STATE OF HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaiʻi

October 25, 2024

145-Day Exp. Date: November 24, 2024

Board of Land and Natural Resources
State of Hawaiʻi
Honolulu, Hawaiʻi

REGARDING:	Conservation District Use Application (CDUA) OA-3956 for the City and County of Honolulu's Communications Facilities Upgrade at the Board of Water Supply (BWS) Kapaʻa Reservoir
APPLICANT:	City and County of Honolulu, Department of Information Technology and Department of Design and Construction
LANDOWNER:	City and County of Honolulu Board of Water Supply
AGENT:	Aolani Yamasato-Gragas, Planner AGY LLC
LOCATION:	1691 Mōkapu Boulevard, Kailua, Island of Oʻahu
TAX MAP KEY:	(1) 4-2-017:016
AREA OF PARCEL:	2.262 acres
AREA OF USE:	305 feet^2
SUBZONE:	General
EXHIBITS:	1. Project location and site map 2. Subzone map 3. Topographic survey and existing structures 4. FEMA flood map 5. 6E Determination 6. Aerial layout of proposed project 7. Demolition and renovation floor plan 8. Monopole tower diagrams 9. Mock-up of view plane from Mōkapu Boulevard and John A. Burns Freeway

SUMMARY

The City and County of Honolulu's Department of Design and Construction (DDC) and Department of Information Technology (DIT) are proposing to upgrade the existing public safety radio communication system located on the Board of Water Supply (BWS) Kapa'a Reservoir. The communications facility requires transmission and structural upgrades to meet current standards. Upgrades include the replacement of an existing (50 feet and 2 inches) microwave truss tower with a new monopole tower (80 feet); installation of a new concrete sidewalk around the existing communications building; removal of two propane tanks and replacement with one diesel fuel tank; modifications to the existing radio tower equipment building interior including the removal of several existing concrete masonry unit (CMU) walls and installation of a new CMU wall; and replacement of the existing generator located inside the building with a new emergency generator.

The project is necessary to meet current and future emergency communication needs for public service use and would not change the existing land use at the site.

DESCRIPTION OF AREA/ CURRENT USE

The subject parcel is located in the Oneawa Hills at the southern end of Mahinui Ridge, on the east coast of the island of O'ahu (**Exhibit 1**). The proposed project is located in the General Subzone of the State Land Use Conservation District (**Exhibit 2**). The Kapa'a 272' Reservoir facility and the existing Board of Water Supply (BWS) 2.0 million-gallon (MG) reservoir, as well as reservoir-related appurtenances were constructed in 1958 as part of the Kapa'a Water Project.

The BWS Kapa'a Reservoir Communications Facility parcel has been operating as a reservoir site since 1958 and communications facility since 1998. See **Exhibit 3**.

In addition to the 2.0 MG reservoir, reservoir-related appurtenances that were constructed in 1958 as part of the Kapa'a Water Project include a BWS vault building that houses various electrical controls to ensure the safe and reliable function of the existing reservoir, two water valve boxes with covered grates, and an electrical pole and guy wire.

On February 26, 1988, the Board of Land and Natural Resources (BLNR) approved CDUP OA-2105 for radio communications facilities on the parcel consisting of a 20ft and 30ft radio tower with one microwave dish mounted to each tower subject to nine conditions. The radio communications facilities were installed for public safety purposes as well as to provide an emergency communication system for the Police and Fire Departments.

On August 13, 1993, the BLNR approved CDUP OA-2628 for the Honolulu Police Department Communications Facilities Upgrades projects at various locations on the Island of O'ahu including this site subject to fifteen (15) conditions. Authorized upgrades included the construction of 360 sq. ft equipment room, installation of a propane tank and generator, and a 1,250 sq. ft paved area fronting the equipment room. The authorization also allowed for the replacement of the 30ft tower with a 50ft tower and the installation of four (4) vertical antennas. No changes were proposed to the 20ft tower.

On February 28, 2014, the BLNR approved CDUP OA-3670 for the Kāneʻohe/Kailua Wastewater Gravity Flow Tunnel project subject to twenty-three (23) conditions. The authorization allowed for the construction and installation of a 50ft by 30ft concrete pad and access shaft for the 10ft diameter Kāneʻohe/Kailua Wastewater Gravity Flow Tunnel on the northeast corner of the site. The 10ft wastewater tunnel is located within a 40ft wide subterranean easement that runs along the east side of the parcel.

On December 8th, 2022, the BLNR approved CDUP OA-3898 for the City and County of Honolulu BWS Kapaʻa 272 Reservoir Replacement project subject to 25 conditions. The project involved the replacement of the existing 2.0 MG, 44 ft tall reservoir with a 1.0 MG, 34 ft tall, pre-stressed concrete reservoir.

Current land uses in the vicinity of the project area include residential neighborhoods of Kāneʻohe to the north and west. To the south of the parcel is the Kapaʻa Quarry and Transfer Station, and to the east, is the Kawainui Marsh Wildlife Sanctuary as well as Kalāheo High School and residential neighborhoods of Kailua.

The parcel sits at an approximate elevation range of 245 to 290 feet above mean sea level on top of a hill developed in 1958 for water reservoir purposes, so that the elevation of the water creates pressure and water does not need to be pumped to service areas. The windward side of the Koʻolau Range receives a high quantity of rainfall and the site is located in the Kawainui watershed; however, there are no surface waters, coastal waters, or wetlands in the project area. The south-facing slopes adjacent to the northern section of the project site range from 10% to as high as 60%.

The Oneawa Hills comprise the eastern edge of the remnant Koʻolau volcano caldera that formed from the deposition of flowing lava. The caldera of the Koʻolau volcano is estimated to extend from Waimānalo to Kāneʻohe and from the base of the Koʻolau Pali to the area between Lanikai and Mokulua Islands. The Oneawa Hills are capped with coarse breccia that consists of fragmented basalt rocks most likely formed from eroded rocks of the Koʻolau caldera.

According to the U.S. Department of Agriculture (USDA 2001) Soil Survey Geographic database, the soils within the parcel are classified as Alaeloa silty clay, 15 to 35 percent slopes (ALF). Alaeloa silty clay are described as producing runoff that is rapid to very rapid and this soil is suited for pasture and wildlife habitat.

Site Access

Access to the site is via a private BWS paved access road that connects to Mōkapu Saddle Road approximately 860 feet west of the H-3 Interstate overpass on the windward side of the Island of Oʻahu between the towns of Kailua and Kāneʻohe. See **Exhibit 1**.

Flood Hazard Assessment

A Flood Zone Map obtained from the State's Flood Hazard Assessment Tool website shows that the subject property is in Flood Zone D and Flood Zone X which are not special flood hazard areas. Flood Zone D is defined as unstudied areas where flood hazards are

undetermined, but flooding is possible. Flood Zone X are areas determined to be outside of a 500-year flood and protected by levee from a 100-year flood. See **Exhibit 4**.

Flora and Fauna

The BWS Kapa‘a Reservoir parcel consists of grassed areas with high and dense vegetation primarily on the sloped terrain. There are no known rare or endangered plant/or animal species at the project site. The project area does not provide suitable habitat for endangered Hawaiian waterbirds, although they may occur in the vicinity of the project area.

The United States Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office and the State of Hawaii’s Department of Land and Natural Resources (DLNR) Division of Forestry and Wildlife (DOFAW) indicate that there are five listed species with the potential to occur or transit through in the vicinity of the project area: the State listed endangered Pueo, the federally endangered Hawaiian hoary bat, band-rumped storm-petrel, Hawaiian petrel, and the threatened Newell’s shearwater.

Historical & Cultural Resources

The project site is used as a BWS reservoir and emergency communications facility, and public access is not allowed for the protection of public safety. The existing 2.0 MG reservoir at the Kapa‘a 272 Reservoir facility has been in operation since 1958 and the communications facility since 1988.

A review of the State Historic Preservation Division (SHPD) records indicated an archaeological monitoring report included a test boring location with TMK: (1) 4-2-017:016. No archaeological historic properties were identified in the project area or vicinity. SHPD accepted the archaeological monitoring report on September 19, 2019.

An Archaeological Field Inspection and Literature Review (AFILR) of the project site was also completed for the Kapa‘a 272 Reservoir Replacement Project. The AFILR did not reveal or identify any historic properties on the subsurface of the project area, and the SHPD provided concurrence with the BWS effect determination of “No historic properties affected” on November 12, 2022.

SHPD provided the CCH DDC’s Kapa‘a BWS Reservoir Radio Tower Replacement project concurrence with their effect determination of “No historic properties affected” on November 21, 2024, and notification that permit issuance process may continue. The SHPD requested that the following be attached to all construction permits: “In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808)-692-8015” (Log No. 2020 PR34899, Doc. No. 2111LS07, **Exhibit 5**).

PROPOSED USE

The project proposes to replace one existing microwave truss tower, 50 feet and 2 inches tall, with a new monopole tower, 80 feet tall; install a new concrete sidewalk around the existing communications building; remove two existing propane tanks and replace them with one diesel fuel tank; modify the existing radio equipment building interior including the removal of several existing concrete masonry unit (CMU) walls and installation of a new CMU wall; and replace the existing generator located inside the building with a new emergency generator. Structural improvements to the existing radio equipment building will be made to withstand a Category IV hurricane. The total area of work will be approximately 305 ft². See **Exhibits 6, 7 and 8**.

Alternatives Considered

No action: The "no action" alternative would not be ideal as it would pose a risk to public safety due to the deterioration of existing radio facilities. Poor communications coverage around the island creates an additional risk. Taking no action to improve the public safety communications system would curtail an increase in effectiveness and efficiency of the system, hindering police enforcement capabilities.

Alternative system design: Other alternative system designs were considered, however despite possible short-term reductions in cost, these system designs would also provide fewer opportunities for the possibility of future expansion of communications applications, would not accommodate new users, and would lead to long-term higher costs for system expansion.

Alternative sites: An alternative site would not be ideal, based on radio coverage surveys and land availability. The proposed site location was chosen based upon topography, as higher elevation of the site itself requires less height for towers to achieve ideal radio coverage. In addition, the selected site is on City and County-controlled property, which helps to reduce costs and potential security issues.

Mitigation and Best Management Practices

The applicant has identified a number of mitigative measures, conditions and practices within the Environmental Assessment related to handling of hazardous material, and resource protection to ensure that the proposal will have minimal effects on the natural and cultural resources of the land. As such these proposed measures, conditions and practices are incorporated into the permit.

Staff notes that the Final Environmental Assessment (FEA) states that construction Best Management Practices (BMP)s including silt fences, periodic watering to minimize dirt particles, and stabilized construction road access will be implemented. Areas that are exposed as a result of earthwork will be properly handled utilizing site specific BMPs as required to ensure against the loss of sediment and soils due to storm water runoff. This includes structural (e.g. berms, silt fences, barriers), vegetative (e.g. grass, mulch, ground cover), and other management measures as appropriate.

As recommended by DOFAW, no nighttime construction will be performed, and dark sky compliant lighting will be installed to ensure no deleterious impacts to seabirds who can be downed after becoming disoriented by lights. Potential adverse effects to Hawaiian hoary bats will be avoided or minimized by not clearing woody vegetation taller than 15 feet, between June 1 and September 15, the pup rearing season.

It is believed that there will be no significant impact to native flora, fauna, or habitats as the site has been previously cleared for the BWS reservoir replacement project. Avoidance and BMPs will be implemented to minimize and mitigate adverse effects prior to and during construction.

SUMMARY OF COMMENTS

The Office of Conservation and Coastal Lands referred the application to the following agencies for review and comment:

Federal Agency

- US Fish & Wildlife Services

State Agencies:

- DLNR: O‘ahu District Land Office, Division of Forestry and Wildlife, Ahu Moku, and Engineering
- Office of Hawaiian Affairs
- Accounting and General Services Division: Office of Enterprise Technology Services

County Agencies

- County of O‘ahu: Department of Planning, the Honolulu Fire Department, the Honolulu Police Department, and Emergency Management

This application was forwarded to the Kailua Public Library and the Kailua Neighborhood Board and was also available on OCCL’s website to make this information readily available for those who may wish to review it. Additionally, notice of CDUA OA-3956 was published in the July 23, 2024, edition of *The Environmental Notice*.

Comments were received by the following agencies, and summarized by Staff as follows:

US Fish and Wildlife Service

No comments of substance regarding the project were provided. The agency provided information on how to use their new online portal.

Applicant’s Response

An official species list by the Pacific Islands Fish and Wildlife Office was generated through the iPac system as recommended by the USFWS for the proposed project. We

acknowledge the information on the protected species provided that may be encountered in or near the project site. Avoidance and best management practices will be implemented to minimize and mitigate adverse effects.

DLNR- Engineering Division

The Engineering Division notes that the owner of the project property and/or their representative is responsible for researching the Flood Hazard Zone designation for the project. Flood zones subject to NFIP requirements are identified on FEMA's Flood Insurance Rate Maps (FIRM). The official FIRMs can be accessed through FEMA's Map Service Center (msc.fema.gov). Their Flood Hazard Assessment Tool (FHAT) (fhat.hawaii.gov) could be used to research flood hazard information.

Applicant's Response

3.5 Flood Hazard impacts regarding the project were addressed in the Final Environmental Assessment Section 2.5 Flood Hazard, published on the Environmental Review Program's website on May 8, 2024. The project will not be subject to flooding or cause any flooding to the surrounding properties. See **Exhibit 4**.

The Honolulu Fire Department

The Honolulu Fire Department (HFD) requires the following be complied with:

1. Fire department access roads and approved water supply capable of supplying the required fire flow for fire protection shall be in accordance with the National Fire Protection Association (NFPA) 2018 edition.

2. The applicant shall submit civil drawings to the City and County of Honolulu's Department of Planning and Permitting (DPP), which will be routed to the HFD as needed, by the DPP.

Applicant's Response

This project is not expected to impact HFD operations or ability to provide fire protection services to the area. The existing project site meets the recommendations provided by HFD. Appropriate fire access roads are provided for the existing project site. The Honolulu Board of Water Supply has confirmed that adequate water supply is also provided for the site. Prior to construction, civil drawings will be submitted to the HFD for review and approval.

The Honolulu Police Department

The Honolulu Police Department (HPD) recommends that all necessary signs, lights, barricades, and other safety equipment be installed and maintained by the contractor during the construction phase of the project. Additionally, adequate notification should be made to area businesses and residents prior to possible road closures, as any impacts to pedestrian and/or vehicular traffic may cause issues and disruptions that could lead to

complaints. Lastly, the HPD recommends a long-term plan to mitigate the tracking of dirt, gravel, and debris to minimize potential environmental impacts from all affected areas.

Applicant's Response

Short- and long-term impacts regarding the project were addressed in the Final Environmental Assessment published on the Environmental Review Program's website on May 8, 2024. There will be no road closures with the upgrades to the HPD Emergency Communication Facility on the BWS Kapa'a Reservoir property.

Staff notes that the FEA states that construction BMPs including silt fences, periodic watering to minimize dirt particles, and stabilized construction road access will be implemented. Areas that are exposed as a result of earthwork will be properly handled utilizing site specific BMPs as required to ensure against the loss of sediment and soils due to storm water runoff. This includes structural (e.g. berms, silt fences, barriers), vegetative (e.g. grass, mulch, ground cover), and other management measures as appropriate.

ANALYSIS

On July 11, 2024, the Department notified the applicant that:

1. The proposed use is an identified land use in the General subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR) §13-5-22, P-6 PUBLIC PURPOSE USES (D-1) *Not for profit land uses undertaken in support of a public service by an agency of the county, state, or federal government, or by an independent non-governmental entity, except that an independent non- governmental regulated public utility may be considered to be engaged in a public purpose use. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable sources communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district.* Please be advised however, that this finding does not constitute approval of the proposal. The Board has the final authority to grant, modify, or deny the proposal;

2. Pursuant to HAR §13-5-40(a), a Public Hearing will not be required; However, the Chairperson has the authority to require a public hearing should the public interest necessitate a public hearing on the application;

3. In conforming with the Hawaii Revised Statutes (HRS), Chapter 343, as amended, and HAR, Section 11-200.1, the Final Environmental Assessment has been reviewed and accepted by the CCH DDC and DIT. The finding of no significant impact (FONSI) was published in the May 8, 2024, issue of The Environmental Notice;

4. The subject area is not within the Special Management Area (SMA).

CONSERVATION CRITERIA

The following discussion evaluates the merits of the proposed land use by applying the criteria established in HAR, §13-5-30:

1) *The proposed use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. The existing communication facility is part of the City and County of Honolulu's public safety and emergency communications system. The communication facility also provides use for state and federal emergency, as well as public safety agencies to support and maintain public health, safety and welfare.

The proposed project will upgrade an existing resource used for public safety and emergency communications to the region, fulfilling a mandated governmental service for public benefit in accordance with public policy and the purpose of the conservation district. The project is not anticipated to cause significant impact to natural resources and will ensure proper mitigative practices and BMPs are implemented should there be disturbance.

2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur*.

The objective of the General subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature. The proposed use is an identified land use in the General Subzone pursuant to HAR, §13-5-22 P-6 PUBLIC PURPOSE USES (D-1) *Not for profit land uses undertaken in support of a public service and by an agency of the county, state, or federal government, or by an independent non-governmental entity, except that an independent non-governmental regulated public utility may be considered to be engaged in a public purpose use. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable sources, communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district*.

While there will be impacts to scenic open space due to the increase in size of the replacement monopole tower, the increase of 30 feet (50 feet and two inches to 80 feet) will help support the upgrade of the Kapa‘a tower emergency system to a microwave communication system. Overhead lines for communications currently in use are not able to withstand hurricane winds. The new tower will ensure structural integrity in the case of a Category IV hurricane.

The new tower and building will be painted a dark earth-tone color, similar to existing facilities, with the intention of facilities appearance to recede into the lighter

colors of vegetation covering the surrounding hillside.

The other communication facility upgrades improvements would be near ground level and shielded from view by existing vegetation surrounding the property. Therefore, no impacts to open space resources are anticipated.

3) *The proposed land use complies with the provisions and guidelines contained in Hawai'i Revised Statutes (HRS), Chapter 205A, entitled "Coastal Zone Management", where applicable.*

The Coastal Zone encompasses all land areas of the state and extends seaward 3-miles. The proposed project is not within the Special Management Area (SMA) and does not involve changes to existing land uses and current uses will remain the same.

Staff believes the land use complies with the provisions and guidelines contained in HRS Chapter 205A regarding Coastal Zone Management.

4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community, or region*.

Construction for the Kapa'a communications facility upgrades will only take place on the previously disturbed facility site and avoid any degradation of the surrounding environment. Best management practices (BMPs) will be implemented to prevent sedimentation, erosion, and run off.

The project will be taking into consideration recommendations provided by DOFAW for the FEA, such as no nighttime construction, dark sky compliant lighting, and not clearing woody vegetation taller than 15 feet during pup rearing season.

Minor grading and trenching will be needed for the communication facility upgrades. Once constructed, the proposed action will not substantially change the impervious areas of the facility. Measures to control erosion and other pollutants shall be in place before any earth moving phase of grading/disturbance is initiated. The project will implement a list of BMPs during construction in order to mitigate any potential adverse impact to existing natural resources within the surrounding area.

The proposed action is not anticipated to cause adverse impacts to existing natural resources within the surrounding area, community, or region.

5) *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

The proposed action would not change current usage. The proposed project will replace the existing tower and building with minor modifications essential for the

facility upgrades. While the monopole tower may be more visible from certain vantage points than the existing tower, it will maintain public infrastructure and ensure emergency communication needs to support the long-term safety and welfare of the public.

6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

The site is situated on a ridge and surrounded by tall vegetation on all sides. The surrounding vegetation will not be impacted by the proposed improvements. The applicant believes that impacts to view plane will be minimal due to the consolidation of antennas on the tower.

Other appurtenant improvements would be below grade or at near ground level and shielded from view by existing vegetation at the site. The locations where viewers currently have the highest exposure to and awareness of the monopole tower (Mōkapu Boulevard and John A. Burns Freeway) are expected to be minimal, as the tower will be colored a dark earth-tone color, similar to existing facilities, to recede into the lighter colors of the vegetation covering the hillside. **See Exhibit 9**.

No adverse effects to the surrounding population are expected from the upgrade project as the site is not situated in an area obstructing any stationary, continuous, or intermittent views identified in the Koʻolau Poko Sustainable Communities Plan. Scenic vistas including Kāneʻohe Bay and Kawainui marsh face opposite of the hillside of the proposed project, and would not be impacted by the project.

The parcel is not located near the shoreline; therefore, no direct effect on the quality of the coastal scenic resources or views are expected.

7) *Describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.*

No subdivision of land is proposed for this project.

8) *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The proposed land use will improve existing facilities on the telecommunications site. The upgrades are needed to meet current and future emergency communication needs for public use and is vital for the welfare and safety of the surrounding population. The proposed action will promote the long-term sustainability of public health, safety, and welfare by ensuring structural integrity after a natural disaster to meet current standards, and the ability to provide service to the region for future emergency situations.

CULTURAL IMPACT ANALYSIS

The project site is used as a BWS reservoir and emergency communication facility, therefore public access is not allowed for public safety. The existing 2.0 MG Kapa‘a 272 Reservoir has been in operation since 1958 and the emergency facility since 1988. There are no known present or contemporary cultural uses within or around the project area.

The applicant believes that the traditional and customary Native Hawaiian rights of the area will not be affected by the proposed action as there will be no substantive change in the land use that would later or affect the existing access to the area for cultural purposes. The proposed project will have no effect on the existing public use of any uplands, beach, or ocean waters.

The proposed upgrades are necessary to ensure that the public safety radio communication system continues to meet safety standards and ensure long-term use of the facility to support public health, safety, and welfare for the region.

The application was provided for review by the DNLR Ahu Moku Committee, Office of Hawaiian Affairs, and the Kailua Neighborhood Board. No comments of concern in regard to traditional and customary Native Hawaiian rights and practices were received.

DISCUSSION

The City and County of Honolulu Department of Design and Construction and Department of Information Technology would like to upgrade the existing HPD public safety radio communication system located on the BWS Kapa‘a Reservoir parcel. This would require replacing one existing microwave truss tower (50’-2” height) with a new monopole tower (80’-0” height); install a new concrete sidewalk around the existing communications building; remove two existing propane tanks and replace with one diesel fuel tank; modifications to the existing radio equipment building interior; and structural improvements to ensure the building can withstand a Category IV hurricane.

The height difference of the proposed monopole tower will support the mounting of three additional 6’-0” antenna and high speed communication links. High speed communication for the BWS reservoir and other CCH facilities requires a total of 28’-6” of additional height. The increased number of antennae and increased height of the tower create additional wind load and structural requirements for the new monopole tower replacement.

The existing Kapa‘a tower is unable to relay directly to the Kāne‘ohe Police Station. The microwave technology allows transmission of large amounts of information and uninterrupted frequencies. However, the microwave communication is typically limited to line-of-sight propagation and cannot pass around hilly and mountain landscapes. Microwave antennae require visual clearance to receive radio signals. The increased height will allow the proposed monopole tower to be connected to the upgraded Waimanalo Ridge 100’-0” tall microwave tower. This height increase from the existing pole is necessary in order to reduce interference between the various antennas and

microwaves.

Increasing the tower height will provide the Kapa‘a tower the clearance and the space for additional links, such as high-speed communications. The City and County of Honolulu Department of Parks and Recreation requested the use of additional links at the Kapa‘a tower for security video cameras at comfort stations on the Windward side of the island. As additional links and antennae are added to the tower, wind-loading and other structural requirements are increased. The upgrade of the Kapa‘a tower will provide a direct link from the Waimānalo Ridge tower to Kāne‘ohe Police Station, as well as feed to the Kailua Police Station.

Standard BMPs will be followed during construction. Within the Environmental Assessment, the applicant has identified several mitigative measures, conditions, and practices to ensure that the proposal will have minimal negative effects on the natural resources of the land. As such these proposed measures, conditions, and practices are incorporated into the permit. Additionally, the comments received by DOFAW from the FEA will be taken into consideration to minimize the impact to native flora or fauna.

Construction activities will result in a short-term increase in power demand. On a long-term scale, the emergency communication facility upgrades will have similar electrical needs to the existing facility. Electrical consumption during construction is anticipated to be comparable to what is currently being used, due to the replacement with new energy-efficient equipment.

Staff believes that the project will have negligible adverse environmental or ecological effects provided that best management practices and mitigation measures as described in the application and environmental assessment are fully implemented.

RECOMMENDATION

Based on the preceding analysis, staff recommends that the Board of Land and Natural Resources APPROVE Conservation District Use Application OA-3898 for the City and County of Honolulu’s Department of Information Technology and Department of Design and Construction’s HPD Communications Facility Upgrade at the BWS Kapa‘a Reservoir located at 1691 Mōkapu Boulevard, Portion of Kailua, O‘ahu on TMK: (1) 4-017:016 subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of HAR Chapter 13-5;

2. The permittee, its successors and assigns, shall indemnify and hold the State of Hawai‘i harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;

3. The permittee shall comply with all applicable Department of Health administrative rules;

4. The permittee shall provide documentation (e.g., book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;

5. Before proceeding with any work authorized by the department or the board, the permittee shall submit four (4) copies of the construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three (3) of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;

6. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;

7. All representations relative to mitigation set forth in the accepted application and environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;

8. The permittee shall plan to minimize the amount of dust generating materials and activities. Material transfer points and on-site vehicular traffic routes shall be centralized. Dusty equipment shall be located in areas of least impact. Dust control measures shall be provided during weekends, after hours and prior to daily start-up of project activities. Dust from debris being hauled away from the project site shall be controlled. Landscaping and dust control of cleared areas will be initiated promptly;

9. The permittee shall notify the Office of Conservation and Coastal Lands (OCCL) in writing prior to the initiation and upon completion of the project;

10. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact SHPD (808) 692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;

11. The permittee shall utilize Best Management Practices for the project;

12. During construction, appropriate mitigation measures shall be implemented to

minimize impacts to the aquatic environment, off-site roadways, utilities, and public facilities;

13. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;

14. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

15. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;

16. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

17. Obstruction of public roads, trails, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, or pathways acceptable to the department;

18. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;

19. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;

20. Artificial light from exterior lighting fixtures, including but not limited to floodlights, up lights, or spotlights used for decorative or aesthetic purposes, shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to section 205A-71, HRS. All exterior lighting shall be shielded to protect the night sky;

21. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawai‘i, and by Hawai‘i statutory and case law;

22. Any landscaping shall be appropriate to the site location and shall give preference to plant materials that are endemic or indigenous to Hawai‘i. The introduction of invasive plant species is prohibited;

23. The permittee shall ensure that areas that are disturbed or denuded of vegetation shall be planted or covered as quickly as possible to prevent erosion;

24. Other terms and conditions as may be prescribed by the Chairperson; and

25. Failure to comply with any of these conditions shall render this Conservation District Use Permit void under HAR Chapter 13-5, as determined by the chairperson or board.

Respectfully submitted,

Mari Kurosawa

Mari Kurosawa, Staff Planner
Office of Conservation and Coastal Lands

Approved for submittal:

_____
DAWN N.S. CHANG, Chairperson
Board of Land and Natural Resources

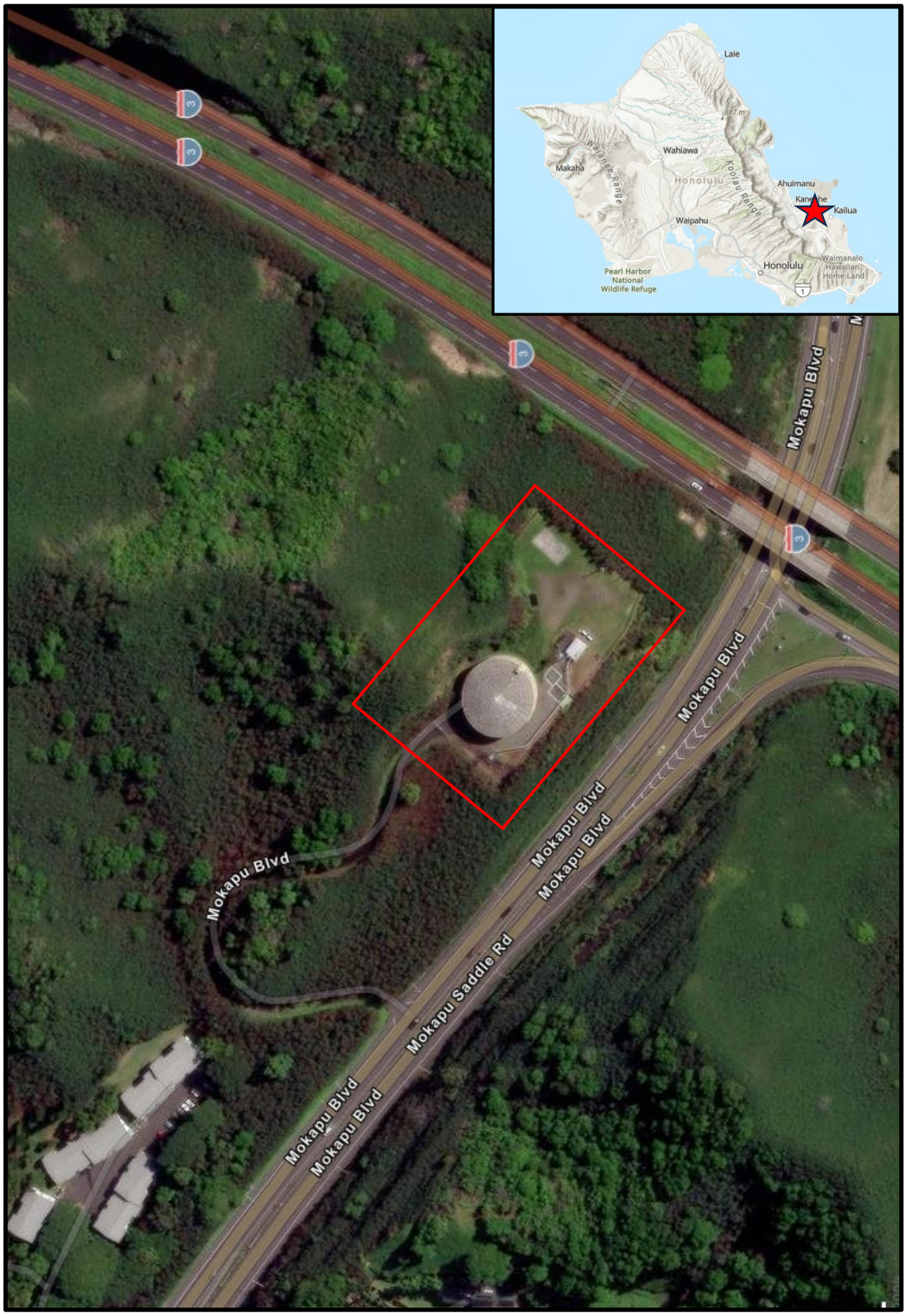


Exhibit 1- Project Location and Site Map

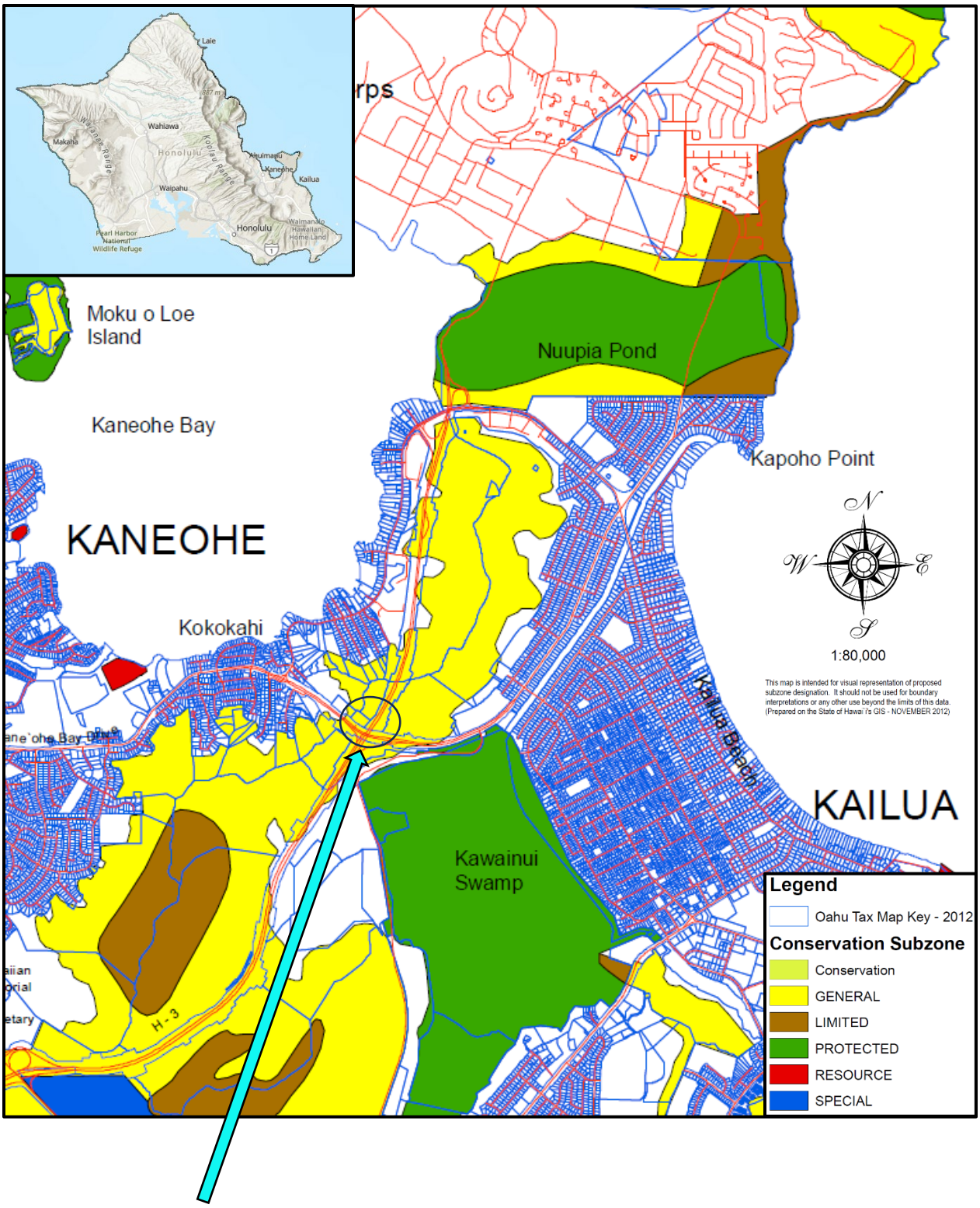


Exhibit 2- Subzone Map

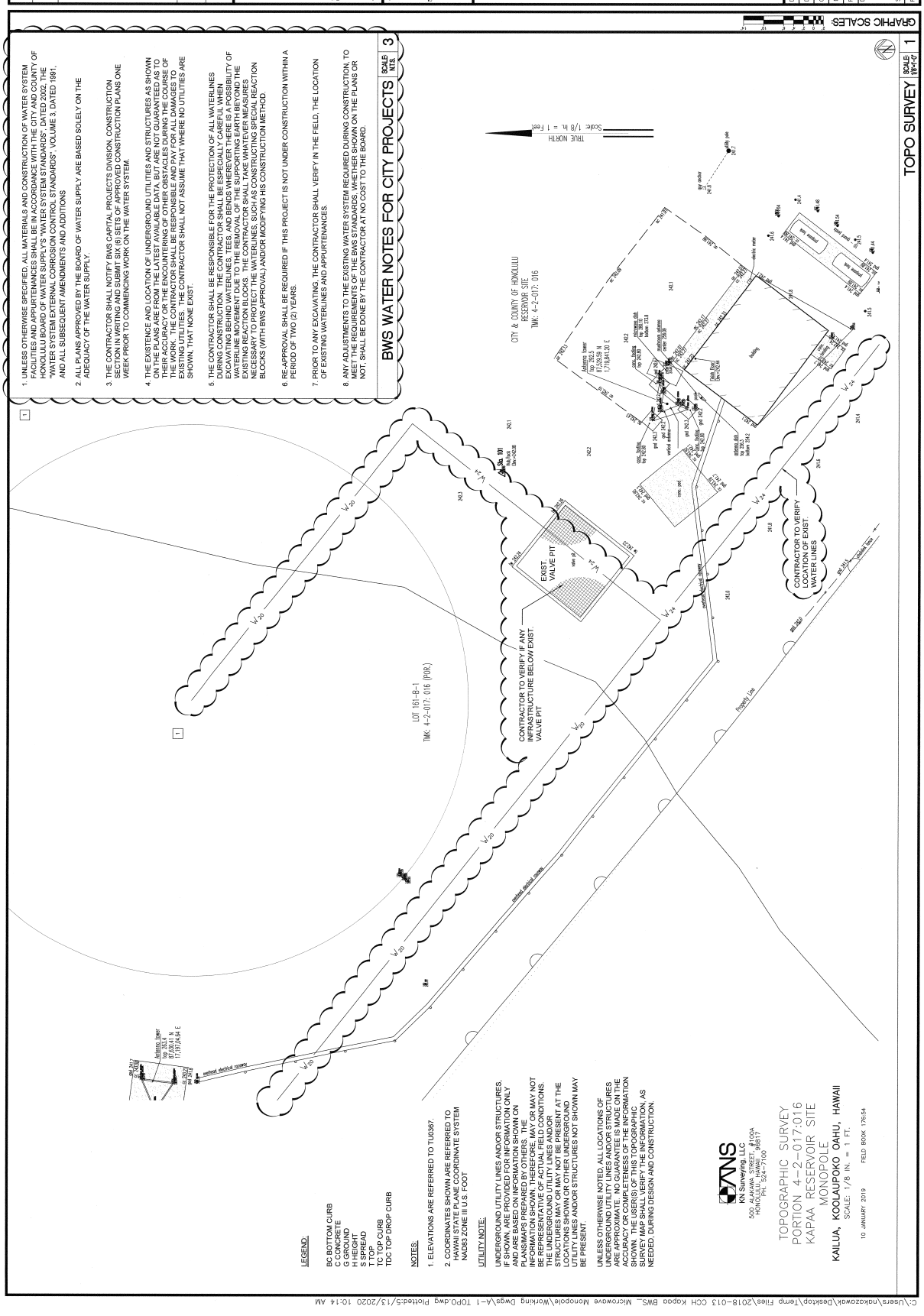


Exhibit 3- Topographic Survey and Existing Structures

Figure 6: Flood Map

Exhibit 4- FEMA Flood Map

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

November 24, 2021

IN REPLY REFER TO:
Project No. 2020PR34899
Doc. No. 2111LS07
Archaeology

Xianping Li, Project Manager
City and County of Honolulu
Department of Design and Construction
630 South King Street
One Main Plaza
Honolulu, HI 96813

Dean Uchida, Director
Department of Planning and Permitting
City and County of Honolulu
One Main Plaza Building
650 South King Street
Honolulu, Hawaii 96813

Dear Xianping Li and Dean Uchida:

SUBJECT: **Chapter 6E-8 and 6E-42 Historic Preservation Review –**
Request for Concurrence with Project Effect Determination
Kapa‘a BWS Reservoir Radio Tower Replacement, DDC Project No. II-31-19-C
Building Permit Application – A2020-11-0150
1691 Mokapu Blvd., Kailua
Kailua Ahupua‘a, Ko‘olaupoko District, Island of O‘ahu
TMK: (1) 4-2-017:016

This letter provides the State Historic Preservation Division’s (SHPD’s) review of the Kapa‘a BWS Reservoir Radio Tower Replacement Project. SHPD received a letter dated August 23, 2021 (Ref. No. 859854) from the City and County of Honolulu Department of Design and Construction (DDC) submitting the project for HRS 6E-8 review. The DDC’s submittal also included a SHPD HRS 6E Submittal Form, scope of work, permit set, a TMK plat map, and photographs. Additionally, the project requires a City and County of Honolulu Department of Planning and Permitting (DPP) building permit (A2020-11-0150) and thus is also subject to review per HRS 6E-42.

Project Description
The project area comprises of a 500-sq.-ft. portion of the 2.26-acre parcel. The project involves the installation of a new monopole microwave tower to replace the existing truss microwave tower. Additionally, a new concrete sidewalk will be installed around the existing communication building. Subsurface disturbance will include excavation for installation of a 5-ft-diameter footing to 22 feet below grade. Excavation for the sidewalk will be 33 ft. by 3 ft. by <1 ft. deep. Additional work includes demolition and removal of the existing tower and foundation to a minimum of 2 ft. below surface, following construction of new tower. Existing propane tanks will be removed, and modifications will be made to existing radio equipment building including removal of several existing CMU walls and installation of a new CMU wall. A future reservoir (approximately 35 ft. high) is planned but is not part of current project.

Findings
A review of the SHPD records indicate that an archaeological monitoring report (Filimoehala and Rieth 2019) included a test boring location with TMK: (1) 4-2-017:016. A single stratum of Alaeloa silty clay was documented above natural basalt bedrock. No archaeological historic properties were identified in the project area or vicinity. SHPD accepted the archaeological monitoring report on September 19, 2019 (Log No. 2019.01554, Doc. No. 1909JA07).

The USDA (Foote et al. 1972) identifies the soils within this parcel as Alaeloa silty clay, 40 – 70% slopes (ALF). Low potential exists for the project to encounter intact subsurface historic properties.

Determination
Based on the information provided, **SHPD concurs** with the DDC's effect determination of "No historic properties affected" for the current project. Pursuant to HAR §13-275-7(e), when the SHPD agrees that the action will not affect any significant historic properties, this is the SHPD's written concurrence and historic preservation review ends. The HRS 6E-8 historic preservation review process is ended.

SHPD hereby notifies the DDC and the DPP that the permit issuance process may continue.

Please attach to construction permits: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 692-8015.

Please contact Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov for any questions regarding this letter.

Aloha,
Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Kalani Mahoe, kalani.mahoe@honolulu.gov
Lester Hirano, lhirano@honolulu.gov
Perry Tamayo, ptamayo@honolulu.gov
Lloyd Higa, higal@yharchitects.com
Clyde Higa, clyde.higa@honolulu.gov
Elaine Morisato, emorisato@honolulu.gov

Exhibit 5- 6E Determination

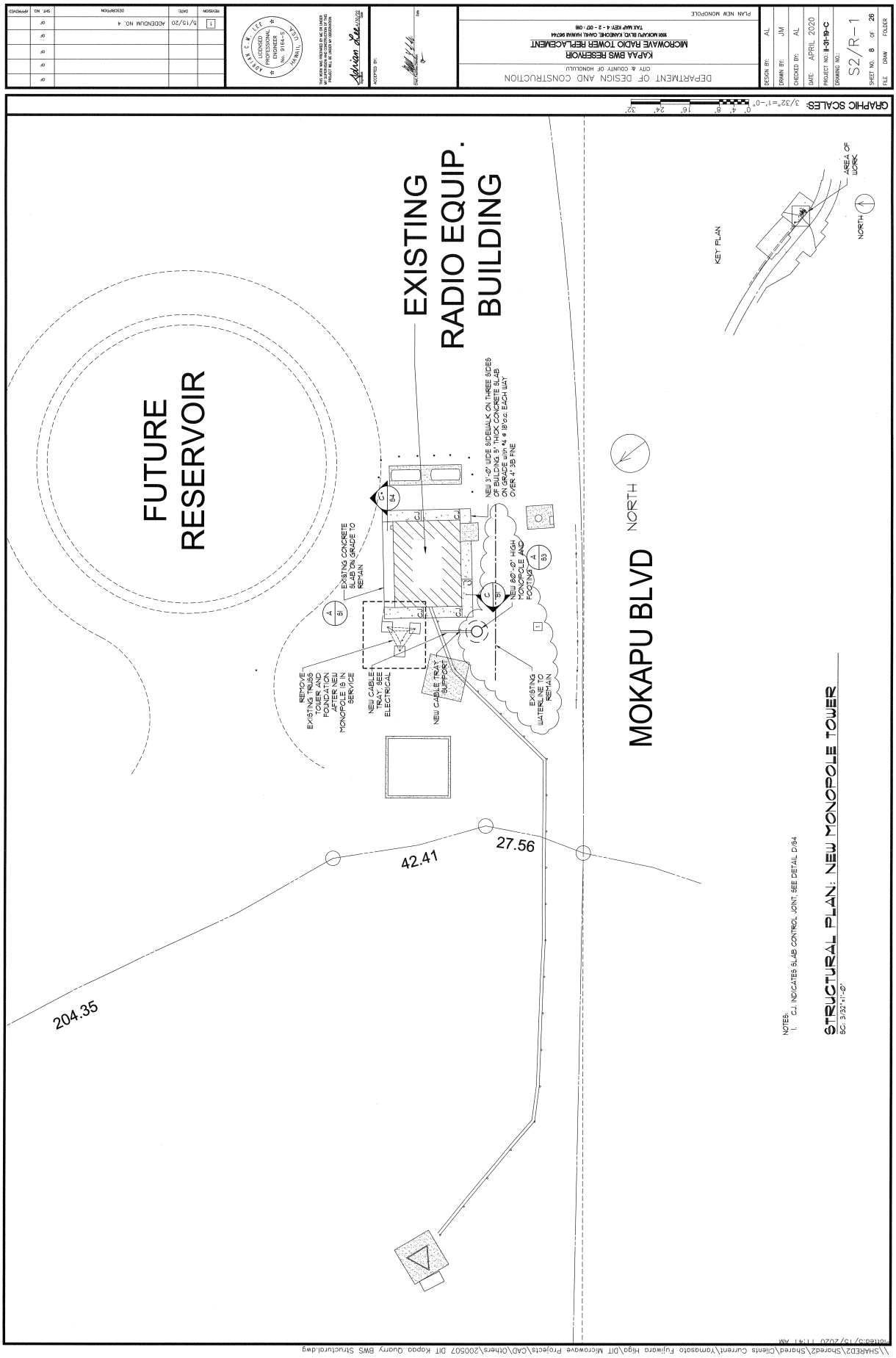
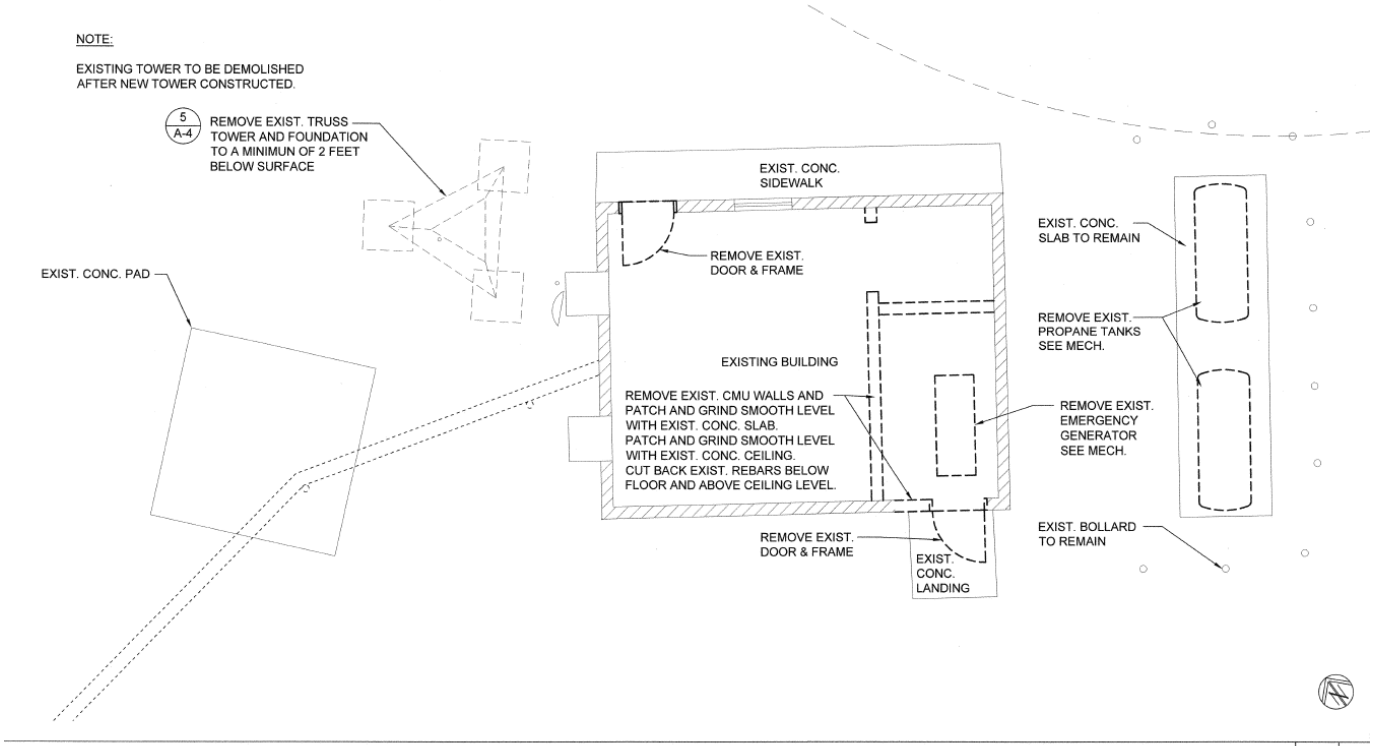
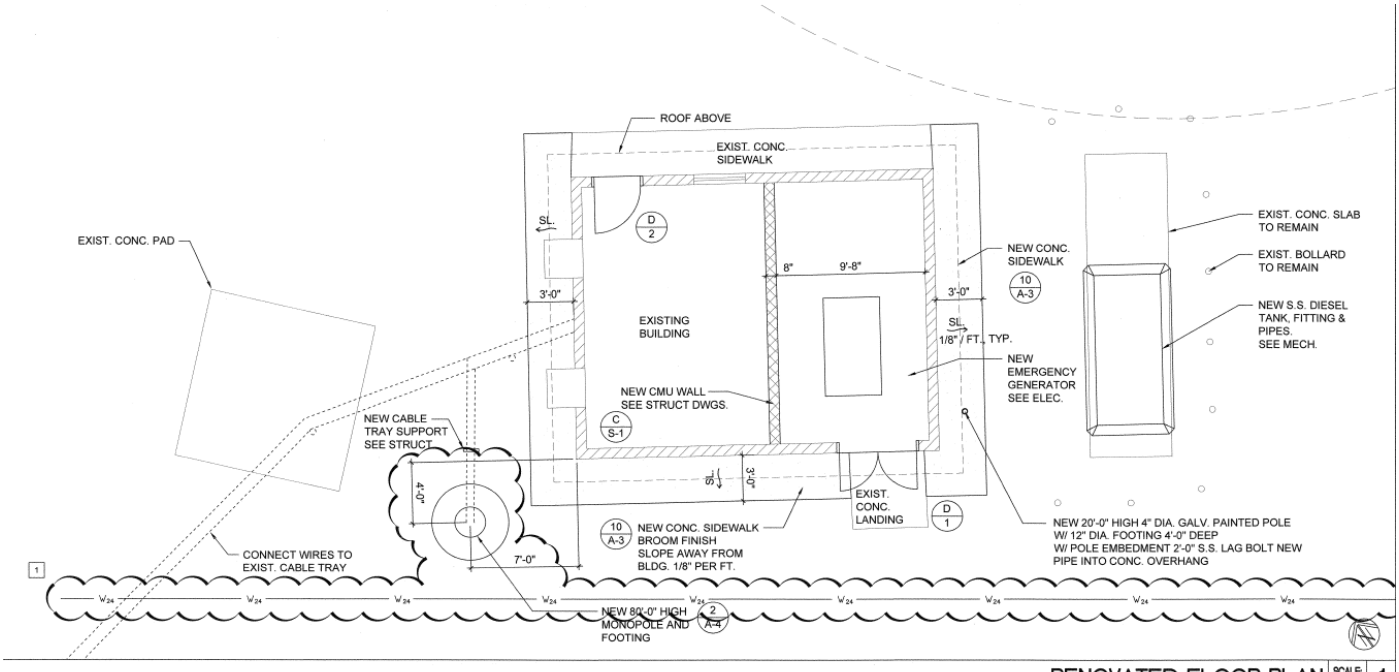


Exhibit 6- Aerial Layout of Proposed Project



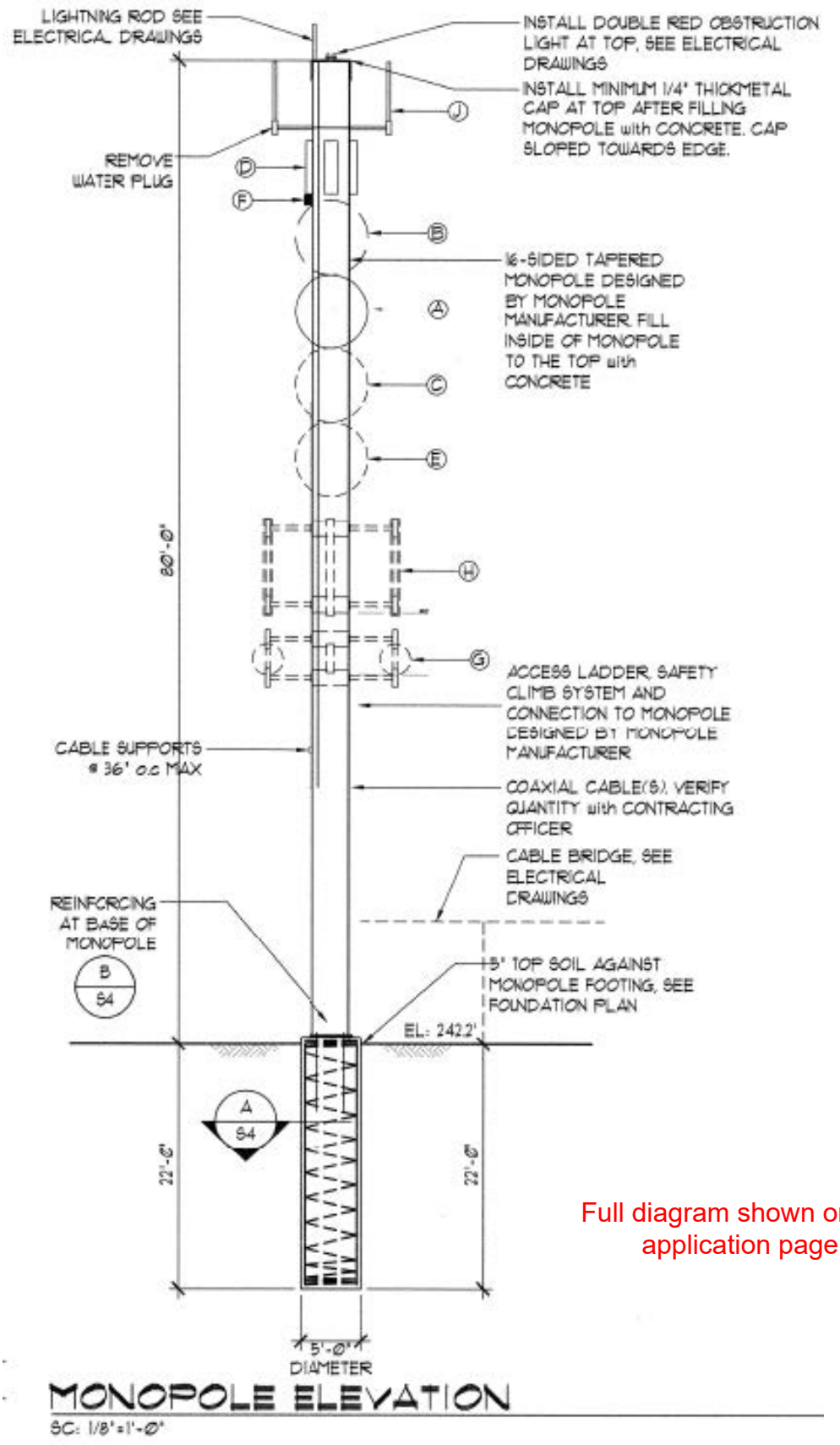
DEMOLITION FLOOR PLAN SCALE: 1/4"=1'-0" 3



RENOVATED FLOOR PLAN SCALE: 1/4"=1'-0" 1

Exhibit 7- Demolition and Renovation Floor Plan

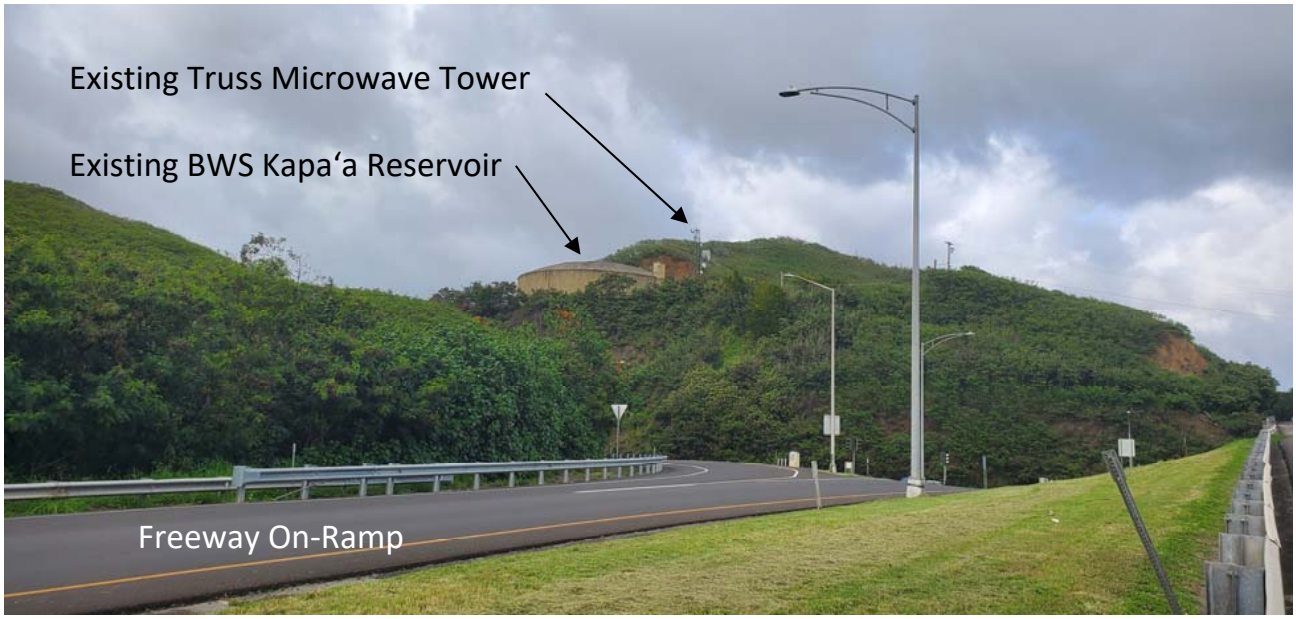
Exhibit 8- Monopole Diagrams



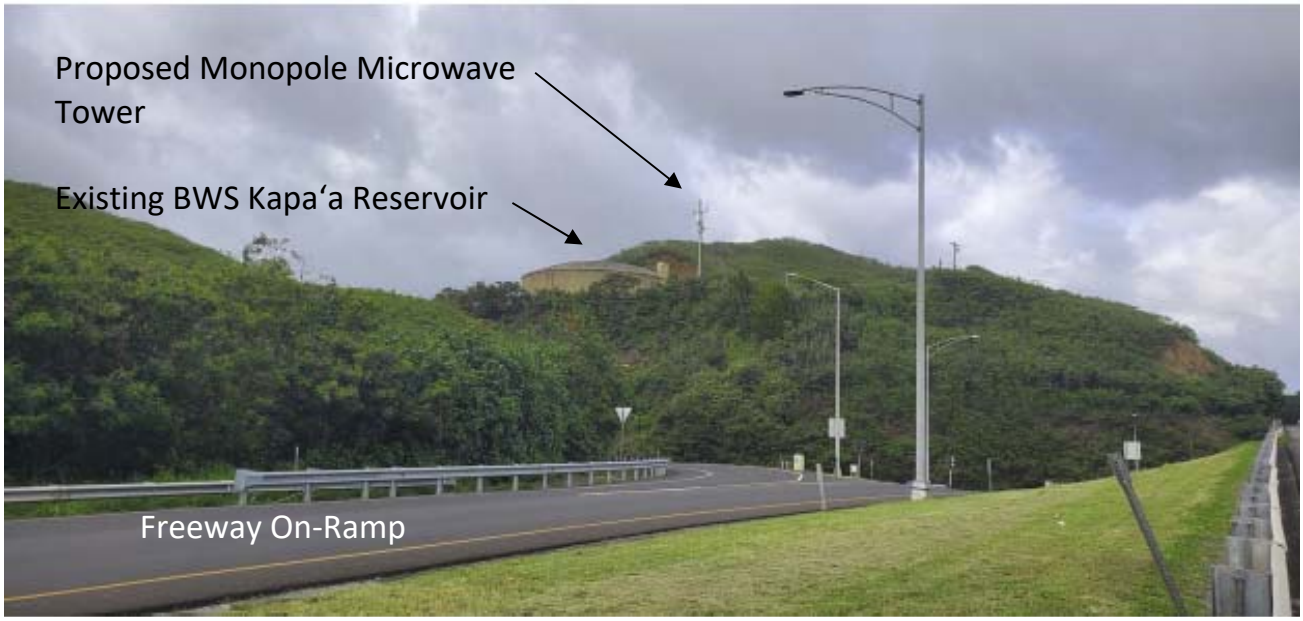
Full diagram shown on CDUA application page 83

Exhibit 8- Monopole Diagrams

Existing and Proposed Views – John A. Burns (H-3) Freeway



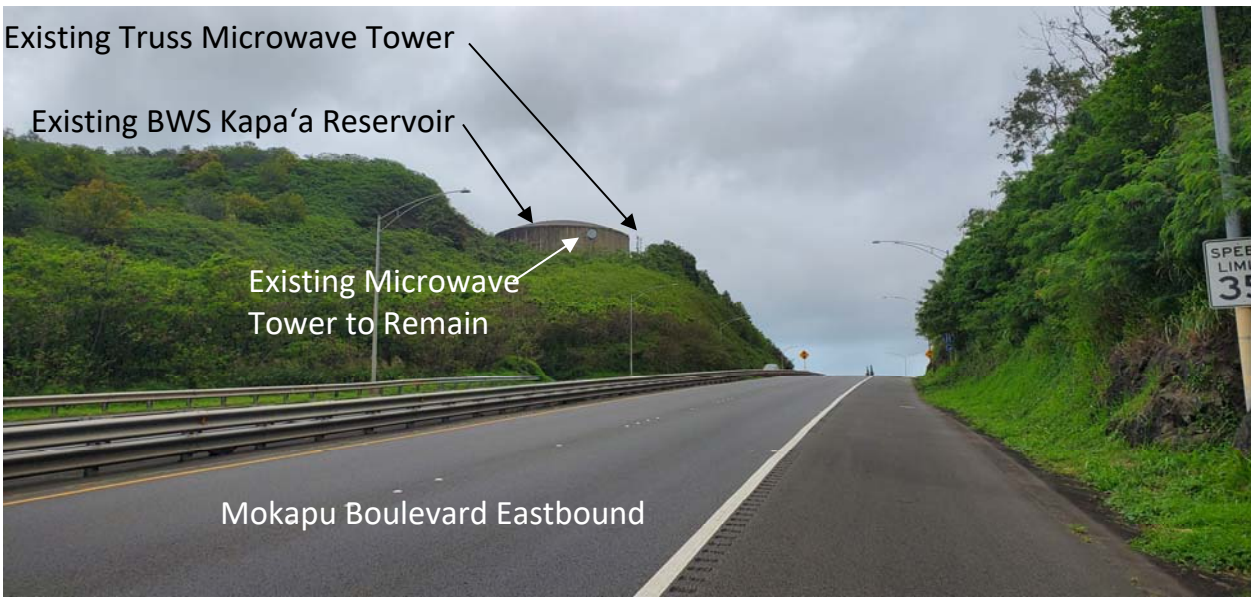
Existing View from John A. Burns (H-3) Freeway Looking North



Proposed View from John A. Burns (H-3) Freeway Looking North

Exhibit 9- Mock-up of View Plane from John A. Burns Freeway

Existing and Proposed Views – Mokapu Boulevard



Existing View from Mokapu Boulevard

Proposed View from Mokapu Boulevard

Exhibit 9- Mock-up of View Plane from Mōkapu Boulevard