

Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

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According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Bureau Veritas North America, Inc.

Kailua, HI 96734

Main: (808) 531.6708



Brewer Environmental January 3, 2008

Page 2 Project No. 17007-007129.00

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Recent History

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<u>Information Request</u>

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If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America. Inc.

ristine yoth

/cy

Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs

cc: Mr. Mike D. Formby, Deputy Director, DOT/Harbors Division

Department of Hawaiian Home Lands, Land Management Division

Mr. John S. Allen, DBA John Allen Sign Company



SECTION 3

Neighboring Landowner Second Notices (Owners Who Did Not Respond)



2nd Notice December 5, 2007

Mr. John S. Allen DBA John Allen Sign Company 59-553 Ka'ala Road Kamuela, Big Island, Hawaii 96743

Project No. 17007-007129.00

Subject: Immediate Neighboring Landowners Consultation for Proposed Verizon Wireless (VZW)

HI3 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, Highway (Tax Map Key

[TMK] No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Mr. Allen:

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The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Main: (808) 531.6708

Fax: (808) 537.4084

Bureau Veritas North America, Inc.



Page 2

Project No. 17007-007129.00

Mr. John S. Allen DBA John Allen Sign Company December 5, 2007

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

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Per FCC NEPA review process guidelines, please provide *written* documentation as to whether or not the proposed action has the potential to impact the immediate area within 30 days, either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com.

If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

hristine yoth

/cy

Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs

cc: Mr. Mike D. Formby, Deputy Director, DOT/Harbors Division



2nd Notice February 4, 2008

Brewer Environmental 311 Pacific Street Honolulu, Oahu, Hawaii 96817

Project No. 17007-007129.00

Subject: Neighboring Landowners Consultation for Proposed Verizon Wireless (VZW) HI3

Kawaihae Harbor Cell Site, located at Kawaihae Harbor, Highway (Tax Map Key [TMK]

No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Sir or Madame:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless to conduct a site evaluation for the Federal Communications Commission (FCC) of the above-reference proposed cellular wireless telecommunications project.

Pursuant to FCC rules regarding review under the National Environmental Policy Act (NEPA) and the State of Hawaii, Department of Health (DOH)-Office of Environmental Quality Control (OEQC), we are contacting you for information with regards to any potential environmental, historical, or cultural impacts the proposed wireless telecommunications facility may have on properties within 300 feet of the perimeter boundary of the proposed action. The parcel where the proposed cell site is to be located is southeast of your property.

Project Description

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According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316 Fax: (808) 537.4084

Kailua, HI 96734

Main: (808) 531.6708



Brewer Environmental February 4, 2008

Page 2 Project No. 17007-007129.00

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Bureau Veritas North America, Inc.

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2) VZW HI3 Kawaihae Harbor Cell Site Photographs

cc: Mr. Mike D. Formby, Deputy Director, DOT/Harbors Division

Department of Hawaiian Home Lands, Land Management Division

Mr. John S. Allen, DBA John Allen Sign Company



APPENDIX D COMMUNITY CONSULTATION CORRESPONDENCE



SECTION 1

Honolulu Star Bulletin Newspaper Public Legal Notice

AND

South Kohala Community Development Plan (CDP) Coordinator

IN THE MATTER OF PUBLIC NOTICE TO NEWSPAPER AND/OR RESIDENTS [Verizon Wireless - Kawaihae Harbor]))) AFFIDAVIT OF PUBLICATION)))
STATE OF HAWAII) SS.	
City and County of Honolulu)	PUBLIC NOTICE TO NE
Carrie Asuncion being duly deposes and says that she is a clerk, duly authorize execute this affidavit of MidWeek Printing, Inc., p of MidWeek and the Honolulu Star-Bulletin, that newspapers are newspapers of general circulation State of Hawaii, and that the attached notice is true as was published in the aforementioned newspaper follows:	ed to National Historic Preservation Verizon Wireless (VZW) is proposed wireless said tin the Kawaihae Harbor, (Tax Map Konotice Hawaii 96743, According to VZ National Historic Preservation Verizon Wireless (VZW) is proposing tions facility: VZW is proposing HI3 Kawaihae Harbor Cell to Kawaihae Harbor, (Tax Map Konotice Hawaii 96743, According to VZ
MidWeektimes on _ Honolulu Star-Bulletin1 times on _ 07/24/2007	associated 12- by 26-foot (3 equipment shelter will be instal an internal 60 kilowatt generate and equipment shelter are to b a 40- by 50-foot (2,000 square fence. Construction activities v impact to the ground surface. I who wish to submit comments regarding the potential for this historic structures and cultural contact Christian Vet by mail o
And that affiant is not a party to or in any way into the above entitled matter. Subscribed to and sworn before me this	erested in day article Rel

PUBLIC NOTICE TO NEWSPAPER AND/OR RESIDENTS

Pursuant to FCC rules under Section 106 of the Pursuant to FCC rules under Section 106 of the National Historic Preservation Act (NHPA), Verizon Wireless (VZW) is providing notice of the following proposed wireless telecommunications facility: VZW is proposing to construct the HI3 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743. According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence. Construction activities will have a minor impact to the ground surface. Interested parties who wish to submit comments and/or concerns who wish to submit comments and/or concerns regarding the potential for this project to impact historic structures and cultural resources may contact Christine Yott by mail at 970 N. Kalaheo Avenue, Suite C-316, Kailua, Oahu, Hawaii 96734 or by telephone at (808) 531-6708. (SB05531014 7/24/07)





October 26, 2007

Alex Frost, CDP Coordinator County of Hawaii Department of Research and Development 25 Aupuni Street, Room 109 Hilo, Big Island, Hawaii 96720

Project No. 17007-007129.00

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) HI3 Kawaihae

Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003:

Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Mr. Frost:

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Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

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Mr. Alex Frost, CDP Coordinator Department of Research and Development Hawaii County Resource Center Page 2 Project No. 17007-007129.00 October 26, 2007

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Information Request

As noted, we are contacting you to request your comments in regards to potential environmental, historical, or cultural impact the proposed project may have. Please provide written documentation of your findings either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com. If you have any questions or concerns, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



2nd Notice December 5, 2007

Alex Frost, CDP Coordinator County of Hawaii Department of Research and Development 25 Aupuni Street, Room 109 Hilo, Big Island, Hawaii 96720

Project No. 17007-007129.00

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) HI3 Kawaihae

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Mr. Alex Frost, CDP Coordinator Department of Research and Development Hawaii County Resource Center Page 2 Project No. 17007-007129.00 December 5, 2007

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2) VZW HI3 Kawaihae Harbor Cell Site Photographs



SECTION 2

Sierra Club, Hawaii Chapter

AND

University of Hawaii Sea Grant Program Director



October 26, 2007

Sierra Club – Hawaii Chapter Gary Coffin, Chair/Conservation P.O. Box 2577 Honolulu, Oahu, Hawaii 96803

Project No. 17007-007129.00

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) HI3 Kawaihae

Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003:

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Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Main: (808) 531.6708

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316 Fax: (808) 537.4084

Kailua, HI 96734 www.us.bureauveritas.com



Mr. Gary Coffin, Chair Conservation Sierra Club – Hawaii Chapter Page 2 Project No. 17007-007129.00 October 26, 2007

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

The historical research presented in this section has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted area of the subject property as developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii and later listed as the State of Hawaii.

Information Request

As noted, we are contacting you to request your comments in regards to potential environmental, historical, or cultural impact the proposed project may have. Please provide written documentation of your findings either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com. If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



October 26, 2007

E. Gordon Grau, Ph.D. Director, UH Sea Grant Program 2525 Correa Road, HIG 238 Honolulu, Oahu, Hawaii 96822

Project No. 17007-007129.00

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) HI3 Kawaihae

Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003:

Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Dr. Grau:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless to conduct a site evaluation for the Federal Communications Commission (FCC) of the above-reference proposed cellular wireless telecommunications project.

Pursuant to FCC rules regarding review under the National Environmental Policy Act (NEPA) and the State of Hawaii, Office of Environmental Quality Control (OEQC), we are contacting you for information with regards to any potential environmental, historical, or cultural impacts the proposed wireless telecommunications facility may have.

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The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

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E. Gordon Grau, Ph.D. University of Hawaii Sea Grant College Program Page 2 Project No. 17007-007129.00 October 26, 2007

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

The historical research presented in this section has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted area of the subject property as developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii and later listed as the State of Hawaii.

Information Request

As noted, we are contacting you to request your comments in regards to potential environmental, historical, or cultural impact the proposed project may have. Please provide written documentation of your findings either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com. If you have any questions or concerns, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



2nd Notice December 5, 2007

Sierra Club – Hawaii Chapter Gary Coffin, Chair/Conservation P.O. Box 2577 Honolulu, Oahu, Hawaii 96803

Project No. 17007-007129.00

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) HI3 Kawaihae

Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003:

Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Mr. Coffin:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless to conduct a site evaluation for the Federal Communications Commission (FCC) of the above-reference proposed cellular wireless telecommunications project.

Pursuant to FCC rules regarding review under the National Environmental Policy Act (NEPA) and the State of Hawaii, Office of Environmental Quality Control (OEQC), we are contacting you for information with regards to any potential environmental, historical, or cultural impacts the proposed wireless telecommunications facility may have.

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According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Main: (808) 531.6708

www.us.bureauveritas.com

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316 Fax: (808) 537.4084



Mr. Gary Coffin, Chair Conservation Sierra Club – Hawaii Chapter Page 2 Project No. 17007-007129.00 December 5, 2007

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

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Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



2nd Notice December 5, 2007

E. Gordon Grau, Ph.D. Director, UH Sea Grant Program 2525 Correa Road, HIG 238 Honolulu, Oahu, Hawaii 96822

Project No. 17007-007129.00

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) HI3 Kawaihae

Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003:

Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Dr. Grau:

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E. Gordon Grau, Ph.D. University of Hawaii Sea Grant College Program Page 2 Project No. 17007-007129.00 December 5, 2007

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Information Request

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Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



SECTION 3

National Park Service



August 3, 2010

Mr. Daniel K. Kawaiaea Jr., Superintendent NATIONAL PARK SERVICE Pu'ukohola Heiau National Historic Site 62-3601 Kawaihae Road Kawaihae, Hawaii 96743

Project No. 17007-007129.00

Subject: Confirmation of Community Group Consultation for the Proposed Verizon Wireless

(VZW) HI3 Kawaihae Cell Site, Located at Kawaihae Harbor (Tax Map Key [TMK] No.: [3]

6-1-003: Parcel 034), Kawaihae, Hawaii 96743

Dear Mr. Kawaiaea Jr.:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless (VZW) to conduct a site evaluation for the Federal Communications Commission (FCC) of the above-referenced proposed cellular wireless telecommunications project.

Under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA), we contacted you for information regarding any potential impacts to historic properties, religious, or cultural resources that the proposed wireless telecommunications facility may have at the site. This letter follows up on earlier correspondence with your office, NPS # H4217 (PUHE), dated March 16, 2010.

Your response letter, dated March 16, 2010, stated: "our main concerns are the visual impacts this monopole and panels would have on the view plane, in addition to potential impacts to the "night sky". As you stated, the monopole is basically a light pole, and will be the same height and painted the same color as the numerous light posts already existing in the harbor area. I requested if possible, that the 12-8' panels, which will be mounted near the top of the monopole, be parallel to the ground versus perpendicular. I believe if this is an option, that it would be less intrusive on the view plane if visible at all from areas within the park."

Based on wireless telecommunication monopole engineering design, it is not feasible to mount the antenna panels parallel to the ground versus perpendicular.

However, your letter also indicated that "the DOT land between the project site and the park serves as an excellent buffer and helps to lessen the impacts from the harbor operations, including visual and noise. The existing lights and light poles at the harbor already poses an impact upon the park's "night sky" and view shed. This proposed project will not increase the effects and impacts to the park resources and visitors which are already presented by the Kawaihae harbor operations and activities."

Main: (808) 531.6708

Fax: (808) 537.4084

Bureau Veritas North America, Inc.



Mr. Daniel K. Kawaiaea Jr., Superintendent National Park Service Pu'ukohola Heiau National Historic Site Page 2 Project No. 17007-007129.00 August 3, 2010

If you have any additional questions, please feel free to call me at 808.531.6708, or by email at lori.ford@us.bureauveritas.com. We appreciate your response and input regarding the proposed wireless telecommunications site. Mahalo!

Warm regards,

Lori Ford

Senior Project Manager

Bureau Veritas North America, Inc.

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cc: Mr. Eric Leong, Hawaii State Department of Transportation, Harbors Division



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United States Department of the Interior

NATIONAL PARK SERVICE
Pu'ukohola Heiau National Historic Site
62-3601 Kawaihae Road
Kawaihae, HI 96743



IN REPLY REFER TO: H4217 (PUHE)

March 16, 2010

Ms. Lori Ford Senior Project Manager Bureau Veritas North America, Inc. 970 N. Kalaheo Avenue, Suite C-316 Kailua, Hawaii 96734

Subject: Community Group Consultation for the Proposed Verizon Wireless (VZW) H13 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3]-6-1-003 Parcel 034, Kawaihae, Big Island 96743

Aloha Ms. Ford:

Thank you for your letter of January 6, 2010, providing us with information on this proposed project, in addition to your telephonic inquiry of February 11, 2010 seeking consultation and input from the park concerning possible effects this proposed project may have to the park resources.

Though you initially mentioned that you would record my verbal comments we discussed over the phone to include in your project consultation process, you later requested written documentation be provided from the park for your records.

I appreciated the additional information you provided during our February phone conversation. As shown in the project construction drawings, the proposed construction including a 60' monopole equipped with a light and 12, 8' panel antennas, and equipment shelter enclosed by a 40' by 50' chain link fence will be constructed within the confines of the State Department of Transportation (DOT) Kawaihae Harbor area. More specifically, just north of the Kawaihae harbor's "south gate" entrance.

As indicated during our phone conversation, our main concerns are the visual impacts this monopole and panels would have on the view plane, in addition to potential impacts to the "night sky". As you stated, the monopole is basically a light pole, and will be the same height and painted the same color as the numerous light posts already existing in the harbor area. I requested if possible, that the 12-8° panels, which will be mounted near the top of the monopole, be parallel to the ground versus perpendicular. I believe if this is an option, that it would be less intrusive on the view plane if visible at all from areas within the park.

As discussed, fortunately the DOT land between the project site and the park serves as an excellent buffer and helps to lessen the impacts from the harbor operations, including visual and noise. The existing lights and light poles at the harbor already poses an impact upon the park's "night sky" and view shed. This proposed project will not increase the effects and impacts to the park resources and visitors which are already presented by the Kawaihae harbor operations and activities.

We greatly appreciate the opportunity to provide comments on your planning efforts and your sensitivity toward helping us to protect the nationally significant resources found within this National Park Service unit.

If you have any questions or need additional information, please call me at (808) 882-7218 extension #1001, or email me at daniel kawaiaea@nps.gov.

Sincerely,

/SQD/ Daniel K. Kawaiaea Jr.

(Original on file)

Daniel K. Kawaiaea Jr.

Superintendent

cc: PWR-Honolulu



APPENDIX E

CULTURAL IMPACTS AGENCY AND ORGANIZATION CORRESPONDENCE



SECTION 1

State of Hawaii
Department of Land and Natural Resources (DLNR)
State Historic Preservation Division (SHPD)

AND

Hawai'i DLNR-SHPD Historic Sites List

LINDA LINGLE







LAURA H. THIELEN
CHAIRFERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI FIRST DEPUTY

KEN C. KAWAHARA DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RASOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ELAND
STATE PARKS

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

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

March 25, 2008

Christine Yott, Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Avenue, Suite C-316 Kailua, HI 96734 LOG NO: 2008.0913 DOC NO: 0803MD62 Archaeology

Dear Ms. Yott:

SUBJECT:

Section 106 Historic Preservation Review –

Request for Comment on a Proposed Verizon Wireless (VZW) H13 Kawaihae

Harbor Cell Site, Located at Kawaihae Harbor

Por. of Kawaihae 1st Ahupua'a, Kohala District, Island of Hawai'i

TMK: (3) 6-1-003:034 (por)

This letter is in response to your Project No. 17007-007129.00, for a proposed 60-foot monopole cell phone tower supporting a light and twelve 8-foot high antennas. The project area encompasses approximately 2,000 square feet within a 1.925-acre parcel. In support of your proposal, you have included as an attachment a report from T.S. Dye & Colleagues, Archaeologists, Inc. [Dye and Macak, March 10, 2008: Historic Properties Assessment for the Proposed Verizon Wireless H13 Kawaihae Cell Site (ID#2004005304), Located at Kawaihae Harbor, Kawaihae, Kohala District, Hawai'i Island, TMK(3)6-1-003:034 por.]

The archaeological assessment report for this project found that no historic properties occur within the Area of Potential Effect (APE). This includes the APE for both direct effects and visual effects. We concur with these findings and concur with the determination that the project will have no effect on historic properties.

In the event that historic resources, including human skeletal remains, lava tubes, and lava blisters/bubbles are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, Hawaii Island Section, needs to be contacted immediately at (808) 981-2979.

Please contact Morgan Davis at (808) 981-2979 if you have any questions or concerns regarding this letter.

Aloha,

Laura H. Thielen

State Historic Preservation Officer

Jay Monda to

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-01-2328	Mo'okini Heiau	5-5-05:20	2/21/81	12/29/62 NHL 1962
10-02-2245	Lapakahi Complex (District w/ multiple sites)	Various		7/2/73
10-02-4135	Heiau in Kukuipahu	5-6-01:75	8/29/94	4/24/73
10-02-7100	Bond District	5-3-05:04, 05,19,20,26	7/22/77	3/30/78
10-02-7102	Kohala Pilgrim Church	5-5-15:25	6/27/83	7/9/84 E
10-02-7115	Tong Wo Society Building	5-3-08:20	10/2/77	6/9/78
10-02-7127	Kohala District Courthouse	5-4-05:01	5/4/79	8/31/79
10-02-7135	Union Mill Managers Residence	5-4-10:58,59	3/9/91	
10-02-7501	James M. Hind Residence	5-5-15:35	3/9/91	2/3/94
10-02-7503	Hashimoto House	5-5-15:38	3/9/91	
10-02-7512	Hawi Plantation Manager's Residence	5-5-15:41	2/24/96	
10-02-7517	Nanbu Hotel/Holy's Bakery	5-4-05:22	4/25/98	11/18/99
10-04-2348	Possible Heiau	5-8-01:13	2/21/81	

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-04-2352	Vault Complex	5-7-01:21	2/21/81	
10-04-2424	Makeanehu Complex	5-8-01:12	2/21/81	
10-04-2426	10-04-2426	5-8-01:12	2/21/81	
10-04-4152	Habitation Complex	5-7-01:21	2/21/81	
10-05-4139	Pu'ukohola Heiau National Historic Park (District w/ multiple sites)	6-2-02:09, 10,10	5	1966 NHL
10-06-7151	'Imiola Church	6-5-04:04	7/25/81	8/28/75
10-06-7520	Old Lindsey House	6-5-03:42	4/24/99	
10-06-7523	Waimea Elementary School	6-5-07:03	3/29/03	
10-08-7184	East Hamakua Protestant Church	4-4-06:01	8/15/87	
10-08-7194 demolished	Chee Ying Society Clubhouse	4-5-09:09	1/19/78	7/20/78
10-08-7499	Pa'auhau Plantation House	4-4-06:22	11/26/86	
10-08-7514	Honokaa Plantation Manager's Residence	4-8-06:13	2/24/96	

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-08-7522	PUBLIC SCHOOLS ON THE ISLAND OF HAWAI Thematic Group: (Also in Quads 16, 26, 35, 69 & 74)		6/29/02	
	Honokaa High & Elementary School	4-5-03:20 (portion)	6/29/02	
10-10-11,334	Ala Loa Foot Trail (Southernmost Kohala & Northernmost Kona Districts) (Also in Quad 11)	t 6-8-01:32,35 (portions) 6-8-22:32 (portion) 6-9-01:15 (portion) 6-9-07: (portion) 7-1-03:22 (portion)	1/14/89	
10-10-10,308	Kiholo-Puako Trail (Also in Quad 11)	Various	4/29/83	6/5/87
10-11-4713	Puako Petroglyph Archaeological District	6-9-01:15	11/19/82	4/8/83
10-11-10,308	Kiholo-Puako Trail (Also in Quad 10)	Various	4/29/83	6/5/87
10-11-11,334	Ala Loa Foot Trail (Southernmost Kohala & Northernmost Kona) (Also in Quad 10)	Various (see Quad 10)	1/14/89	

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-16-7518	Yamamoto Store	2-9-03:18	7/25/98	
10-16-7522	PUBLIC SCHOOLS ON THE ISLAND OF HAWAl Thematic Group: (Also in Quads 08, 26, 35, 69 & 74)	Various	6/29/02	
	Laupahoehoe High and Elementary School	3-5-04:26,50 3-5-05:01	6/29/02	
10-19-7498	Francis Ii Brown Beach Residence	7-1-03:03, 12,13	9/14/85	8/21/86
10-23-4136	Mauna Kea Adze Quarry	4-4-15:01, 09,10	5/21/81	12/29/62 1962 NHL
10-25-7505	H. Tanimoto Residence (Honomu Theater)	2-8-14:15	9/28/92	
10-26-7522	PUBLIC SCHOOLS ON THE ISLAND OF HAWAI'I Thematic Group: (Also in Quads 08, 16, 35, 69 & 74)	Various	6/29/02	
	Kalanianaole Elementary & Intermediate School	2-7-22:02,03	6/29/02	

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-27-1896	Haleokane Heiau	7-4-08:03	2/21/81	
10-27-1897	Habitation Site	7-4-08:03	2/21/81	
10-27-1917	Shelter and Pen	7-3-43:03	2/21/81	
10-27-1918	Wawalo'i Habitation	7-3-43:03	2/21/81	
10-27-1920	Habitation Cluster	7-3-43:03	2/21/81	
10-27-2001	Lanihau Papamu	7-5-05:07	2/21/81	
10-27-2002	10-27-2002	7-5-05:07	2/21/81	
10-27-4138	Honokohau Settlement/ Kaloko-Honokohau National Historic Park (U.S. Government has acquired TMK 7-3-09:02 & 4-08:25 for park) (District w/ multiple sites)	7-3-09:02 7-4-08:03, 10,25		12/29/62 NHL
10-27-6302 or 10-27-7276	Great Wall of Kuakini (Also in Quad 37)	Various		11/23/77 E
10-27-6601	Kona Field System (District w/multiple sites)	Various		1/28/77 E
10-27-7002	Kamakahonu (Residence of King Kamehama I)	7-5-06:24,32	7/17/93	12/29/62 1962 NHL

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-27-10,205	Kalaoa Permanent House Site 10,205	7-3-43:42 (portion)	1/14/89	11/21/92
10-28-6601	Kona Field System (District w/multiple sites also in Quads 37,47,56)	Various		1/28/77 E
10-28-7001	Hulihe'e Palace	7-5-07:20	2/21/81	5/25/73
10-28-7231	Moku'aikaua Church	7-5-07:18	1/12/78	10/3/78
10-28-10,229	Pua'a 2 Agricultural Fields Archaeological District	7-5-14:23 (portion)	3/15/86	10/14/86
10-29-3810	Ahu-a-'Umi Heiau	7-8-01:03		8/13/74
10-30-5004	Bobcat Trail Habitation Cave	7-1-04:06		5/15/86
10-35-5500	United States Post Office and Office Building	2-3-05:03		10/1/74
10-35-7405	W. H. Shipman House	2-3-15:04,05	7/23/77	6/23/78
10-35-7417	Waiakea Mission Station or Haili Church	2-3-12:09	11/17/01	4/23/02

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-35-7420	S. Hata Building	2-3-08:16	1/14/89	8/27/91
10-35-7454	Rev. D. B. Lyman House	2-3-16:24	10/4/77	3/24/78
10-35-7497	District Courthouse and Police Station	2-3-06:04	5/4/79	9/4/79
10-35-7500	Ludloff Residence	2-3-28:22	3/9/91	
10-35-7502	Masao Kubo Residence	2-3-28:44	3/9/91	
10-35-7504	Palace Theatre	2-3-07:21	3/9/91	5/11/93
10-35-7506	Kamehameha Hall	2-1-21:43	9/28/92	5/20/93
10-35-7507	Volcano Block	2-3-03:09	9/28/92	1/7/93
10-35-7508	Hilo Masonic Lodge	2-3-05:07	6/28/93	4/21/94
10-35-7510	United Community Church	2-2-20:02	4/16/94	
10-35-7516	A.J. Williamson Residence	2-6-06:11	11/2/96	5/9/97

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-35-7522	PUBLIC SCHOOLS ON THE ISLAND OF HAWAI Thematic Group: (Also in Quads 08, 16, 26, 69 & 74)		6/29/02	
	Hilo Union Elementary School	2-3-16:37 (portion)	6/29/02	
	Hilo High School	2-3-14:01 (portion)	6/29/02	
	Old Riverside School (Hilo District Office)	2-3-15:01	6/29/02	
	Chiefess Kapiolani Elementary School	2-2-20:01	6/29/02	
10-35-11,001	Michael Victor Houses	2-3-14:02	8/15/87	
	Hilo Breakwater	2/2/09		10/30/80 E
	Hilo Iron Works	2-2-01:17		7/1/81 E
10-35-7455	Thomas Guard House	2-3-15:20	3/29/03	
10-36-1840	10-36-1840	2-1-13:01	2/21/81	
10-36-1841	10-36-1841	2-1-13:01	2/21/81	
10-36-1842	10-36-1842	2-1-13:01	2/21/81	
10-36-1843	10-36-1843	2-1-13:01	2/21/81	
10-37-1669	Keauhou Holua Slide	7-8-10:30		12/29/1962 1962 NHL

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-37-1745	10-37-1745	7-8-10:66		8/13/74
10-37-2059	Keolonahihi Complex/Kamoa Point Complex (District w/multiple sites)	7-7-04:12, 28, 31, 51, 52, Various	11/2/77	7/14/83
10-37-4150	Kahaluu Historic District (District w/multiple sites)	7-8-10: 02,04,35		12/27/74
10-37-4383	Kamehameha III Birthplace (Kauikeaouli Stone)	7-8-12:17	1/13/78	7/24/78
10-37-6302 or 10-37-7276	Great Wall of Kuakini (Also in Quad 27)	Various		11/23/77 E
10-37-6601	Kona Field System (District w/multiple sites also in Quad 28,47,56)	Various		1/28/77 E
10-37-7225	Christ Church Episcopal	8-1-05:08	8/25/01	
10-37-7234	Hale Halawai o Holualoa	7-6-16:13	11/26/86	6/5/87
10-37-7243	Greenwell Store	8-1-04:50	8/17/77	5/22/78
10-37-23, 661	Holualoa 4 Archaeological District	7-7-004	8/2/03	
10-41-5504	Mauna Loa Trail	9- Various		7/19/74

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-44-7511	Mountain View Theater	1-8-02:01	2/24/96	
10-46-2529	MacKenzie Petroglyphs	1-3-07:26 1-3-08:01	2/21/81	
10-46-2530	King's Highway	1-3-07:26	2/21/81	
10-47-4137	Pu'uhonua o Honaunau National Historical Park (District w/multiple sites)	8-4-11:07		1966 NHL
10-47-6601	Kona Field System (District w/multiple sites also in Quads 28,37,56)	Various		1/28/77 E
10-47-7000	Kealakekua Bay Historical District (District w/multiple sites)	8-2 Various 3 Various	8-	12/12/73
10-47-7215	Kahikolu Church	8-2-07:06	7/30/82	11/15/82
10-47-7222	Daifukuji Soto Zen Mission	8-2-10:20	3/9/91	4/21/94
10-47-7230	St. Benedict's Catholic Church	8-4-06:06	3/27/79	5/31/79
10-47-7509	Uchida Coffee Farm	8-2-15:13, por.	4/16/94	2/9/95
10-50-5501	'Ainapo Trail (Menzies Trail)	9-9-01:03		8/30/74

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-50-5507	Wilkes Campsite	9-9-01:03		7/24/74
10-52-5502	Kilauea Crater	9-9-01:01		7/24/74
10-52-5506	Whitney Seismograph Vault No. 29	9-9-01:23		7/24/74
10-52-5508	Old Volcano House No. 42	9-9-01:23		7/24/74
10-53-7519	Johnston Summer Home/Hale Ohia Cottages	1-1-05:19 & 42	8/21/99	
10-53-7521	Hale Ohia Tract Historic District Boundary Amendment	1-1-05:24-26, 28- 33	- 8/26/00 3/19/01	
10-55-7384	'Opihikao Evangelical Church Residence	1-3-04:18	8/15/87	
10-55-7515	Kalapana Painted Church	1-2-06:81 (portion)	11/2/96	5/9/97
10-55-10,922	Ala Loa (Puna District)	1-2-09:03 (portion)	1/14/89	
10-55-11,333	Keauohana Ahupua'a Archaeological District (District w/multiple sites)	1-2-09:03 (portion)	1/14/89	

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-56-6601	Kona Field System (District w/multiple sites also in Quads 28,37,47)	Various		1/28/77 E
10-61-5505	1790 Footprints	9-9-01:01,02		8/7/74
10-62-5503	Puna-Ka'u Historic District, Hawaii Volcanoes National Park (District w/multiple sites)	Various		7/1/74
10-62-19,429	Ainahou Ranch House	9-09-01:06	4/16/94	2/8/95
10-65-1992	10-65-1992	8-9-03:01	2/21/81	
10-65-2132	North Honomalino Complex	8-9-03:01	2/21/81	
10-65-2134	Ahole Holua Complex	8-9-06:03		11/26/73
10-65-3710	Okoe Bay Complex	8-9-03:01	2/21/81	
10-69-7522	PUBLIC SCHOOLS ON THE ISLAND OF HAWAI'I Thematic Group: (Also in Quads 08, 16, 26, 35 & 74)		6/29/02	

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I NATIONAL REGISTER REGISTER
	Ka`u High & Pahala Elementary School	9-6-05:08	6/29/02
10-71-2146	Manuka Bay Petroglyphs	9-1-01:03	2/21/81 9/19/73
10-71-2148	Platform and Mounds	9-1-01:03	2/21/81
10-71-2149	Kuleana Complex	9-1-01:03	2/21/81
10-71-2151	Koa	9-1-01:03	2/21/81
10-71-2152	South Manuka Bay Complex	9-1-01:03	2/21/81
10-71-2153	Kipuka Malua Complex	9-1-01:03,06	2/21/81
10-71-2155	Platform and Shelters	9-1-01:03	2/21/81
10-71-2156	Lava Tube Complex	9-1-01:03	2/21/81
10-71-2159	Kaiakekua Complex	9-1-01:03	2/21/81
10-71-2160	Habitation Complex	9-1-01:07	2/21/81
10-71-3660	Manuka Bay Holua Slide	9-1-01:03	2/21/81
10-71-3661	Heiau and Trail	9-1-01:03	2/21/81
10-71-3663	Shrine and Heiau	9-1-01:03,07	2/21/81
10-72-2161	Keawaiki Complex	9-1-01:03	2/21/81

SITE NUMBER	SITE NAME	TAX MAP KEY	HAWAI'I REGISTER	NATIONAL REGISTER
10-72-3700	Kaulanamaluna Upland Complex	8-9-06:02	2/21/81	
10-74-7522	PUBLIC SCHOOLS ON THE ISLAND OF HAWAI'I Thematic Group: (Also in Quads 08, 16, 26, 35 & 69)		6/29/02	
	Naalehu School	9-5-09:06,15	6/29/02	
10-76-3598	Ki'i Petroglyphs	9-5-06:01	3/19/84	7/12/84
10-76-4140	South Point Complex	9-3-01:01, 03,07,11		12/29/62 1962 NHL
10-76-10,230	Mahana Archaeological District	9-3-01:02 (portion)	3/15/86	10/14/86
10-76-10,231	Kapalaoa Archaeological District	9-3-01:02 (portion)	3/15/86	



SECTION 2

State of Hawaii Office of Hawaiian Affairs (OHA)

AND

Historic Hawaii Foundation (HHF)

AND

Hui Malama



STATE OF HAWAI'I OFFICE OF HAWAIIAN AFFAIRS

711 KAPI'OLANI BOULEVARD, SUITE 500 HONOLULU, HAWAI'I 96813 RECEIVED

HRD08/3564

April 1, 2008

Christine Yott Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Avenue, Suite C-316 Kailua, HI 96734

RE: Section 106 Consultation for Proposed Verizon Wireless HI3 Kawaihae Harbor Cell Site, TMK (3) 6-1-003: 034, Kawaihae, Kohala District, Hawai'i

Dear Christine Yott.

The Office of Hawaiian Affairs (OHA) is in receipt of your March 12, 2008 submission for Section 106 consultation concerning the proposed Verizon Wireless Kawaihae Cell Site and offers the following comments:

We have concluded from our available records that it appears no known Native Hawaiian historic properties or burials are located in the Area of Potential Effect of the proposed project. Since the proposed cell site is located in an area that has been heavily impacted, our office has no other immediate concerns at this time.

If the project moves forward, and if any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division (SHPD/DLNR) shall be contacted. OHA would also like to be notified.

Thank you for the opportunity to comment. If you have further questions or concerns, please contact Jason Jeremiah, Policy Advocate-Preservation, Native Rights, Land and Culture, at (808) 594-1816 or jasonj@oha.org.

Aloha,

Clyde W. Nāmu'o Administrator

Lyew Por





September 20, 2007

Christine Yott Staff Consultant Bureau Veritas North America, Inc. 970 N. Kalaheo Ave., Suite C-316 Kailua, HI 96734

RE: Proposed Verizon HI3 Kawaihae Harbor Cell Site (Project #17007-007129.00), Kawaihae Harbor, Hawai'i Island

Dear Ms. Yott:

Thank you for referring the above-referenced project to Historic Hawai'i Foundation for consultation under Section 106 of the National Historic Preservation Act.

Since 1974, Historic Hawai'i Foundation (HHF) has been a statewide leader for historic preservation. HHF's mission is to preserve and encourage the preservation of Hawai'i's historic buildings, places, objects and communities.

HHF is currently unaware of any historic resources that would be affected by the proposal. Unless historic resources are discovered during additional research or construction, HHF does not have any concerns about this proposal. If additional research determines that historic or cultural resources are present, HHF would like to be informed and may have additional input at that time.

Very truly yours,

Kiersten Faulkner, AICP

Executive Director





July 20, 2007

Mr. Charles K. Maxwell, Sr., Po'o Hui Malama I Na Kupuna O Hawai'i Nei 157 Alea Place Makawao, Maui, Hawaii 96768

Project No. 17007-007129.00

Subject: Historic Sites and Impact Determination Request for Proposed Verizon Wireless (VZW)

HI3 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, Highway (Tax Map Key

[TMK] No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743

Dear Mr. Maxwell:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless to conduct a site evaluation for the Federal Communications Commission (FCC) of the above-reference proposed cellular wireless telecommunications project. This site is an alternative for the HI3 Kawaihae site for which we sent a notice dated May 9, 2007. This site will be replacing the one from the previous notice.

Pursuant to FCC rules regarding review under Section 106 of the National Historic Preservation Act (NHPA), we are contacting you for information with regards to any potential impacts to historic properties, religious, or cultural resources that the proposed wireless telecommunications facility may have.

Per FCC requirements, Bureau Veritas is also contacting other applicable agencies and native Hawaiian organizations, and will be running a Legal Notice in the local newspaper as a public notification effort. A formal submission and application for zoning approval of the proposed project is being handled by other professionals under separate project tasks.

Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an

Main: (808) 531.6708

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316 Fax: (808) 537.4084

Kailua, HI 96734 www.us.bureauveritas.com



Mr. Charles K. Maxwell, Po'o Hui Malama I Na Kupuna O Hawai'i Nei Makawao, Maui, Hawaii Page 2 Project No. 17007-007129.00 July 20, 2007

internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

The historical research presented in this section has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted area of the subject property as developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii and later listed as the State of Hawaii.

Information Request

As noted, we are requesting information on any native Hawaiian cultural, religious, and/or burial sites; historic places, artifacts, and/or other related concerns at the proposed project site; and whether or not any of these issues will be impacted by the proposed wireless telecommunications project.

Per FCC NEPA/NHPA 106 review process guidelines, please provide *written* documentation of your findings within 30 days, either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.vott@us.bureauveritas.com.

If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs

cc: Ms. Heidi Guth, OHA Mr. Jesse Yorck, OHA



2ND NOTICE October 31, 2007

Mr. Charles K. Maxwell, Sr., Po'o Hui Malama I Na Kupuna O Hawai'i Nei 157 Alea Place Makawao, Maui, Hawaii 96768

Project No. 17007-007129.00

Subject: Historic Sites and Impact Determination Request for Proposed Verizon Wireless (VZW)

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[TMK] No.: [3] 6-1-003: Parcel 034), Kawaihae, Big Island, Hawaii 96743

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The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

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970 North Kalaheo Avenue Suite C-316 Fax: (808) 537.4084

Kailua, HI 96734

www.us.bureauveritas.com

Main: (808) 531.6708



Mr. Charles K. Maxwell, Po'o Hui Malama I Na Kupuna O Hawai'i Nei Makawao, Maui, Hawaii Page 2 Project No. 17007-007129.00 October 31, 2007

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain link fence.

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments.

Recent History

The historical research presented in this section has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted area of the subject property as developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii and later listed as the State of Hawaii.

Information Request

As noted, we are requesting information on any native Hawaiian cultural, religious, and/or burial sites; historic places, artifacts, and/or other related concerns at the proposed project site; and whether or not any of these issues will be impacted by the proposed wireless telecommunications project.

Per FCC NEPA/NHPA 106 review process guidelines, please provide *written* documentation of your findings within 30 days, either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com.

If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter. Mahalo nui loa!

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



SECTION 3

Tower Construction Notification System (TCNS)
Site Registration Confirmation

AND

Notice of Organizations Sent TCNS Data Tribal Correspondence FCC Clearance

towernotifyinfo@fcc.gov 07/20/2007 10:54 AM

To Christine Yott/USA/VERITAS@VERITAS

CC

bcc

Subject Proposed Tower Structure Info - Email ID #1605476

Dear Christine J Yott Ms,

Thank you for submitting a notification regarding your proposed structure via the Tower Construction Notification Application. Note that the FCC has assigned a unique Notification ID number for this proposed structure. You will need to reference this Notification ID number when you update your project's Status with us.

Below are the details you provided for the tower you have proposed to construct:

Notification Received: 07/20/2007

Notification ID: 29357

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Christine J Yott Ms Street Address: 970 N. Kalaheo Avenue

Suite C-316

City: Kailua, Oahu State: HAWAII Zip Code: 96734 Phone: 808-531-6708

Email: christine.yott@us.bureauveritas.com

Structure Type: BPOLE - Building with Pole

Latitude: 20 deg 1 min 58 sec N Longitude: 155 deg 49 min 25 sec W Location Description: Kawaihae Harbor

City: Kawaihae State: HAWAII County: HAWAII

Ground Elevation: 8.8 meters

Support Structure: 18.3 meters above ground level Overall Structure: 19.5 meters above ground level Overall Height AMSL: 28.3 meters above mean sea level



To Christine Yott/USA/VERITAS@VERITAS

cc kim.pristello@fcc.gov, diane.dupert@fcc.gov

bcc

Subject NOTICE OF ORGANIZATION(S) WHICH WERE SENT PROPOSED TOWER CONSTRUCTION NOTIFICATION INFORMATION - Email ID #1606823

Dear Sir or Madam:

Thank you for using the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS). The purpose of this electronic mail message is to inform you that the following authorized persons were sent the information you provided through TCNS, which relates to your proposed antenna structure. The information was forwarded by the FCC to authorized TCNS users by electronic mail and/or regular mail (letter).

Persons who have received the information that you provided include leaders or their designees of federally-recognized American Indian Tribes, including Alaska Native Villages (collectively "Tribes"), Native Hawaiian Organizations (NHOs), and State Historic Preservation Officers (SHPOs). For your convenience in identifying the referenced Tribes and in making further contacts, the City and State of the Seat of Government for each Tribe and NHO, as well as the designated contact person, is included in the listing below. We note that Tribes may have Section 106 cultural interests in ancestral homelands or other locations that are far removed from their current Seat of Government. Pursuant to the Commission's rules as set forth in the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (NPA), all Tribes and NHOs listed below must be afforded a reasonable opportunity to respond to this notification, consistent with the procedures set forth below, unless the proposed construction falls within an exclusion designated by the Tribe or NHO. (NPA, Section IV.F.4).

The information you provided was forwarded to the following Tribes and NHOs who have set their geographic preferences on TCNS. If the information you provided relates to a proposed antenna structure in the State of Alaska, the following list also includes Tribes located in the State of Alaska that have not specified their geographic preferences. For these Tribes and NHOs, if the Tribe or NHO does not respond within a reasonable time, you should make a reasonable effort at follow-up contact, unless the Tribe or NHO has agreed to different procedures (NPA, Section IV.F.5). In the event such a Tribe or NHO does not respond to a follow-up inquiry, or if a substantive or procedural disagreement arises between you and a Tribe or NHO, you must seek guidance from the Commission (NPA, Section IV.G). These procedures are further set forth in the FCC's Declaratory Ruling released on October 6, 2005 (FCC 05-176).

1. TCNS Representative Jesse Yorck - Office of Hawaiian Affairs - Honolulu, HI - electronic mail and regular mail

The information you provided was also forwarded to the additional Tribes and NHOs listed below. These Tribes and NHOs have NOT set their geographic

preferences on TCNS, and therefore they are currently receiving tower notifications for the entire United States. For these Tribes and NHOs, you are required to use reasonable and good faith efforts to determine if the Tribe or NHO may attach religious and cultural significance to historic properties that may be affected by its proposed undertaking. Such efforts may include, but are not limited to, seeking information from the relevant SHPO or THPO, Indian Tribes, state agencies, the U.S. Bureau of Indian Affairs, or, where applicable, any federal agency with land holdings within the state (NPA, Section IV.B). If after such reasonable and good faith efforts, you determine that a Tribe or NHO may attach religious and cultural significance to historic properties in the area and the Tribe or NHO does not respond to TCNS notification within a reasonable time, you should make a reasonable effort to follow up, and must seek quidance from the Commission in the event of continued non-response or in the event of a procedural or substantive disagreement. If you determine that the Tribe or NHO is unlikely to attach religious and cultural significance to historic properties within the area, you do not need to take further action unless the Tribe or NHO indicates an interest in the proposed construction or other evidence of potential interest comes to your attention.

None

The information you provided was also forwarded to the following SHPOs in the State in which you propose to construct and neighboring States. The information was provided to these SHPOs as a courtesy for their information and planning. You need make no effort at this time to follow up with any SHPO that does not respond to this notification. Prior to construction, you must provide the SHPO of the State in which you propose to construct (or the Tribal Historic Preservation Officer, if the project will be located on certain Tribal lands), with a Submission Packet pursuant to Section VII.A of the NPA.

- 2. SHPO Peter T Young Department of Land & Natural Resources Kapolei, HI regular mail
- 3. Administrator Melanie Chinen State Historic Preservation Office Kapolei, HI regular mail

"Exclusions" above set forth language provided by the Tribe, NHO, or SHPO. These exclusions may indicate types of tower notifications that the Tribe, NHO, or SHPO does not wish to review. TCNS automatically forwards all notifications to all Tribes, NHOs, and SHPOs that have an expressed interest in the geographic area of a proposal, as well as Tribes and NHOs that have not limited their geographic areas of interest. However, if a proposal falls within a designated exclusion, you need not expect any response and need not pursue any additional process with that Tribe, NHO, or SHPO. Exclusions may also set forth policies or procedures of a particular Tribe, NHO, or SHPO (for example, types of information that a Tribe routinely requests, or a policy that no response within 30 days indicates no interest in participating in pre-construction review).

If you are proposing to construct a facility in the State of Alaska, you should contact Commission staff for guidance regarding your obligations in the event that Tribes do not respond to this notification within a reasonable time.

Please be advised that the FCC cannot guarantee that the contact(s) listed above opened and reviewed an electronic or regular mail notification. The following information relating to the proposed tower was forwarded to the person(s) listed above:

Notification Received: 07/20/2007

Notification ID: 29357

Tower Owner Individual or Entity Name: Verizon Wireless

Consultant Name: Christine J Yott Ms Street Address: 970 N. Kalaheo Avenue

City: Kailua, Oahu State: HAWAII Zip Code: 96734 Phone: 808-531-6708

Email: christine.yott@us.bureauveritas.com

Suite C-316

Structure Type: BPOLE - Building with Pole

Latitude: 20 deg 1 min 58.0 sec N Longitude: 155 deg 49 min 25.0 sec W Location Description: Kawaihae Harbor

City: Kawaihae State: HAWAII County: HAWAII

Ground Elevation: 8.8 meters

Support Structure: 18.3 meters above ground level Overall Structure: 19.5 meters above ground level Overall Height AMSL: 28.3 meters above mean sea level

If you have any questions or comments regarding this notice, please contact the FCC using the electronic mail form located on the FCC's website at:

http://wireless.fcc.gov/outreach/notification/contact-fcc.html.

You may also call the FCC Support Center at (877) 480-3201 (TTY 717-338-2824). Hours are from 8 a.m. to $7\!:\!00$ p.m. Eastern Time, Monday through Friday (except Federal holidays). To provide quality service and ensure security, all telephone calls are recorded.

Thank you,

Federal Communications Commission



APPENDIX F REGULATORY AGENCY CORRESPONDENCE FOR PERMITTING



SECTION 1

State of Hawaii Department of Transportation Traffic Branch

AND

County of Hawaii Department of Public Works Traffic Division



October 23, 2007

Mr. Alvin Takeshita **Engineering Program Manager** DEPARTMENT OF TRANSPORTATION Traffic Branch 601 Kamokila Boulevard, Room 602 Kapolei, Oahu, Hawaii 96707

Project No. 17007-007129.00

Subject:

Traffic Impact Consultation for Proposed Verizon Wireless (VZW) HI3 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003: Parcel 034),

Kawaihae, Big Island, Hawaii 96743

Dear Mr. Takeshita:

Bureau Veritas North America, Inc. (Bureau Veritas) has been retained by Verizon Wireless (VZW) to conduct an Environmental Assessment of the above-reference proposed cellular wireless telecommunications project, as required to receive a Special Management Area (SMA) Use Permit.

Pursuant to County of Hawaii, Planning Department rules regarding SMA Use Permit Application regulations, we are contacting you for information with regards to whether or not the proposed action will require a traffic impact survey. The proposed cell site will not be used as a regular public or private gathering area, and traffic to and from the site will only be for small, routine maintenance operations; consequently, Bureau Veritas believes that traffic will not be affected by the project and a traffic impact survey is therefore not necessary.

Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and up to 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50foot (2,000 square feet) chain-link fence.

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316

Kailua, HI 96734

Main: (808) 531.6708 Fax: (808) 537,4084

www.us.bureauveritas.com



Mr. Alvin Takeshita, Engineering Program Manager DEPARTMENT OF TRANSPORTATION Traffic Branch

Page 2 Project No. 17007-007129.00 November 13, 2008

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments to this letter.

History

The historical research conducted by Bureau Veritas has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted the area of the subject property developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii, and was later listed as the State of Hawaii.

Information Request

Attached for your review, records and consideration as part of this request are: (1) figures and construction drawings of the proposed VZW project site, and (2) recent photographs taken at the proposed site.

Per Federal Communications Commission (FCC) National Environmental Policy Act (NEPA) review process guidelines, please provide *written* documentation as to whether or not the proposed action will require a traffic impact survey within 30 days, either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com.

If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter.

Regards.

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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Attachments: 1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs

cc: Mr. Ronald L. Thiel, Division Head, Hawaii Department of Public Works/Traffic Division



2ND Notice November 13, 2008

Mr. Alvin Takeshita Engineering Program Manager DEPARTMENT OF TRANSPORTATION Traffic Branch 601 Kamokila Boulevard, Room 602 Kapolei, Oahu, Hawaii 96707

Project No. 17007-007129.00

Subject:

Traffic Impact Consultation for Proposed Verizon Wireless (VZW) HI3 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, (Tax Map Key [TMK] No.: [3] 6-1-003: Parcel 034),

Kawaihae, Big Island, Hawaii 96743

Dear Mr. Takeshita:

Bureau Veritas North America. Inc. (Bureau Veritas) has been retained by Verizon Wireless (VZW) to conduct an Environmental Assessment of the above-reference proposed cellular wireless telecommunications project, as required to receive a Special Management Area (SMA) Use Permit.

Pursuant to County of Hawaii, Planning Department rules regarding SMA Use Permit Application regulations, we are contacting you for information with regards to whether or not the proposed action will require a traffic impact survey. The proposed cell site will not be used as a regular public or private gathering area, and traffic to and from the site will only be for small, routine maintenance operations; consequently, Bureau Veritas believes that traffic will not be affected by the project and a traffic impact survey is therefore not necessary.

Project Description

The subject parcel, currently owned by the State of Hawaii, measures 1.9250 acres in area, and is located on the southeastern-most parcel of Kawaihae Harbor in an industrial/maritime setting.

The subject parcel is further described by the Hawaii County Real Property Tax Assessment Office as TMK Number: (3) 6-1-003: Parcel 034. According to the Hawaii County Department of Planning and Permitting, the county zoning designation for the subject parcel is "Industrial, MG-1a" and the State Land Use designation is "Urban."

The subject property, identified as the VZW HI3 Kawaihae Cell Site, consists of a 40- by 50-foot (2,000 square foot) lease area located on the southeastern-most parcel of Kawaihae Harbor (Lat/Long: 20° 01' 58" N and 155° 49' 25" W NAD83).

According to VZW, the proposed action involves erecting a 60-foot monopole equipped with a light and up to 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot (312 square feet) equipment shelter will be installed that contains an

Bureau Veritas North America, Inc.

970 North Kalaheo Avenue Suite C-316

Kailua, HI 96734

Fax: (808) 537.4084 www.us.bureauveritas.com

Main: (808) 531.6708



Mr. Alvin Takeshita, Engineering Program Manager DEPARTMENT OF TRANSPORTATION Traffic Branch Page 2 Project No. 17007-007129.00 November 13, 2008

internal 60 kilowatt generator. The monopole and equipment shelter are to be secured within a 40- by 50-foot (2,000 square feet) chain-link fence.

Construction activities will have a minor impact to the ground surface. Figures showing the location and design of the proposed cell site, as well as recent photographs of the site, are included as attachments to this letter.

History

The historical research conducted by Bureau Veritas has established the use of the subject property since 1883, prior to the construction of the Kawaihae Harbor. A 1956 topographic map depicted the area of the subject property developed with the Kawaihae Harbor. Historical research indicates that the area of the subject parcel has been used for storage of industrial shipping containers and parking. According to records at the City and County of Honolulu Real Property Tax Assessment Office, the earliest record of ownership of the subject property was listed as the Territory of Hawaii, and was later listed as the State of Hawaii.

Information Request

Attached for your review, records and consideration as part of this request are: (1) figures and construction drawings of the proposed VZW project site, and (2) recent photographs taken at the proposed site.

Per Federal Communications Commission (FCC) National Environmental Policy Act (NEPA) review process guidelines, please provide *written* documentation as to whether or not the proposed action will require a traffic impact survey within 30 days, either to the address shown on the first page, via fax at 808.537.4084, or by email at christine.yott@us.bureauveritas.com.

If you have any questions or concern, please feel free to contact me at 808.531.6708. We greatly appreciate your time and assistance in this matter.

Regards,

Christine Yott Staff Consultant

Bureau Veritas North America, Inc.

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/cy

Attachments:

1) VZW HI3 Kawaihae Harbor Cell Site Figures and Construction Drawings

2) VZW HI3 Kawaihae Harbor Cell Site Photographs



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS DIVISION 79 SO. NIMITZ HWY., HONOLULU, HAWAII 96813-4898

BRENNON T.MORIOKA ACTING DIRECTOR

Deputy Director
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

DEP-H/PM 3022.08

January 10, 2008

Ms. Christine Yott, Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Ave. Suite C-316 Kailua, Hawaii 96734

Dear Ms. Yott:

RECEIVED

1-16-03

Subject: Request for Comments on the Proposed Verizon Wireless H13 Kawaihae Harbor Cell Site. Situated at Kawaihae Harbor, County of Hawaii, Hawaii

We are in receipt of your letter of December 5, 2007, requesting comments with regards to any potential environmental, historical or cultural impacts that the proposed cell site may have on the property that it will be constructed on, or on any directly adjacent properties.

We would like to point out that you stated in your letter that the parcel measures 1.9250 acres in area, and is located on the southeastern most parcel of Kawaihae Harbor. While the location is correct, we would like to point out that Verizon Wireless has requested a revocable permit for 2,000 square feet as shown on Exhibit "B," enclosed with this letter. We suggest that you correct your exhibit. Once the revocable permit is issued, the County of Hawaii will create a parcel for the applicant of 2,000 square feet for taxation purposes only.

At this time, we are not aware of any potential environmental, historical or cultural impacts that the proposed cell site would have on the requested area or any impacts that the proposed project would have on any adjacent properties.

Very truly yours,

MICHAEL D. FORMBY Deputy Director-Harbors

Enc.



SECTION 2

State of Hawaii
Department of Business, Economic Development and Tourism
Office of Planning

AND

County of Hawaii Department of Planning and Permitting



Douglas Tom <DTom@dbedt.hawaii.gov> 10/31/2007 09:18 AM

- To Christine Yott/USA/VERITAS@VERITAS
- cc John Nakagawa <JNakagaw@dbedt.hawaii.gov>, norman_hayashi@co.hawaii.hi.us, akawaha@co.hawaii.hi.us

bcc

Subject Kawaihae Harbor Cell Site

Christine,

We received your request for comments on potential environmental impacts relative to the CZM Program your proposed cell site project at Kawaihae Harbor might have. We are informing you that we no longer comment on projects before they are decided. According to the CZM concept and legal provisions, state and county agencies having functional responsibilities are expected and required to address CZM implications within the scopes of their authorities. Our direct comments may be regarded as usurping their authority or precluding their independent analyses. Hence, we limit our involvement to monitoring their decisions for consistency and compliance with the state CZM statute.

If the project requires a federal action, license, or approval, a CZM federal consistency certification will have to be prepared and filed directly with us. If that is applicable, the contact person is John Nakagawa. He can be reached at (808) 587-2878. Otherwise, we will not have a formal involvement in the project. If you have questions about this, you may call John or me (587-2875).

Doug

Harry Kim

Mayor

neceiven



County of Hawaii PLANNING DEPARTMENT

101 Pauahi Street, Suite 3 • Hilo, Hawaii 96720-4224 (808) 961-8288 • FAX (808) 961-8742

Christopher J. Yuen

Director

Brad Kurokawa, ASLA LEED® AP

Deputy Director

December 3, 2007

Ms. Christine Yott Bureau Veritas North America, Inc. 970 North Kalaheo Avenue, Suite C-316 Kailua, HI 96734

Dear Ms. Yott:

Subject: Pre-Assessment Consultation for Draft Environmental Assessment (EA)

Project: Verizon Wireless HI3 Kawaihae Harbor Cell Site

Tax Map Key: (3) 6-1-3:34

This is in response to your letter dated November 1, 2007, in which you requested our comments on any special environmental conditions or impacts related to the proposed development.

According to the application the proposed project involves erecting a 60-foot monopole equipped with a light and 12, 8-foot panel antennas. The overall height of the monopole and antennas will be approximately 64 feet. An associated 12- by 26-foot equipment shelter that contains an internal 60 kilowatt generator and chain-link fencing surrounding the site is also proposed.

The subject 1.925-acre property is zoned Industrial (MG-1a) by the County and is located in the State Land Use (SLU) Urban district. A telecommunication tower is allowed in the MG-1a district, provided the antenna, tower and its use are not hazardous or dangerous to the surrounding area and the Planning Director has issued plan approval for such use. Therefore, the proposed project will require plan approval.

Since the subject parcel has previously been graded and is located in an industrial area it is unlikely that any historic, religious, or cultural resources remain, if there were ever any on the site. In addition, there are no historic resources identified in the County of Hawaii General Plan on the subject property.

Ms. Christine Yott Bureau Veritas North America, Inc. Page 2 December 3, 2007

The subject property is located entirely within the County's Special Management Area (SMA), but does not have frontage along the shoreline. According to Planning Commission Rules of Practice and Procedure Rule 9, Section 9-4(10)A.(v) development is defined as the "construction, reconstruction, demolition, or alteration of the size of any structure", therefore review of the proposed project in accordance with Rule 9 is required.

The valuation of the proposed project was not mentioned in your letter. If the proposed project is less than \$125,000 in value, and will not have a cumulative impact or substantial adverse effect on the SMA the applicant will need to submit a SMA Use Permit Assessment Application to the Department for review. If the proposed project has a valuation in excess of \$125,000 or may have a substantial adverse effect on the SMA the applicant is required to submit a SMA Use Permit Application.

Please be aware that the requirements of Chapter 343, HRS regarding Environmental Impact Statements must be satisfied prior to the filing of an SMA Use Permit Assessment Application or SMA Use Permit Application.

Please provide this office with a copy of the draft EA upon its publication. Should you have questions, please contact Maija Cottle of my staff at 961-8288 extension 253.

Sincerely,

CHRISTOPHER J. YUEN

Planning Director

MJC:cd

P:\wpwin60\Maija\EA-EIS\Pre-Consult Comments\Kawaihae Harbor Verizon 6-1-3-34 Pre-cmnts.doc



APPENDIX G

NATURAL RESOURCES IMPACTS REGULATORY AGENCY CORRESPONDENCE



SECTION 1

United States Department of the Interior United States Fish & Wildlife Service (USFWS) Pacific Islands Fish and Wildlife Office



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122, Box 50088 Honolulu, Hawaii 96850

In Reply Refer To: 2008-I-0283 2008-I-0110 2007-TA-0236 2008-B-0014

AUG 19 2008

Ms. Merideth Gibe Bureau Veritas North America, Inc. 970 North Kalaheo Avenue, Suite C-316 Kailua, Hawaii 96734

Subject:

Informal Consultation for the Proposed Verizon Wireless HI3 Kawaihae Harbor

Cell Site, Hawaii Island, Hawaii

Dear Ms. Gibe:

Thank you for your July 29, 2008, letter which was received on July 30, 2008. You requested our concurrence with your determination that the installation of a new 60-foot monopole cell tower with up to twelve, 8-foot panel antennas, an equipment shelter, and a 40-foot by 50-foot chain-link fence will not adversely affect the Hawaiian hawk (Buteo solitarius), Hawaiian hoary bat (Lasiurus cinerus semotus), or the listed seabirds, the Hawaiian petrel (Pterodroma sandwichensis) and the Newell's shearwater (Puffinus auricularis newelli), pursuant to section 7 of the Endangered Species Act of 1973, as amended (Act). The proposed project is located at Kawaihae Harbor in Kamuela, Hawaii.

In a letter dated September 5, 2007, we recommended that additional biological information be collected, including data from night-time avian surveys. In your July 29, 2008, letter, you attached a report on night-time bat and bird surveys at the site conducted by Hamer Environmental, L.P., on your behalf. No endangered birds or bats were observed visually or using modified marine radar. Because this project is an unguyed monopole, and because the Hawaiian hawk is a diurnal species that would be unlikely to collide with an unguyed monopole, should it occasionally occur in the project area, we concur with your determination that the project may affect, but is not likely to adversely affect the Hawaiian hoary bats are able to avoid colliding with objects, we concur with your determination that the project may affect, but is not likely to adversely affect the Hawaiian hoary bat.



Ms. Merideth Gibe

The Hawaiian petrel and Newell's shearwater are nocturnal species known to collide with objects when moving between feeding areas at sea to upland nesting areas. However, neither of these birds were detected during night-time surveys, therefore we concur with your determination that the project may affect, but is not likely to adversely affect the Hawaiian petrel or Newell's shearwater. Therefore, unless the project description changes, or new information reveals that the effects of the proposed action may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary.

We appreciate the opportunity to assist you with the proposed project. If you have questions or would like additional information regarding these comments, please contact Fish and Wildlife Biologist Megan Laut by telephone at (808) 792-9400.

Sincerely,

Patrick Leonard Field Supervisor

Christ Russeu

ENDANGERED BIRD AND BAT SURVEYS AT A PROPOSED VERIZON CELL TOWER SITE, KAWAIHAE HARBOR, HAWAI'I

SUBMITTED TO:

Reginald David Rana Productions, Ltd. P.O. Box 1371 Kailua, Kona, Hawaii

SUBMITTED BY:

Hamer Environmental, L.P. P.O. Box 2561 Mount Vernon, WA 98273

July 18th, 2008

EXECUTIVE SUMMARY

- We conducted surveys for the Hawaiian Petrel (Pterodroma sandwichensis), Newell's Shearwater (Puffinus auricularis newelli), Hawaiian Goose (Branta sandvicensis), and Hawaiian hoary bat (Lasiurus cinereus semotus) near the proposed Verizon cell tower site at the Kawaihae Harbor on the island of Hawai'i, from 22 to 27 May 2008.
- We used surveillance and vertical radars to measure movement rates (targets/hr) and heights of birds. Night-vision and acoustic recording equipment were used to detect bats and help identify radar targets to genus or species.
- Over the course of the one-week study we had no detections on surveillance radar that fit our criteria for petrel/shearwaters targets or Hawaiian Goose.
- No petrels, shearwaters or Hawaiian Geese were heard or seen by the outside observer during the surveys.

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ACKNOWLEDGMENTS

We thank Verizon Wireless for funding this study. At Hamer Environmental, Erin Colclazier, Nathalie Denis and Rachael Orben were responsible for collecting data in the field and monitoring the equipment. Nathalie Denis, Tom Hamer and Jake Verschuyl produced the report. Finally, we are very grateful to Reginald David of Rana Productions, Ltd. who provided us with all the necessary background information and technical support to make the project a success. Mr. David also provided helpful comments on this report.

INTRODUCTION

Verizon Wireless is proposing to erect a cell tower at the Kawaihae Harbor site on the island of Hawai'i (Figure 1). The site is located approximately 16.3 km (10 mi) west of Waimea (Kamuela), Hawai'i. As part of the planning process, Hamer Environmental L.P. conducted radar surveys designed to determine the extent to which the endangered Hawaiian Petrel, ('Ua'u) (Pterodroma sandwichensis), the threatened Newell's (Townsend's) Shearwater ('A'o) (Puffinus auricularis newelli), the endangered Nene (Branta sandwicensis), and the endangered Hawaiian hoary bat ('Ōpe'ape'a) (Lasiurus cinerus semotus), might be present in the vicinity of the proposed cell tower. Due to the previous success of using modified marine radar to study these species in the Hawaiian Islands (Cooper and Day 2003, 1998, 1995, Day et al. 2003a, 2003b, Reynolds et al. 1997) the use of ornithological radar was chosen as the primary survey method with the assistance of a visual observer. If birds were detected, our primary objective was to determine the hourly passage rates and heights of any of these species in the vicinity of the cell tower.

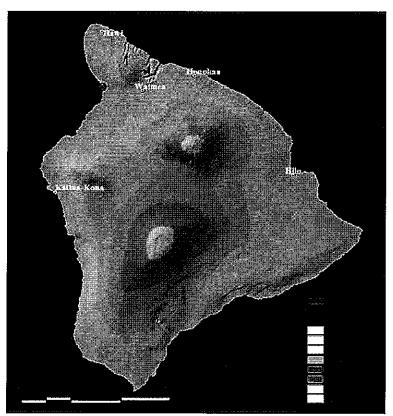


Figure 1. Location of the proposed cell tower at the Kawaihae Harbor, Hawai'i.

BACKGROUND

Newell's Shearwaters and Hawaiian Petrels

Newell's Shearwater

The Hawaiian endemic sub-species of the Newell's Shearwater is a medium sized "Manx-type shearwater". Due to low overall population numbers and restricted breeding distribution the species was federally listed as threatened in 1975 (USFWS 2005b). It is also listed as threatened under the State of Hawai'i endangered species statutes (DLNR 1998). Newell's Shearwater were once widespread in the main Hawaiian Islands; however they are now known to breed only on Kaua'i, Hawai'i, and Moloka'i (Ainley et al. 1997b, Reynolds and Richotte 1997, Reynolds et al. 1997, Day et al. 2003a, 2003b) (Figure 2). Due to their nocturnal habits (Day and Cooper 1995) and inaccessible and remote mountainous terrain where most nesting colonies are located, obtaining accurate information on their distribution, abundance, and population trends has proven difficult.

Typical flight patterns for inland-nesting shearwaters include flights inland after dusk and seaward pre-dawn. Newell's Shearwaters, especially fledgling birds on their way to sea for the first time are susceptible to being attracted to lights, once attracted many of these birds become confused and either collide with man-made and other structures or land on the ground exhausted, or confused. Once grounded, nearly all would die without human intervention. The vast majority of these downed birds are unharmed, and once retrieved can be released quickly. For the past 29 years the State of Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife has run a Save Our Shearwaters program (SOS) on Kauai, which retrieves, assesses the condition of the downed birds, provides medical or rehabilitory care and then releases the downed birds. The vast majority of the birds recovered by the SOS Program are picked up and transported to SOS aid stations by volunteers around the island. The annual number of birds recovered has steadily decreased over the last 28-years, from an average of 1,500 birds/year during the first 10years of the SOS Program to an average of less than 500 birds/year over the past 5 years (Planning Solutions Inc. and Rana Productions, Ltd. 2003, 2004, SOS unpublished data 2004-2007). The decrease is believed to be largely the result of declining bird populations,

although the conversion to shielded streetlights and the general reduction in outdoor lighting following the last hurricane may also have helped reduce the number of grounded birds.

Hawaiian Petrel

The Hawaiian Petrel is a large, nocturnal gadfly petrel endemic to Hawaii. Prior to the arrival of Polynesians, sub-fossil evidence indicates the Hawaiian Petrel was common throughout the main Hawaiian Islands (Olson and James 1982). The species was federally listed as endangered in 1967 (USFWS 2005a). It is also listed as endangered under the State of Hawaiii endangered species statutes (DLNR 1998).

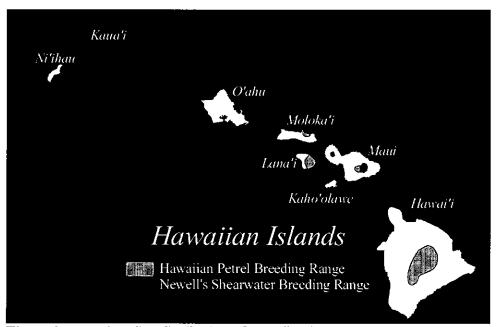


Figure 2. Breeding distribution of Newell's Shearwaters and Hawaiian Petrels in the Hawaiian Islands.

Hawaiian Petrel nesting colonies have been documented on Maui, Hawaii, Lānai and Kauai (Figure 2). The islands of Kauai and Maui are estimated to support the majority of the nesting adults. Based on calls heard during the breeding season the Hawaiian Petrel is also suspected to breed on the island of Molokai (Simons and Hodges 1998).

Similar to the Newell's Shearwater, typical summer flight patterns for the Hawaiian Petrel include flights inland after dusk and seaward pre-dawn. Collisions with human-made objects on Maui (Hodges 1994) and Kaua'i (Telfer et al. 1987, Cooper and Day 1998, Podolsky et al.

1998) have caused documented mortality. Hawaiian Petrels occasionally become grounded after being disoriented by lights in urban areas. Although only 15–20 petrels are reported grounded on Maui and Kaua'i in an average year, the maximum number of reported groundings has been as high as 20 birds on Maui, and 29 on Kaua'i (Simons 1983, Hodges and Nagata 2001, R. David pers. comm.). Groundings on Maui are concentrated in urban areas, as on Kaua'i (Telfer et al. 1987), and are more likely to occur on overcast or moonless nights.

Hawaiian Goose

The Hawaiian Goose or Nēnē is endemic to the Hawaiian Islands and is the only species of goose not occurring naturally in continental areas (Weller 1980). The Nēnē differs from other true geese by having longer legs, more erect posture, and reduced webbing between its toes. Its strikingly furrowed neck plumage is unique among waterfowl. Populations formerly occurred on all or most major Hawaiian Islands (Olson and James 1991). Today, wild Nēnē nest and live on Hawai'i, Maui, Kaua'i, and Moloka'i.

Hawaiian hoary bat

The Hawaiian hoary bat or the 'ope'ape'a is the only extant endemic land mammal in the Hawaiian archipelago. The Federal government listed the species as endangered on October 13, 1970; it is also listed under state endangered species statutes (USFWS 2005a, DLNR 1998). The Hawaiian hoary bat usually weighs 142-227 grams (5 to 8 ounces), is predominantly nocturnal, and preys on both native and non-native volant (flying) insects. Females (which are larger than males) have wingspans of 27 to 34 cm (10.5 to 13.5 inches). Relatively little research has been conducted on this endemic Hawaiian bat, and data regarding its habitat and population status are very limited. Hawaiian hoary bats have been shown to roost in both native and non-native plant species.

The Hawaiian hoary bat is solitary, typically leaving its roost shortly before sunset and returning before sunrise. Like its North American relative, the Hawaiian hoary bat gives birth to twins during the summer months. Presently, the largest populations are thought to occur on Kaua'i and Hawai'i (Tomich 1974, 1986, Kepler and Scott 1990).

On the island of Hawai'i, most bat observations have been made between sea level and 2,286 meters (7,500 feet). However bats have been seen at elevations as high as 4,023 meters (13,200 feet) (Baldwin 1950, Tomich 1974, Fujioka and Gon 1983, Kepler and Scott 1990). Duvall and Gassmann-Duvall (1991) recorded the hoary bat on Maui between 0 and 2,760 m (9,050 ft) in elevation, with most records occurring around 630 m (2,060 ft).

STUDY AREA

The site is located approximately 16.3 km (10 mi) west of Waimea (Kamuela), Hawai'i. The Pacific Ocean lies closely to the west (Figure 3). Topography surrounding the site is fairly flat with the Kohala mountains located east of the site. The proposed cell tower is located at the Kawaihae Harbor along Highway 270. The cell tower will be approximately 19.5 m (64 ft) high and will be located in the parking area of the Kawaihae Harbor. The residual vegetation around the harbor is comprised of native and introduced plants. The radar sampling site was located at sea level.

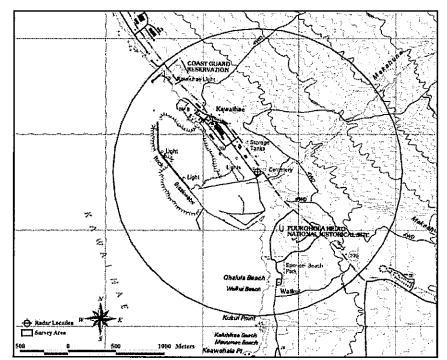


Figure 3. Proposed cell tower site at the Kawaihae Harbor, Hawai'i.

METHODS

Equipment

We used standard marine radar systems that we modified to enable their use for terrestrial ornithological studies. Our systems consisted of Furuno Model FR-1500 Mark 3 marine radars. The units were standard X-band marine radars transmitting at 9,410 MHz with a peak power output of 12 kW. The units were powered by 2000kw Honda quiet generators positioned within 20 feet of the radar labs. These small generators produced minimal noise.

The radar antennas were 2 meters long and mounted on sport utility vehicles in a horizontal and vertical plane (Figure 4). The antennas rotated and scanned the horizon once every 2.5 seconds. With each rotation the radar monitors would display an echo of the target being tracked. Echoes on the radar displays were retained for 30 seconds resulting in a trail of echoes as the target moved, enabling us to plot the flight path of the target. Because the radars rotated at fixed time intervals, the distance between adjacent echoes was directly proportional to the ground speed of the targets. We measured the speed of targets by measuring the distance between echoes using a hand-held scale; echoes farther apart indicated faster moving targets.

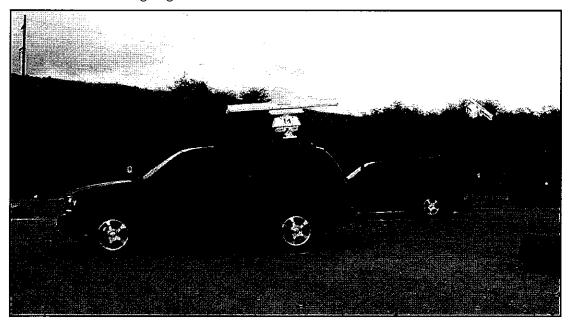


Figure 4. Furuno Model FR-1500 Mark 3 mounted on 4x4 vehicles at the Kawaihae Harbor, Hawai'i.

The antennas had a beam width of 1.23° (horizontal) and 20° (vertical) with side lobes of energy $\pm \sim 10^\circ$ that helped detect targets beyond the fixed beam width. The scale of the radars could be adjusted from 0.5 km to 96 km, but for purposes of this study we operated at the 1.5 km scale. Range accuracy was 1% of the maximum range of the scale in use, or 30 m, whichever was greater. Bearing discrimination was >2.5° and bearing accuracy was \pm 1°.

We set the radars pulse length at 0.07 second since shorter pulse length provided us with improved echo definition and thus more accurate information on the distance of the target from the radars. Information on flight direction, flight behavior, movement rates (targets/hr), and ground speed of birds (km/h) was obtained from the radar in surveillance position (horizontal). One limitation of radar occurs when radar energy is reflected off of solid objects, such as surrounding landforms and trees; it creates solid echoes on the radar screen (ground clutter) making it impossible to detect birds in these areas. Since ground clutter can obscure targets of interest, we carefully selected our sampling locations to minimize the amount of ground clutter on our radar screen.

In addition, the antennas are modified on the scanning array with an adjustable ground-clutter reduction screen to enhance our ability to detect targets (Cooper et al. 1991). When raised, this screen clips off the lower edge of the radar beam so that less radar energy will be reflected off the ground or surrounding vegetation. However, the clutter screen was not used during this survey since the radar screen was mostly clear of clutter. In addition, the scanning arrays were hinged so that the radars could be tilted upward to reduce the amount of ground clutter on the display and scan more of the surrounding sky. We tilted the radar scanners up 30° at the Kawaihae Harbor site. These modifications and the selection of an optimal survey site helped to reduce ground clutter to less than 10%, while also reducing or eliminating the chance of missing targets.

We also used a vertical radar system that was mounted on a welded hitch post 1.2 meter (4 ft) above ground. This enabled us to collect information on bird altitudes across the landscape. The radar was oriented along a north-south axis that was perpendicular to the expected east-west flight paths of nesting birds. This orientation maximized our chances of detecting birds as they passed near the proposed cell tower. The vertical radar was also used

to calculate the proportion of birds passing through the area that were flying at or below the top of the proposed cell tower.

The ability to detect birds on the radar declines with distance. Detection distance varies with the size of the bird or flock, pulse and gain settings of the radar, weather conditions, orientation of the bird, and other factors. During previous studies, we commonly detected individual Hawaiian Petrel and Newell's Shearwater type targets out to 1.5 km, the maximum extent of our radar coverage using the 1.5 km radius radar scale.

Sampling methods

We used the standard sampling methods developed by Cooper and Day (2004). We monitored movements of birds and bats at the Kawaihae Harbor for five consecutive nights from 22 to 27 May 2008. We sampled during the dusk peak movement where birds would be expected to be flying inland toward their nesting colonies and during the dawn peak movement where birds would be expected to be flying toward the ocean away from the nesting colonies. Our studies were scheduled to correspond with the breeding periods of both the Hawaiian Petrel and Newell's Shearwater (Simons 1985, Simons and Hodges 1998, Telfer et al. 1987, Ainley et al. 1997).

We conducted both evening and morning sampling sessions on each survey day and we sampled continuously for two hours in the morning and two and a half hours in the evening. The morning sessions began around 0345, while the evening surveys began at approximately at 1855. To combine evening and morning sessions into one survey "day" we defined each survey day to begin at 1855 and end the next day at 0545. This definition enabled us to treat the evening and following morning's data as occurring on the same day.

To eliminate species that were unlikely to be petrel/shearwater targets, such as slow-flying birds and insects, we recorded only radar targets flying >48.3km/h (>30 mi/h). We also had an observer outside of the radar lab who conducted visual and acoustic observations for birds and bats concurrently with the radar sampling. Therefore, the timing and number of surveys at each site for the outside observer were identical to those for the radar sampling, with birds and bats observed before or after our regular survey sessions also recorded. The

outside observer used 10x binoculars during crepuscular periods and AN PVS-14 night-vision monocular during nocturnal periods. Whenever needed, the observer also used a 2,000,000-Cp floodlight fitted with an IR filter to help detect birds and bats along with the night-vision equipment.

In addition to visual sampling, the outside observer monitored bat activity using a Pettersson 240x bat detector to record the sonar vocalizations of bats. The bat detector was set to detect bat calls in the peak range of ~20-30KHz and recorded calls heard during each survey.

Data collection

Following Cooper and Day (2004), for each radar target on the surveillance radar, we recorded the event number, time, direction of flight (to the nearest degree), and tangential range (the minimal distance to the target when it passed closest to the lab). We recorded the flight behavior (straight, erratic, circling, and curving flight), speed, and species (if confirmed with the outside observer) for each target. For each bird or bat seen during night-vision sampling, we recorded the time, distance from the radar, number of calls heard, number of birds/bats, species, flight direction (the eight ordinal points), flight altitude (m above ground level) and whether the bird or bat was detected with binoculars or night-vision goggles.

On the vertical radar, we recorded only the targets that were confirmed by the surveillance (horizontal) radar as likely petrel/shearwater targets. We recorded the closest distance to the ground along with the bearing from the radar for every target. This enabled us to calculate the height above ground level and horizontal distance from the radar of each target. We also noted if the target was seen or heard by the outside observer.

The following weather data was collected by the outside observer every 30 minutes starting at the beginning of each survey period: average wind speed;

- wind direction (north, northeast, east, southeast, south, southwest, west, northwest, variable, calm);
- precipitation (no precipitation, fog, drizzle, light rain, heavy rain, hail);
- air temperature (°C);

Bird and Bat Surveys at the Kawaihae Harbor cell site, Hawai'i

- cloud cover (to the nearest 5%);
- approximate ceiling height (m agl in several height categories);
- light conditions (daylight without precipitation, daylight with precipitation, twilight without precipitation, twilight with precipitation, darkness without precipitation, darkness with precipitation) and;
- approximate minimal horizontal visibility (m).

We could not collect radar data during periods of heavy rain because the electronic filtering required to remove the echoes of the precipitation from the display screen also removed bird targets.

RESULTS

Weather observations

Average wind speeds varied from 0 km/h to 6.7 km/h (10.8 mph) and cloud cover varied between 0% and 100% (Table 1). The moon phase was a waning gibbous until the end of the survey period.

Audio-visual observations

No Hawaiian Petrel, Newell's Shearwater, Nene or Hawaiian Hoary bat were observed or heard at the Kawaihae Harbor during the survey period.

Hawaiian Petrel and/or Newell's Shearwater-type radar targets on surveillance radar We detected no Hawaiian Petrel, Newell's Shearwater, or Nene on radar during the survey period. None of the targets seen on radar fit the speed, size and behavior characteristics of the Hawaiian Petrel, Newell's Shearwater or Nene.

Sampling effort at the proposed cell tower site, Kawaihae Harbor, Hawai'i, spring 2008. Table 1.

Sunset Sunset Time	Sunset Sunrise Time Time	Radar Sampling Dusk Dawn	Radar Sampling Audio-Visual Sampling Dusk Dawn Dusk Dawn	Audio-Visual Samplir Dusk Dawn	Audio-Visual Sampling Dusk Dawn	Comments Dusk	
5:46		18:56-21:26	18:56-21:26 03:46-05:46 18:56-21:26 03:46-05:46	18:56-21:26	03:46-05:46	ngnt winds, some ram light winds	ngnt winds light winds
5:45		18:56-21:26	18:56-21:26 03:45-05:45 18:56-21:26 03:45-05:45	18:56-21:26	03:45-05:45	light winds	light to moderate winds
5:45		18:57-21:27	03:45-05:45 18:57-21:27 03:45-05:45	18:57-21:27	03:45-05:45	light winds	light winds
5:45		18:57-21:27	18:57-21:27 03:45-05:45 18:57-21:27 03:45-05:45	18:57-21:27	03:45-05:45	light winds, some rain	light winds

Species observed and heard by the outside observer at the proposed cell tower site, Kawaihae Harbor, Hawaii, fall 2008. Table 2.

Scientific Name	Francolinus pondicerianns	Francoliuns francoliuns	Streptopelia chinensis	Geopelia striata	Asio flammens sandwichensis	Acridotheres tristis	Dances Janeary
Common Name	Gray Francolin	Black Francolin	Spotted Dove	Zebra Dove	Short-eared Owl	Common Myna	House Charge

15

DISCUSSION

No Hawaiian Petrel, Newell's Shearwater or Nene were recorded on radar or seen/heard by the outside observer during the survey period of 22 to 27 May, 2008. To our knowledge no Nene have been recorded in the general project area, nor are there any nesting areas within, or close to the project site. Newell's Shearwater colonies have been recorded during radar studies in the Waipio and other valleys north of the Kohala Mountains (Day et al. 2003a) while Hawaiian Petrels are mostly found on the south side of the island and nesting at high elevations.

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United States Department of the Interior



FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122, Box 50088 Honolulu, Hawaii 96850

In Reply Refer To: 2007-TA-0236

SEP 0 6 2007

Ms. Christine Yott Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Ave., Suite C-316 Kailua, Hawaii 96734

Subject:

Species List and Impact Determination Request for the Proposed Verizon

Wireless HI3 Kawaihae Harbor Cell Site located at Kawaihaie Harbor, Kawaihae,

Kamuela, Hawaii

Dear Ms. Yott:

We are in receipt of your letter dated July 20, 2007 in which you request information concerning the proposed Verizon Wireless cell site at Kawaihae Harbor, Kamuela, Hawaii. We received your letter on July 23, 2007. The proposed action includes installing a new 60-foot monople equipped with lighting and 12, eight-foot panel antennas. The overall height of the monople and antennas will be approximately 64 feet above ground level. From the attached drawings, we assessed the maximum width at the top of the monopole to be 16 feet across. The drawings also indicate that the lights will not be shielded or downward facing. An associated 12-foot by 26-foot equipment shelter will be installed, and the entire area will be enclosed by a 40-foot by 50-foot chain-link fence. We understand that the Federal Communications Commission (FCC) has designated the licensees, applicants, tower companies and their representatives as non-Federal representatives for informal section 7 consultations with the U.S. Fish and Wildlife Service (Service) pursuant to the Endangered Species Act (ESA) of 1973 [16 U.S.C. 1531-1544], as amended.

You requested our assistance in determining: (1) whether the proposed site is located within a wildlife preserve or National Wildlife Refuge; (2) proximity of proposed or designated critical habitat; and (3) presence of proposed or listed species. We searched our databases, including data compiled by the Hawaii Biodiversity and Mapping Program and there is no critical habitat, Wildlife Refuge, or wildlife preserve in the vicinity of your project footprint. However, four animal species federally listed as either endangered or threatened are known to utilize that area. The federally endangered Hawaiian petrel (*Pterodroma sandwichensis*) and the threatened



Ms. Christine Yott

Newell's shearwater (*Puffinus auricularis newelli*) have been detected during surveys from Kawaihae Harbor using modified marine radar (Day et al. 2003). The endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) has been observed at Kawaihae Harbor, and the endangered Hawaiian hawk (*Buteo solitarius*) is widely distributed over Hawaii Island. The proposed project site is within one mile of Puuhohola Heiau National Historic Site.

Communications facilities can present a potential hazard for birds protected under the ESA or the Migratory Bird Treaty Act [16 U.S.C. 703-712]. Many bird species are known to strike objects such as antennas or guy-wires that protrude above the surrounding vegetation height. In Hawaii there are several species of federally listed seabirds that are attracted to lights and are known to collide with buildings, light poles, wires, and other tall objects. Under section 7 of the ESA, it is the Federal agency's (or non-federal designee) responsibility to make the determination of whether or not the proposed project "may affect" federally listed species or designated critical habitat. A "may affect, not likely to adversely affect" determination is appropriate when effects to federally listed species are expected to be discountable (i.e., unlikely to occur), insignificant (minimal in size), or completely beneficial. This conclusion requires written concurrence from the Service as well. Projects that are determined to have "no effect" to federally listed species and/or critical habitat do not require additional coordination or consultation with the Service.

The aforementioned listed seabirds fly at night and are attracted to artificially-lighted areas; they are also known to collide with objects that protrude above the vegetation layer. As described, the proposed tower may affect these species, particularly since lights are included on the tower. We recommend you gather more biological information about this site including the height of surrounding vegetation and buildings, sources of night-time lighting in the project vicinity and night-time avian surveys using ornithological radar and night vision equipment, following the methods described in Day et al. 2003. Recommended time periods for conducting radar surveys are late May to early June for adult birds, and late October to November for fledgling birds. Similarly, bats are known to collide with these same objects, so we recommend you survey for bats concurrently with the nocturnal bird surveys. We recommend you enter into informal consultation with us to ensure FCC compliance with section 7 of the ESA.

If you have questions regarding these comments, please contact Megan Laut, Fish and Wildlife Biologist, Consultation and Technical Assistance Program (phone: 808-792-9400, fax: 808-792-9581).

Sincerely,

Patrick Leonard Field Supervisor

Sinc Tr



SECTION 2

State of Hawaii

Department of Land and Natural Resources (DLNR)

Division of Forestry and Wildlife (DOFAW)

LINDA LINGLE GOVERNOR OF HAWAII



TECENED 1-14-07

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

July 26, 2007

ALLAN A. SMITH
CHAIRPERSON
BOARD OF LIMID AND NATURAL RESOURCES

CEPUTY DIRECTOR FOR LIND

KEN C. KAWAHARA

DEPUTY DIRECTOR FOR THE COMMISSION ON WATER RESCURICE MANAGEMENT

AQUATIC RESOURCES
90ATHS AND COEAT RECREATION
90AMISED ON WATER PESOURCE
MARACEMENT
CONSCRIVATION AND COASTAL LANDS
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JOAMISSION
LAND MARAGEMENT
STATE PARKS

Ms. Christine Yott Staff Consultant Bureau Veritas North America, Inc. 970 North Kalaheo Avenue, Suite C-316 Kailua, Hawaii 96734

Dear Ms. Yott:

Subject: Species List and Impact Determination Request for the Proposed Verizon Wireless (VZW) H13 Kawaihae Harbor Cell Site, located at Kawaihae Harbor, Highway TMK: 3-6-1-003: parcel 034, Kawaihae, Big Island, Hawaii 96743.

Your request to Allan Smith, Chairperson DLNR was referred to the Division of Forestry and Wildlife Office. We appreciate the opportunity to comment on your subject request. DOFAW does not have any management areas near your proposed project but will comment on the impacts your project will have on seabird's attraction to lights. We recommend that your project design include fully shielded, low profile outdoor lighting to reduce the impacts to endangered seabird's attraction to lights (brochure sent in your previous requests). In addition, all guy-wires shall be covered with fluorescent foam wraps and "bird diverters." If lighting cannot reduce the impacts to seabirds, the project may need to proceed through a Habitat Conservation Plan for that seabird species. Thank you for allowing us to review your project.

Sincerely yours,

Paul J. Conry Administrator



STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF FORESTRY AND WILDLIFE
P.O. BOX 4849
HILO, HAWAII 96720
(808) 974-4221
FAX (808) 974-4226

August 2, 2007

Christine Yott Staff Consultant Bureau Veritas North America, Inc.

Madam,

The proposed VZW HI3 Kawaihae Cell Site (TMK Number: (3) 6-1-003: Parcel 034) is not located within federally designated critical habitat for either plant species or the Blackburn's sphinx moth (*Manduca blackburni*). There are no records of endangered plant species locations within the proposed cellular site though there may be resident endangered Hawaiian hawk or 'io (*Buteo solitarius*) in the vicinity and care should be taken not to disturb potential roosting trees in the area during construction activities. Please contact us if you have additional questions and thank you for the opportunity to comment on the proposed action.

Sincerely,

Roger Imoto

Hawaii District Manager

Division of Forestry and Wildlife

19 East Kawili Street

Hilo, Hawaii 96720

(808) 974-4221



SECTION 3

U.S. Army Corp of Engineers (USACE) Clearance



received

DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, HONOLULU

I.S. ARMY ENGINEER DISTRICT, HONOLULU FORT SHAFTER, HAWAII 96858-5440

REPLY TO ATTENTION OF: August 20, 2007

Regulatory Branch

File No. POH-2007-00277

Christine Yott Bureau Veritas North America Inc. 970 North Kalaheo Avenue, Suite #C-316 Kailua, HI 96734

Dear Ms. Yott:

This letter is in response to your request for a jurisdictional determination dated July 20, 2007 for a proposed telecommunications tower at Kawaihae Harbor, Hawaii, 96743 (TMK: (3) 6-1-003: 034). We have reviewed the information you provided under the Corps' authority to issue Department of the Army (DA) permits pursuant to Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403) and Section 404 of the Clean Water Act (CWA) (33 USC 1344).

Based on the information you provided as part of the Federal Communications Commission Environmental Checklist requirements, we have determined that the proposed project site does not contain waters of the U.S. subject to our jurisdiction, and that the described project and its related activities are understood to not involve the placement of dredged and/or fill material into waters of the U.S., including adjacent wetlands; therefore, a **DA permit is not required.**

The Corps does not provide confirmation or comments on findings of a proposed project's potential impacts to National Wetlands Inventory (NWI) wetlands outside of the subject parcel being reviewed. As a general practice, best management practices should be implemented during project construction to minimize erosion, to avoid the discharge of storm water from impacting adjacent waters of the U.S., and to ensure continued protection of identified aquatic resources, including any wetlands identified on the NWI.

Should you have any questions regarding this jurisdictional determination, please contact Ms. Paulette Choy at 808-438-9258 and reference the above file number.

Sincerely,

George P. Young, P.E. Chief, Regulatory Branch