CONSERVATION DISTRICT USE APPLICATION (CDUA)

All permit applications shall be prepared pursuant to HAR 13-5-31

File No.:	
Acceptance Date:	180-Day Expiration Date:
Assigned Planner:	

for DLNR Use

PROJECT NAME: O'ahu Subsea Cable Telecommunications Project

Conservation District Subzone: Resource

Identified Land Use: P-14 Telecommunications (D-1) New telecommunications facility

Project Address: Submerged lands seaward of 91-121 'Ōla'i St, Kapolei, HI 96707

Ahupua'a, District, Island: Honouliuli, 'Ewa District, Island of O'ahu

Tax Map Key(s): Submerged lands seaward of (1) 9-1-026:027

Proposed Commencement Date: July 31, 2026

Proposed Completion Date: July 31, 2027 (for construction); long-term occupancy within a non-exclusive easement is being requested concurrently with the Land Division.

Estimated Project Cost: The installation of six landing pipes and three subsea cables on State submerged lands within the Conservation District is estimated to cost approximately $9 million.

Type of permit sought ☒ Board or ☐ Departmental

ATTACHMENTS

$ 2,500 Application fee. 2.5% of project cost for Board Permits, but no less than $250, up to a maximum of $2500; $250 for Departmental Permits (*ref §13-5-32 through 34*).

$ 250 Public hearing fee if required *($250 plus publication costs; ref §13-5-40)*

☒ 6 copies of CDUA (*5 hard + 1 digital copy) (disc or cloud share; no flash drives)*

☒ Draft / Final Environmental Assessment (EA) *or* Final Environmental Impact Statement (EIS) *or* Statement of Exemption (see **Enclosure 1**)

☒ State Historic Preservation Division (SHPD) HRS 6E submittal form *or* Determination letter (dlnr.hawaii.gov/shpd/review-compliance/forms) (see **CDUA Attachment 1**)

☒ Management plan *or* Comprehensive management plan (*ref §13-5-39)* (see **Enclosure 2**)

The following are not applicable to the proposed use of submerged lands in the Conservation District:

☐ Special Management Area determination *(ref Hawai'i Revised Statutes 205A)*

☐ Shoreline certification (*ref §13-5-31(a)(8))* if land use is subject to coastal hazards.

☐ Kuleana documentation (*ref §13-5-31(f))* if applying for a non-conforming kuleana use.

☐ Boundary determination *(ref §13-5-17)* if land use lies within 50 feet of a subzone boundary.

REQUIRED SIGNATURES

Applicant

Name: Humuhumu Services, LLC and Starfish Infrastructure, Inc
Title; Agency: Authorized Signatory
Mailing Address: 2801 Centerville Road, 1st Floor, PMB 811, Wilmington, DE 19808
Contact Person & Title: Lee Livingston, Project Manager
Phone: (703) 828-4664
Email: llivingston@google.com
Interest in Property: Permittee

Signature: DocuSigned by: Lee Livingston 1E786212CE06484... Date: 25 November 2025

Signed by an authorized officer if for a Corporation, Partnership, Agency or Organization

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Landowner (if different than the applicant)

Name: State of Hawai'i Dawn N. S. Chang
Title; Agency: Chairperson, Department of Land and Natural Resources
Mailing Address: P.O. Box 621, Honolulu, HI 96809
Phone: (808) 587-0400
Email: dlnr.land@hawaii.gov

Signature: for Date: 11/25/2025

For public lands, the government entity with management control shall sign as landowner.

Consultant

Agency: ICF
Contact Person & Title: Tanya Copeland, Principal
Mailing Address: 980 9th Street, Suite 1200, Sacramento, CA 95814
Phone: (970) 691-4724
Email: tanya.copeland@icf.com

Signature: Tanya Copeland Date: 11/24/2025

For DLNR Managed Lands

Chairperson, Board of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809-0621

Signature: _____ Date: _____

CERTIFICATION

I hereby certify that I have read this completed application and that, to the best of my knowledge, the information in this application and all attachments and exhibits is complete and correct. I understand that the failure to provide any requested information or misstatements submitted in support of the application shall be grounds for either refusing to accept this application, for denying the permit, or for suspending or revoking a permit issued based on such misrepresentations, or for seeking of such further relief as may seem proper to the Land Board.

I hereby authorize representatives of the Department of Land and Natural Resources to conduct site inspections on my property. Unless arranged otherwise, these site inspections shall take place between the hours of 8:00 a.m. and 4:30 p.m.

DocuSigned by:
Lee Livingston
1E708212CE80484...

Signature of authorized agent(s) or if no agent, signature of applicant

AUTHORIZATION OF AGENT

I hereby authorize *Click or tap here to enter text.* to act as my representative and to bind me in all matters concerning this application.

Signature of applicant(s)

O'AHU SUBSEA CABLE TELECOMMUNICATIONS PROJECT
CONSERVATION DISTRICT USE APPLICATION

PREPARED FOR:

Humuhumu Services, LLC and Starfish Infrastructure, Inc.

PREPARED BY:

ICF
980 9th Street, Suite 1200
Sacramento, CA 95814
Contact: Tanya Copeland
tanya.copeland@icf.com

December 2025

ICF. 2025. *O'ahu Subsea Cable Telecommunications Project – Conservation District Use Application*. December. Sacramento, CA. Prepared for Humuhumu Services, LLC and Starfish Infrastructure, Inc.

Contents

Figures

Acronyms and Abbreviations

Acronym	Definition
AIS	archaeological inventory survey
APE	Area of Potential Effect
Applicants	Humuhumu Services, LLC and Starfish Infrastructure, Inc.
CDUA	Conservation District Use Application
cm	centimeters
EA	Environmental Assessment
ESA	Endangered Species Act
HAR	Hawai‘i Administrative Rules
HDD	horizontal directional drilling
HRS	Hawai‘i Revised Statutes
IDFR	inadvertent drilling fluid release
m	meter
nm	nautical miles
NMFS	National Marine Fisheries Service
Project	O‘ahu Subsea Cable Telecommunications Project
SHPD	State Historic Preservation Division
SIHP	State Inventory of Historic Places
SMA	Special Management Area
TMK	Tax Map Key
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
WQC	water quality certification

Proposed Use

Humuhumu Services, LLC and Starfish Infrastructure, Inc. (Applicants) are requesting a non-exclusive easement and immediate construction right-of-entry for State submerged lands located seaward of Barbers Point Beach Park (Tax Map Key [TMK] [1] 9-1-026:027), ʻEwa District, Island of Oʻahu, Hawaiʻi for the purpose of constructing a new telecommunication facility. The Project is proposed within the Resource Subzone of the State Conservation District and is an identified land use pursuant to Hawaiʻi Administrative Rules (HAR), §13-5-22 P-14 TELECOMMUNICATIONS (D-1) *New telecommunications facility*.

Project infrastructure proposed on State submerged lands would occupy an estimated 35,488 square feet. This includes the area needed for the installation of:

- Six landing pipes utilizing horizontal directional drilling (HDD) methods between the shoreline and punch-out points on State submerged lands, and
- Three subsea cables that would be laid on the seafloor between the seaward limit of State of Hawaiʻi marine waters and the end of the landing pipe and then each cable would be pulled though a landing pipe to connect to a beach manhole onshore.

An overview of proposed locations for landing pipes and subsea cable installation on State submerged lands is included as **Figure 1** and an HDD Plan and Profile Drawing for the six landing pipes is included as **Figure 2**.

Purpose and Need

The purpose of the proposed use is to provide affordable, reliable, and diverse telecommunication connectivity between Hawaiʻi, the continental United States, other Pacific Islands, Australia, and Japan. The Project would respond to the needs identified under the Hawaiʻi Broadband Initiative by contributing to the development of the state's broadband infrastructure and improving telecommunications speed and reliability.

Schedule

Landing pipe installation is currently planned to commence as early as the third quarter (Q3) of 2026 with completion in the first quarter (Q1) of 2027. Subsea cable installation would follow installation of the landing pipes, commencing in Q1 2027. Subsea cable installation would require approximately 2 weeks for each of 3 cables (6 weeks total duration). However, each subsea cable would be installed on a separate and distinct installation schedule and could occur over one to two calendar quarters (i.e., Q1 to Q2 2027). Overall, installation of landing pipes and subsea cables are planned for completion within one calendar year from issuance of the Conservation District Use Permit.

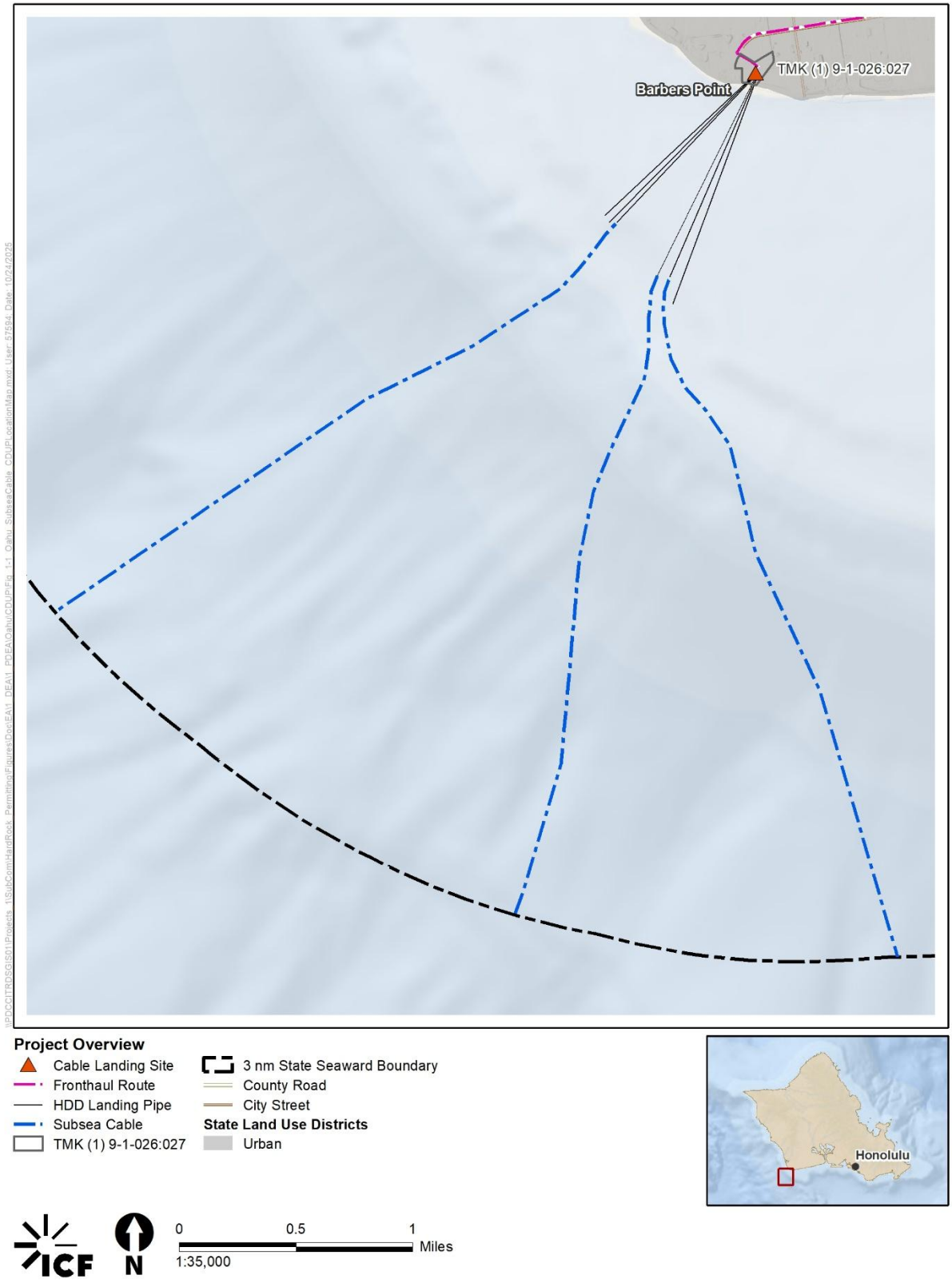

Figure 1. Project Location Map and Overview

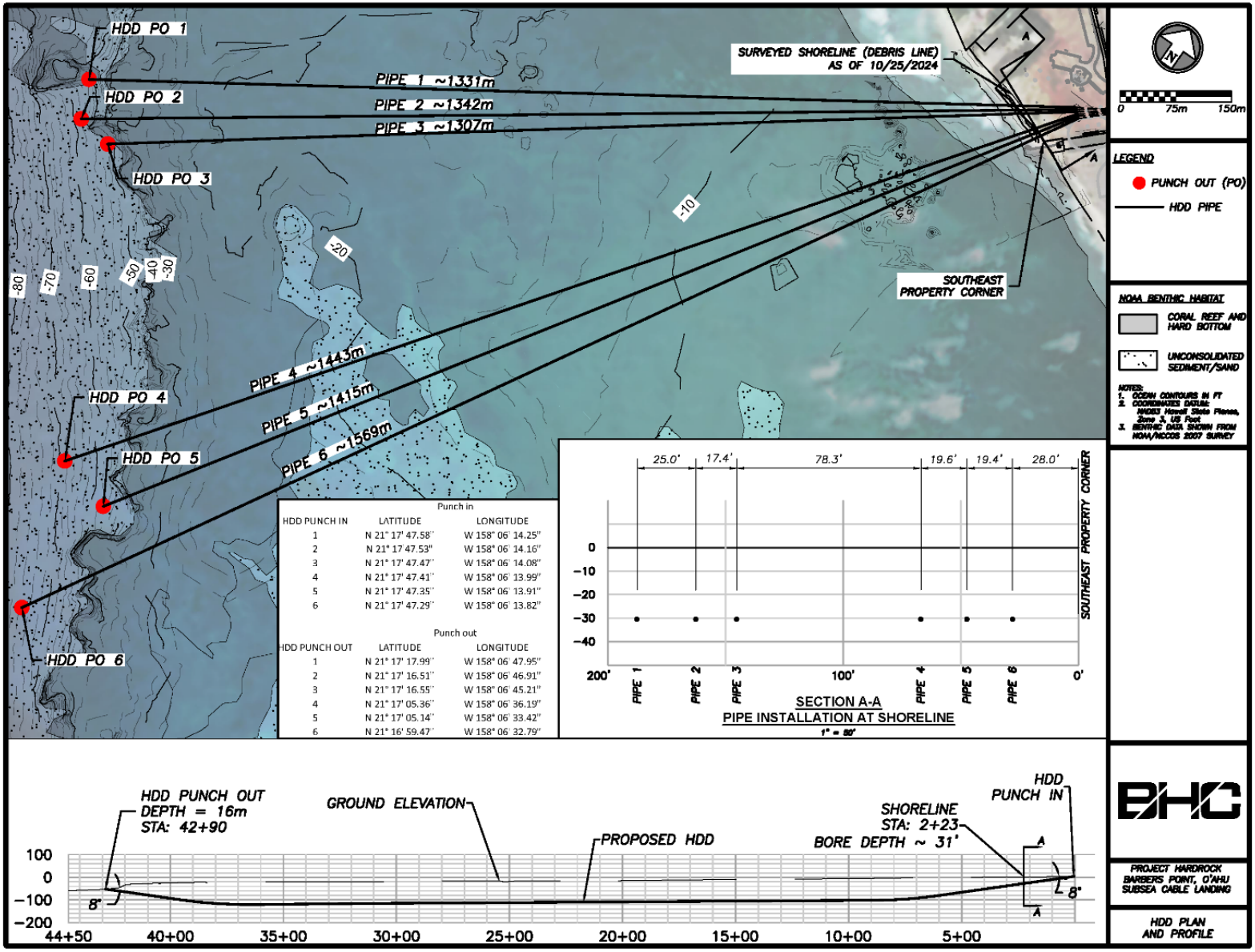

Figure 2. HDD Plan and Profile Drawing

Installation Methods

The methods to be used for installation of the landing pipes and subsea cables are described below.

Horizontal Directional Drilling and Cable Landing

The subsea cables would be landed via construction of subterranean conduits, known as landing pipes. The landing pipes would measure approximately 7 inches (17.8 centimeters [cm]) (outside diameter) and would be installed using HDD methods beginning on land and exiting on the seafloor approximately 4,300 to 5,400 feet (1,311 to 1,646 meters [m]) from the shoreline (**Figure 2**). The use of HDD would allow the landing pipes to be installed beginning at a point on land and bored beneath the beach and surf zones, exiting at a point on submerged lands without any disturbance to the seafloor along the way. The HDDs would be guided by a drill head fitted with a steering tool, using magnetometers and inertial devices to track the direction of advance (horizontally and vertically) and the absolute location. The tracking system would be implemented continuously to verify the drill position and path. A component of the tracking system is a wire loop that is placed on the ground in the cable landing site. The wire loop is energized for a fraction of a second after each 30-foot joint of pipe is installed, allowing the drill operator to triangulate the exact location of the drill head.

The conduit would be advanced in 30-foot sections through the bore hole as it is created. Surveys would be conducted in 15-foot and 30-foot increments (using 30-foot joint sections) to verify the drill position and path. The HDD machine would occupy the bore entry site, drilling steel casing into the ground at an angle of approximately 12 degrees. Once the HDD reaches the desired depth, the direction would level out as the drilling continues to push the landing pipe horizontally through the ground. When the landing pipe reaches the appropriate distance offshore, the drill head would be guided to the ocean bottom at approximately a water depth of approximately 49 feet (15 m) to 71 feet (22 m). This operation would be repeated for each of the landing pipes as shown in **Figure 3**.

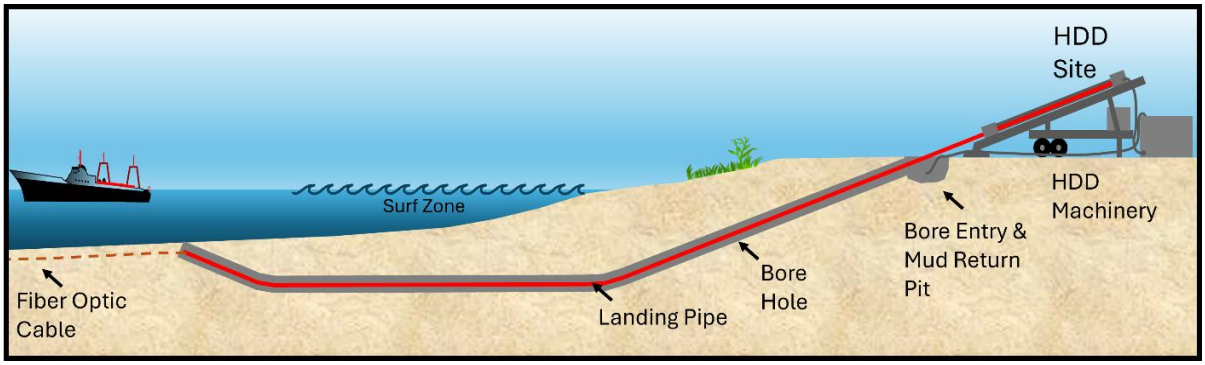

Figure 3. Typical HDD Profile

HDD drilling fluid (a non-toxic, inert material, typically a solution of bentonite clay and water) would be circulated into the bore hole to prevent it from caving in; the fluid would coat the wall of the bore hole to minimize fluid losses to permeable rock and soil types. Drilling fluid also serves as a lubricant for the drill head and carries the cuttings (pieces of drilled rock, sand, and other materials) back to the entry pit, where the cuttings are removed so the drilling fluid can be recirculated into the bore hole. Drilling fluid would be used for drilling all conduit, except for the final approximately 30

feet of the bore hole offshore. The drilling fluid would be changed to water (instead of the drilling fluid) at the end of the bore hole installing the landing pipes; this would minimize the release of drilling fluid into the ocean floor when the drill bit exits offshore.

Given the variety of geologic conditions that may be encountered, it is possible that some of the drilling fluid would be absorbed into fractures in the surrounding subsurface material. For cases in which the fracture is lateral and subterranean, lost fluid would not rise to the surface. In other cases, drilling fluid may reach the surface (e.g., if the fracture comes close enough to the surface that the pressure causes release of drilling fluid above the ocean bottom). In accordance with the terms and conditions of the Nationwide Permit issued for the Project, the Applicants would implement an Inadvertent Drilling Fluid Release (IDFR) Contingency Plan during HDD operations to minimize the potential for substantial releases of drilling fluid into the environment during construction of the landing pipes.

After the bore hole is completed, the bore assembly, consisting of the drill bit and electronics, would be removed either by divers or the bore pipe would be withdrawn back to the bore site to remove the assembly before reinstalling the landing pipe into the completed borehole. The end of the bore pipe would be fitted with a one-way check valve to prohibit intrusion of debris into the pipe. The seaward end of the pipe would be left at a depth of approximately 3.2 feet (1 m) below the ocean floor. The pipe would then be ready for cable installation.

The Applicants estimate that drilling for the six landing pipes would generate approximately 1,022 cubic yards of cuttings and 2,000 gallons of drilling mud. Drilling fluid and cuttings generated by directional drilling for the landing pipes would be pumped back to the landing site where it would be run through a mixer separator. Cuttings would be removed from the landing site and trucked to a permitted landfill for disposal on a regular basis throughout HDD drilling operations. The separated drilling mud would be reused in the bore process while drilling is ongoing and spent drilling fluid would be trucked to a permitted landfill for disposal at the conclusion of the HDD activity.

Submarine Cable Laying and Installation

Subsea cables would be installed using a special purpose cable laying ship. Cable ships typically operate at speeds of 1 to 5 knots (1.9 to 9.3 kilometer/hour) during cable installation in open ocean waters, but speeds vary depending on the weather, seabed, and location. Subsea cables would be laid on the seafloor without trenching or burying. One or two support boats would be required to assist the cable ship during the nearshore landing operation. The support boats would be smaller vessels, sourced from local entities. Positioning of the cable ship at the exit point for the landing pipe would be accomplished using thrusters.

Once the cable ship is properly positioned, it would begin laying out cable while personnel attach suspension floats at regular intervals, as required, to allow the cable to be floated toward the subterranean HDD conduit by divers, a small motorboat, and/or other means. Once the cable reaches the HDD conduit, the floats would be removed, allowing the cable to sink and enter the HDD conduit at the proper angle. Divers would feed the subsea cable into the open subterranean HDD conduit by attaching it to the pilot line. The cable would then be pulled through the HDD conduit toward the beach manhole by a winch or other suitable method, with floats being progressively removed. Once the cable has reached shore, the cable would be secured onshore, the remaining floats would be removed to allow the rest of the cable to sink to the sea bottom, with the subsea cable correctly positioned on the seabed, in the HDD conduit, and anchored into the beach manhole.

The Project would lay variations of subsea cable that differ in nominal diameter and provide different levels of cable armoring given the conditions and environment the cable is being placed in. Subsea cables used for this application would have a nominal diameter of less than 2-inches (5.1 cm). Articulated pipe composed of 5.7-inch (14.4 cm) diameter ductile iron pipe segments would be installed around two subsea cables from the exit point of the landing pipes seaward for a distance of 82 feet (25 m) and around one of the subsea cables for a distance of 49 feet (15 m). The articulated pipe would provide additional abrasion and impact protection for the subsea cable and would not be secured to the seafloor.

The nearshore landing operation would occur during daylight hours and suitable conditions (calm weather and minimal swell) and is anticipated to take approximately 1 day. The cable ship and support boats would comply with applicable federal and state regulations and conventions addressing navigational safety, safe operations, and pollution prevention measures. A Local Notice to Mariners would be prepared in accordance with U.S. Coast Guard (USCG), District 14 requirements. A Local Notice to Mariners would provide information concerning aids to navigation, hazards to navigation, and information on the presence of Project vessels within the State of Hawai‘i waters. The USCG would issue the Local Notice to Mariners to alert other vessels of the cable ship’s presence, expected time in the area, and contact information.

Best Management Practices

The Applicants will comply with the following terms and conditions outlined in the Nationwide Permit issued for the Project:

a. Permittee will implement and abide by the best management practices, avoidance, and minimization measures provided with the Nationwide Permit application material, including adherence to an IDFR Contingency Plan.

b. Permittee will implement and abide by the general and activity specific minimization measures in the Standard Local Operating Procedures for Endangered Species in the Central and Western Pacific Region (Pac-SLOPES) and the Essential Fish Habitat Programmatic Agreement between the U.S. Army Corps of Engineers (USACE) and National Marine Fisheries Service (NMFS).

c. Permittee will contact the USCG at least two weeks prior to beginning of in-water landing pipe installation or cable laying to request publication of a Local Notice to Mariners. USCG may be reached at SecHonoWaterways@uscg.mil and D14-DG-PJdpw@uscg.mil.

d. Permittee will notify NOAA’s National Ocean Service (NOS) upon completion of the activities authorized by the Nationwide Permit. Notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). Notifications must be sent to NOS, either in mailed correspondence to Nautical Data Branch, Office of Coast Survey, N/CS26, 1315 East-West Highway, Silver Spring, MD 20910-3282 or by electronic mail correspondence, with the requisite documents attached, through ocs.ndb@noaa.gov.

e. Permittee will comply with the General Conditions of the Clean Water Act, Section 401 Blanket Water Quality Certification (WQC) WQC1092 issued for the Nationwide Permit by the State of Hawai‘i Department of Health, Clean Water Branch.

The following sections describe the existing conditions within State submerged lands and State marine waters that are proposed for use within the Conservation District. Refer to the Final Environmental Assessment (EA) (ICF 2025) for additional analysis pertaining to the terristial portions of the Project that are located outside the Conservation District.

Prior Conservation District Use Permits or Site Plan Approvals

There have been no prior Conservation District Use Permits or Site Plan Approvals for this Project.

Existing Access to the Site

The cable landing site at Barbers Point Beach Park would be accessed via ʻŌlaʻi Street for set-up of the HDD work area. The cable laying ship and support boats that would be utilized for installation of the landing pipes and subsea cables would access offshore work areas by way of navigable waters.

Existing Buildings/Structures

There are no existing buildings or structures within State submerged lands or State marine waters where Project infrastructure is proposed.

Existing Utilities

There are no existing electrical, communication, gas, drainage, water or wastewater utilities within State submerged lands or State marine waters where Project infrastructure is proposed. There is a concrete storm outfall located on the property adjacent to Barbers Point Beach Park (TMK [1] 9-1-026:027) that extends into the surf zone. The outfall would not be affected by Project activities.

Physiography (Geology, Topography, and Soils)

Offshore geophysical data collected along the HDD alignments indicate that the seabed consists mainly of sparse, migrating sand over rock and fractured rock near shore and sand with exposed outcropping rock going seaward. At the HDD exit points, benthic surveys indicate a nearly flat limestone fossil reef surface that terminates in a steep sloping face (approximately 45-60 degrees). The sloping reef face terminates in a junction with a hard limestone fossil reef platform or sand plains that extend seaward (MRC 2025).

Hydrology/Coastal Waters

State marine waters seaward of the cable landing site at Barbers Point Beach Park (TMK [1] 9-1-026:027) are classified as Class A marine waters by the Hawaiʻi Department of Health – Clean Water Branch (HDOH CWB 2025). *Class A waters*, as defined in HAR Section 11-54-3 (c)(2), are defined as

those waters in which the objective is to protect recreational uses and aesthetic enjoyment, while also ensuring the protection and propagation of fish, shellfish, and wildlife. The State of Hawai'i established basic water quality criteria for open coastal waters, detailed in HAR Section 11-54-6, which includes specific criteria applicable to marine waters, including pH, dissolved oxygen, temperature, and salinity. However, insufficient data has been obtained from the Barbers Point Beach Park monitoring site (HI593573) to determine if the coastal waters offshore Barbers Point are in attainment (see Final EA Section 2.16, *Marine Water Quality*).

Flora and Fauna

Biological resources occupying State submerged lands and State marine waters within the Conservation District include marine and nearshore habitats, essential fish habitat (for pelagic species, bottomfish and seamount groundfish, crustacean, and coral reef ecosystems), and federal and state threatened or endangered species including six endangered species of whale, five species of threatened or endangered sea turtles, the endangered the Hawaiian monk seal (*Monachus schauinslandi),* the Giant Manta Ray (*Mobula birostris)*, and the Oceanic Whitetip Shark (*Carcharhinus longimanus*).

The nearshore benthic habitat between the shoreline and the proposed HDD exit points consists of alternating areas of flat limestone pavement and sand channels with no dense aggregation of corals. The overall physical structure in the vicinity of the HDD exit points consists of a nearly flat fossil limestone reef surface that terminates in a steep sloping face. The seaward terminus of the sloping reef face consists of a juncture with flat plains consisting of white calcareous sand. Sand plains are populated by patches of seagrass (*Halophila sp.*) interspersed with expanses of *Avrainvillea lacerate*, commonly referred to as "mudweed". Dive surveys completed in March 2025 found that three of the six HDD exit points had benthic substrate comprised of uniform beds of sand that avoid coral and seagrass within a 49-foot (15 m) radius of the exit point. Three of the six HDD exit points are located on hard bottom consisting of limestone fossil reef that is colonized by turf algae, macroalgae, and small scattered corals. One of the HDD exit points on hard bottom avoided coral and two of the HDD exit points had small and sparsely distributed coral colonies comprised of cauliflower coral (*Pocillopara meandrina*) and lobe coral (*Porites lobata*) (MRC 2025).

A Biological Assessment and Essential Fish Habitat Assessment was prepared for the Project to facilitate consultation between USACE and NMFS under Section 7 of the Endangered Species Act (ESA) and the Magnuson-Stevens Fishery Conservation and Management Act. On September 10, 2025, the USACE concluded ESA Section 7 programmatic consultation and found that the Project is consistent with the Standard Local Operating Procedures for Endangered Species in the Central and Western Pacific Region (Pac-SLOPES). NMFS concurred with the USACE determination that the Project is not likely to adversely affect endangered or threatened species under the ESA or destroy or adversely modify designated critical habitat. Similarly, the USACE and NMFS verified that the Project meets the conditions of the Essential Fish Habitat Programmatic Consultation on September 17, 2025.

Natural Hazards

The coastal environment at the shoreline and seaward of the cable landing site at Barbers Point Beach Park (TMK [1] 9-1-026:027) is subject to coastal hazards such as flooding, sea level rise, coastal erosion and storm waves arising from hurricanes, tropical storms, or more rarely tsunami.

The area immediately makai of the shoreline is located in Flood Zone VE (Coastal High Hazard District) where wave action and fast-moving water can be associated with a base flood event. This same area is also within the 1.1-foot (0.3-m) future sea level rise scenario as modeled by the Pacific Islands Ocean Observing System (PacIOOS 2018).

Because the Project is a coastal dependent development that must be located near the shoreline to facilitate the landing of subsea telecommunication cables, complete avoidance of coastal hazards is not feasible. However, the landing pipes and subsea cables proposed for installation on State submerged lands within the Conservation District are specifically built for the marine environment and are designed to be resilient to flooding and inundation by sea water. The proposed landing pipes that would house the subsea cables would be directionally drilled at an estimated depth of 31 feet (9.5 m) beneath the shoreline and would also not be affected by coastal erosion processes.

Historic and Cultural Resources

Cable route surveys conducted for the Project did not identify potential submerged cultural resources (i.e., wrecks) within the Project area to the limits of the State of Hawai‘i marine waters (3 nautical miles from shore). A records search with the Bureau of Ocean Energy Management, the State Historic Preservation Division (SHPD), and SHPD's Hawai‘i Cultural Resource Information System (HICRIS) identified three potential submerged resources offshore Barbers Point: the *Arthur*, a British brig belonging to Captain Barber which was reported lost near Barbers Point in 1796; the *Liliu*, a schooner reported lost in 1877; and an "unknown" potential submerged cultural resource identified during the Pearl Harbor Deepwater Maritime Heritage Resources Survey in 2005. The *Arthur*, the *Liliu*, and the unknown potential submerged resource are located at distances of 420 meters, 789 meters, and 1,026 meters from the subsea cable centerline, respectively, and are well outside the Area of Potential Effect (APE) for the Project. Biocultural resources that were identified seaward of Barbers Point Beach Park (TMK [1] 9-1-026:027) through consultation for the Cultural Impact Assessment and Ka Pa‘akai Analysis (Pacific Legacy 2025) include fisheries, *limu*, coral, and marine ecosystems generally.

Cultural resources within the terrestrial portion of the APE (outside the Conservation District) include two previously identified historic properties: a portion of the Oahu Railway and Land Company (OR&L) Railroad right-of-way (State Inventory of Historic Places [SIHP] site number 50-80-12-07387/50-80-12-09714) and a crushed limestone road (SIHP 50-80-12-08933). Additional potential historic properties that were identified through a Literature Review and Field Inspection conducted by Pacific Legacy, Inc. include bridges, canals, culverts, ditches, and infrastructure associated with commercial agriculture during the late 19th to 20th century. None of these identified historic resources are located in the marine portion of the Project area or the Conservation District.

Consultation with SHPD pursuant to Hawai‘i Revised Statutes (HRS) Chapter 6E was initiated on April 11, 2025 with submittal of the 6E Form through HICRIS. The 6E Form covers the entire scope of the Project (marine and terrestrial) and the Project was assigned HICRIS Project No. 2025PR00447. In a letter dated June 23, 2025, SHPD requested that an architectural reconnaissance level survey and archaeological inventory survey (AIS) with subsurface testing be completed. SHPD further requested that the AIS testing strategy be developed in consultation with SHPD, Native Hawaiian Organizations, and other interested organizations and individuals (Attachment 1). SHPD approved the Applicant's AIS testing strategy on November 19, 2025, and AIS testing is currently planned to commence in December 2025.

Evaluation Criteria

The Department or Board will evaluate the merits of a proposed land use based upon the following eight criteria (ref §13-5-30(c)).

1. **The purpose of the Conservation District is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. How is the proposed land use consistent with the purpose of the Conservation District? (ref §13-5-1)**

Under HAR, Chapter 13-5-22 through 13-5-25, which governs uses in the State Conservation District, telecommunication facilities are listed as an identified land use (P-14 Telecommunications; D-1, *New telecommunications facility*), provided that a management plan is approved with the permit. The Applicants have prepared a Management Plan for the project in accordance with Exhibit 3 (*Management Plan Requirements*) of HAR 13-5. Additionally, the Project has been designed and sited to avoid or minimize impacts to natural resources, the shoreline, benthic habitats (including corals and seagrass), protected species, and cultural resources, and would not adversely affect public health and safety. The Project would have beneficial effects on the economic and social welfare of the community and state due to the improved telecommunication infrastructure that the Project would provide. The provision of critical broadband infrastructure for the State of Hawai'i would have multiple benefits for innovation, economic development, healthcare, education, public safety, research, public services, and entertainment and would increase broadband capacity to support forecast population growth. Therefore, the Project is consistent with the purpose of the Conservation District.

2. **How is the proposed use consistent with the objectives of the subzone of the land on which the land use will occur? (ref §13-5-11 through §13-5-15)**

The marine portion of the Project is located within the State Conservation District, Resource Subzone. The Resource Subzone, which encompasses all lands and marine waters between the shoreline and the extent of the State's jurisdiction (seaward out to 3 nm), has the objective of ensuring, with proper management, the sustainable use of the area's natural resources.

The Project has been designed to avoid or minimize impacts to the shoreline, the seabed, marine waters, and other marine resources (such as coral and seagrass) and would be consistent with the objectives of the Resource Subzone. The landing pipes would be constructed with HDD, and subsea cables would be surface laid (without trenching or burial), which would minimize impacts on the nearshore and marine environment. As described in the Final EA at Section 2.7, *Marine and Nearshore Biological Resources*, dive surveys were utilized to identify the most favorable (least impactful) locations to exit the landing pipes in the nearshore environment to reduce impacts on valued resources such as coral and seagrass. During installation of the Project, the Applicants would comply with all conditions of Nationwide Permit 57 to avoid and minimize impacts on water quality and marine biological resources (including protected marine species and essential fish habitat) during construction. The Applicants will also comply with the General Conditions of the Clean Water Act, Section 401 Blanket WQC (WQC1092) issued for the Nationwide Permit by the State of Hawai'i Department of Health, Clean Water Branch, ensuring the sustainable use of the area's natural resources.

3. Describe how the proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled "Coastal Zone Management"

A detailed discussion of how the proposed Project complies with HRS Chapter 205A, Coastal Zone Management is provided in Section 4.2.4, *Coastal Zone Management Act, Chapter 205A, Hawai'i Revised Statutes* of the enclosed Final EA (ICF 2025) and is briefly summarized below for the marine portion of the Project that is in the Conservation District.

For the marine portion of the Project specifically, Nationwide Permit verification for the proposed landing pipe and subsea cable installation confirmed that the project complies with the requirements of the Coastal Zone Management Consistency Concurrence issued for the Nationwide Permit by the State of Hawai'i Department of Business, Economic Development and Tourism, Office of Planning during the Nationwide Permit reissuance process in 2021.

Recreational Resources

The Project would not impact ongoing and continued public access and use of the shoreline or beach park where the cable landing site is proposed. The Project would utilize HDD for landing pipe installation, which would avoid direct impacts to the beach and shoreline. The HDD drill rig would be surrounded by noise fencing during construction to reduce noise levels at the beach park, and public access to the shoreline would not be restricted. Upon completion of construction all equipment would be removed and the site would be restored to original or better condition.

During subsea cable installation, access to the work area around the cable laying vessel would be controlled to maintain safe distances between the work area and other ocean uses. A Local Notice to Mariners would be published prior to the start of construction to advise mariners to avoid the work area during subsea cable installation (for an estimated duration of 2 weeks per cable in State waters). Therefore, impacts on coastal recreational resources would be temporary and short-term. No long-term impacts on public access and use of coastal recreational resources are anticipated.

Historic Resources

A records search conducted for the Project identified three potential submerged resources offshore Barbers Point: the *Arthur*, a British brig belonging to Captain Barber which was reported lost near Barbers Point in 1796; the *Liliu*, a schooner reported lost in 1877; and an "unknown" potential submerged cultural resource identified during the Pearl Harbor Deepwater Maritime Heritage Resources Survey in 2005. The *Arthur*, the *Liliu*, and the unknown potential submerged resource are located at distances of 420 meters, 789 meters, and 1,026 meters from the subsea cable centerline, respectively, and are well outside the Area of Potential Effect for the Project. Marine surveys conducted for the cable route(s) identified no potential submerged historic properties (i.e., wrecks) within the survey limits between the exit point for the landing pipes on State submerged lands and the limit of State of Hawai'i marine waters (3 nm from shore).

Consultation with SHPD pursuant to HRS Chapter 6E was initiated for the Project on April 10, 2025 under HICRIS No. 2025PR00447 and consultation is ongoing.

Scenic and Open Space Resources

Project infrastructure at the cable landing site, including the landing pipes, would be installed subsurface and would not affect scenic resources. Use of HDD for the landing pipe installation would avoid alteration of any coastal landforms and public views toward and along the shoreline. The

construction phase would involve the temporary presence of cable laying vessels and construction equipment visible to users of Barbers Point Beach Park, but this would not significantly impact views toward the ocean or along the shoreline. Upon completion of the installation, vessels and construction equipment would be removed, and only ground-level manholes and vault covers would be visible at the beach park. The completed Project would not diminish the quality of coastal scenic and open space resources.

Coastal Ecosystems

The Project is not anticipated to have significant adverse impacts on coastal ecosystems. The landing pipes would be constructed with HDD, and subsea cables would be surface laid (without trenching or burial), which would minimize impacts on the nearshore and coastal environment. As described in Section 2.7, *Marine and Nearshore Biological Resources* of the Final EA, dive surveys were utilized to identify the most favorable (least impactful) locations to exit the landing pipes in the nearshore environment to reduce impacts on valued resources such as coral and seagrass. During installation of the Project, the Applicants would comply with all conditions of Nationwide Permit 57, including the conditions of the blanket Water Quality Certification, to avoid and minimize impacts on marine biological resources and water quality during construction. Long-term operation of the Project would not affect coastal ecosystems.

Economic Uses

The Project is a coastal dependent development that must be located near the shoreline to facilitate the landing of subsea telecommunication cables. The Project would provide critical broadband infrastructure to the State of Hawai‘i and support the state’s economy as described in the Final EA at Section 4.2.5.1, *Section 226-10: Objectives and Policies for the Economy—Potential Growth and Innovative Activities* and Section 4.2.5.2, *Section 226-10.5: Objectives and Policies for the Economy—Information Industry*. The Project would also support the economic and other goals of the Hawai‘i Broadband Initiative (see the Final EA at Section 4.2.6, *Hawai‘i Broadband Initiative, Hawai‘i Broadband Strategic Plan, and Connect Kākou*) and the Hawai‘i State Comprehensive Economic Development Strategy (see Final EA Section 4.2.6, *Hawai‘i Broadband Initiative, Hawai‘i Broadband Strategic Plan, and Connect Kākou* and Section 4.2.7, *Hawai‘i Comprehensive Economic Development Strategy*, respectively).

Coastal Hazards

As described in Section 2.2, *Climate Change and Sea Level Rise*, and Section 2.8, *Natural Hazards* of the Final EA, the Project infrastructure at the cable landing site has been designed to be resilient to coastal flooding and other coastal hazards, such as future sea level rise, over the expected life of the subsea cables. Because the Project is coastal dependent development that must be located near the shoreline to facilitate the landing of subsea telecommunication cables, complete avoidance of coastal hazards is not feasible. Project infrastructure would be installed underground at the cable landing site and flood hazards would not affect Project components. The Project would not increase the potential for flooding or coastal erosion. The proposed cable landing site is located within a tsunami evacuation zone. In the event of a tsunami warning during construction, construction activities would halt, and loose construction material and equipment would be removed from the site or secured until such time as the warning is lifted. All Project components at the cable landing site would be installed underground and would be resilient to tsunami or storm waves and flooding, as they are designed for installation in the marine environment.

Managing Development

The *Managing Development* provision pertains to improving the development review process, communication, and public participation in the management of coastal resources and hazards.

The discretionary permit process for the Conservation District Use Permit provides several opportunities for public notice and public participation in the management of coastal resources, including through publication of the Draft and Final EA; through consultation for the Cultural Impact Assessment, Ka Paʻakai Analysis, and HRS 6E Consultation; and through the public hearing for Conservation District Use Application (CDUA). The environmental review conducted pursuant to HRS Chapter 343 included early consultation with agencies, elected officials, community members, and other stakeholders that may be affected by the Project and provided opportunity for public comment on the Draft EA. Comments received on the Draft EA are responded to in Section 7.4 of the enclosed Final EA. Therefore, the Project is consistent with the *Managing Development* provision of HRS Chapter 205A.

Public Participation

Opportunities for public participation in review of the Project are described in detail in *Chapter 7, Consultation and Coordination* of the enclosed Final EA and are briefly summarized below:

- The Applicants conducted early consultation during development of the Draft EA through the distribution of an early consultation letter and the conduct of pre-application meetings.
- To initiate consultation for the Cultural Impact Assessment and Ka Paʻakai Analysis (Appendix B of the Final EA), letters and project area maps were sent to a total of 40 contacts that included government agencies, advisory councils, local community organizations, and individuals with generational ties to Honouliuli ahupuaʻa. In addition, an invitation to participate in consultation for the Cultural Impact Assessment and Ka Paʻakai Analysis was posted to the Public Notice Board for Ka Wai Ola in January 2025.
- The Draft EA was published for a 30-day comment period, providing opportunity for public participation in development of the Final EA.
- The Applicants made a presentation to the neighborhood board at the regular meeting on April 23, 2025. In accordance with the application requirements for the Special Management Area (SMA) Major Permit, written notification of the neighborhood board presentation was distributed to property owners adjacent to the SMA permit area on April 10, 2025.
- Public hearings are also required prior to decisions on discretionary permits for the Project including for the CDUA.

Beach Protection

As noted above under *Recreational Resources*, the Project would utilize HDD for landing pipe installation, which would avoid direct impacts to the beach and shoreline. The HDD drill rig would be surrounded by noise fencing during construction to reduce noise levels at the beach park, and public access to the shoreline would not be restricted. Landing pipes installed beneath the shoreline would not directly effect public use and recreation on the beach during long-term operation of the Project.

Marine Resources

The Project would not have significant adverse impacts on marine resources. The landing pipes would be constructed with HDD and subsea cables would be surface laid (without trenching or burial) which would minimize impacts on the nearshore and marine environment. As described in the Final EA at Section 2.7, *Marine and Nearshore Biological Resources*, dive surveys were utilized to identify the most favorable (least impactful) locations to exit the landing pipes in the nearshore environment to reduce impacts on valued resources such as coral and seagrass. During installation of the Project, the Applicants would comply with all conditions of Nationwide Permit 57, including the conditions of the programmatic consultations with NMFS and conditions of the blanket Water Quality Certification, to avoid and minimize impacts on marine resources and water quality during construction. With implementation of the conditions of the USACE Nationwide Permit, NMFS concurred with the USACE determination that the Project is not likely to adversely affect endangered or threatened species under the ESA or destroy or adversely modify designated critical habitat. On September 10, 2025, the USACE concluded ESA Section 7 programmatic consultation and found that the Project is consistent with the Standard Local Operating Procedures for Endangered Species in the Central and Western Pacific Region (Pac-SLOPES). Similarly, the USACE and NMFS verified that the Project meets the conditions of the Essential Fish Habitat Programmatic Consultation on September 10, 2025. Compliance with the terms and conditions of the Nationwide Permit will promote the protection, use, and development of marine and coastal resources to assure their sustainability.

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

The Project has been sited and designed to avoid substantial adverse impacts to existing natural resources within the surrounding area, community and region. The subsurface landing pipes would extend below and beyond the shoreline with the exit points located 4,300 to 5,400 feet (1,311 to 1,646 m) offshore, and disturbance to the seafloor would be limited to a small area around the exit point for the HDD bore. Subsea cables would be laid with trenching or burial, further minimizing impacts in the nearshore and marine environment. The Applicants would comply with all terms and conditions of the Nationwide Permit to minimize impacts to protect species, essential fish habitat, and marine water quality. As addressed in detail in Section 6.2, *Significance Criteria*, of the Final EA, the Project is not anticipated to result in significant impacts as defined by HAR Section 11-200.1-13.

5. Describe how the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

All Project infrastructure and proposed uses within the Resource Subzone (submerged lands seaward of Tax Map Key [TMK] [1] 9-1-026:027) are specifically designed to be compatible with the marine and nearshore environment and are resilient to coastal processes and hazards. The landing pipes would be installed subsurface at a depth of approximately 31 feet (9 m) beneath the shoreline and extend beneath the seafloor to exit points located 4,300 to 5,400 feet (1,311 to 1,646 m) offshore making them resilient to storm waves, flooding, inundation, and coastal erosion. Similarly, subsea cables are specifically designed for the marine and nearshore environments and variations of cable types (i.e., such as Double Armored) are manufactured to meet specifications for cable installation in high-energy environments (i.e., with wave energy, fast currents, sediment mobility, etc.) or to provide additional abrasion resistance in areas of rock outcrops where abrasion is a risk.

Therefore, the Project would be compatible with the locality, surrounding areas, and appropriate to the physical condition and capabilities of the area.

6. Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

The proposed use would preserve the natural beauty of the area through installation of the landing pipes subsurface via HDD and by laying the subsea cables on the surface of the seafloor out to the limit of the State of Hawai'i marine waters. No visible structures would be installed within the Resource Subzone, preserving the natural beauty and open space characteristics of the shoreline area and nearshore environment. Refer to the *Applicant Committed Measures* for additional information about avoidance and minimization measures for the Project that would reduce impacts to the physical and natural environment during construction of the marine portion of the Project. In addition, the Applicants are currently working with City and County of Honolulu, Department of Parks and Recreation to remove broken concrete pipes that have migrated from the adjacent property to the surf zone seaward of Barbers Point Beach Park (TMK [1] 9-1-026:027) that will improve the open space characteristics of the shoreline area.

7. If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

The Project would not subdivide Conservation District land.

8. Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.

Avoidance and minimization measures identified in Chapter 2, *Affected Environment and Environmental Impacts* of the Final EA and compliance with federal, state and local regulations and permit conditions would ensure that the proposed land use would not be materially detrimental to public health, safety, and welfare. As addressed in detail in Section 6.2, *Significance Criteria*, of the Final EA, the Project is not anticipated to result in significant impacts as defined by HAR Section 11-200.1-13 and specifically, would not:

- Irrevocably commit a natural, cultural or historic resource
- Curtail the range of beneficial uses of the environment
- Conflict with the State's environmental policies or long-term environmental goals established by law
- Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community or state
- Have a substantial adverse effect on public health
- Involve adverse secondary impacts, such as population changes or effects on public facilities
- Involve a substantial degradation of environmental quality
- Be individually limited but have substantial adverse cumulative effects
- Have substantial adverse effect on a rare, threatened, or endangered species, or its habitat
- Have a substantial adverse effect on air and water quality, or ambient noise

- Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area
- Have a significant adverse effect on scenic vista and view planes identified in county or state plans or studies
- Require substantial energy consumption or emit substantial greenhouse gases

The Project would have beneficial effects on the economic and social welfare of community and state due to the improved telecommunication infrastructure that the Project would provide. The provision of critical broadband infrastructure for the State of Hawai'i would have multiple benefits for innovation, economic development, healthcare, education, public safety, research, public services, and entertainment and would increase broadband capacity to support forecast population growth.

Articles IX and XII of the State Constitution, other state laws, and the courts of the State, require government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiian and other ethnic groups.

1. **Please provide the identity and scope of cultural, historical, and natural resources in which traditional and customary Native Hawaiian rights are exercised in the area.**

A Cultural Impact Assessment and Ka Pa‘akai Analysis was completed for the Project and is included as Appendix B of the enclosed Final EA (ICF 2025). Barbers Point Beach Park lies within the uplifted coral reef of the ‘Ewa Plain, which is characterized by its abundance of limestone pit features. These pits have been found to contain significant cultural and paleontological deposits, as well as burials. Previous consultation efforts for projects in Honouliuli have identified a range of cultural resources and practices in Honouliuli, including rich marine fisheries, salt pans, coastal freshwater sources, and *limu*; natural coral and rock coves used for shelter; limestone pit features with potential to contain *iwi kupuna* (human skeletal remains); and the spiritual strength of burial areas in Honouliuli.

Consultation specific to this Project identified the potential for *iwi kūpuna* to be present in or near the Project area; the potential presence of access trails or resource gathering sites in or near the Project area; valued offshore cultural resources in the general vicinity of the Project area, including those identified during the desktop review (the *Arthur* and the *Liliu*); offshore and nearshore biocultural resources including fisheries, *limu*, and coral; and potential subterranean water sources underlying the limestone cap rock of Barbers Point.

The possible presence of *kālua, or* limestone pit features, within the Project area was the greatest concern expressed by CIA participants. Although the coastal portion of the Project area has previously been disturbed, there is potential for *kālua* to be present below the surface. CIA participants expressed that *kālua* carry great cultural significance beyond that which they might contain and should be considered cultural resources in their own right. Two types of cultural practices relating to *kālua* were identified by participants: *kāluamahi* (traditional agricultural practices in limestone pits) and *kāluawai* (traditional water access points in limestone pits). In addition, CIA participants emphasized the potential for *kālua* to contain cultural deposits, environmental data, and/or burials, and that there is potential to facilitate a return to traditional burial practices in Honouliuli which would include *kanu* (burial) into the *kālua.* Consultation participants also emphasized the importance of understanding Honouliuli as a living cultural landscape, with descendants and practitioners continuing to perpetuate, revive, and build on long-standing traditional cultural practices.

2. **Identify the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action.**

Potential impacts to resources and traditional and customary Native Hawaiian rights included the potential for the Project to encounter *iwi kūpuna*; potential impacts to submerged cultural resources; potential impacts to nearshore resources like coral and *limu* from Project activities; potential impacts to groundwater underlying the limestone cap rock; and potential impacts to the portion of the OR&L Railroad right-of-way that intersects with the Project area. The Applicants implemented the feasible actions described below to protect Native Hawaiian rights, and with

implementation of these feasible actions, the Applicants do not anticipate that the Project would affect or impair Native Hawaiian rights including rights customarily and traditionally exercised for subsistence, cultural or religious purposes.

3. What feasible action, if any, could be taken by the Board of Land and Natural Resources regarding your application to reasonably protect Native Hawaiian rights?

The feasible actions taken by the Applicants to protect Native Hawaiian rights include: (1) avoiding previously recorded submerged cultural resources and impacts to marine ecosystems through project design; (2) conducting additional surveys to identify historic properties in the Project area; (3) ensuring legal and respectful protocols are in place in the event that *iwi kūpuna* are encountered during ground-disturbing activities; (4) employing best management practices during construction to minimize adverse impacts on marine ecosystems and biocultural resources in the nearshore environment; (5) sharing results of the benthic survey completed for the Project with a community member leading ecosystem restoration efforts in Honouliuli; (6) continuing consultation and collaboration with community members throughout the HRS Chapter 6E consultation for the Project; (7) implementing archaeological and/or cultural monitoring during ground-disturbing activities in areas to be determined through HRS Chapter 6E consultation, and; (8) consulting with the SHPD and the Hawaiian Railway Society to mitigate any potential impacts on the OR&L Railroad with the fronthaul build. With these Applicant-committed measures, no additional feasible actions to be taken by the Board of Land and Natural Resources are recommended.

Other Impacts

1. **Does the proposed land use have an effect (positive/negative) on public access to and along the shoreline or along any public trail?**

The Project would not impact ongoing and continued public access and use of the shoreline or beach park. The Project would utilize HDD for landing pipe installation, which would avoid direct impacts on the beach and shoreline. The HDD drill rig would be surrounded by noise fencing during construction to reduce noise levels at the beach park, and public access to the shoreline would not be restricted. Upon completion of construction all equipment would be removed, and only ground-level manholes and vault covers would be visible at the beach park. The construction work area at the beach park would be restored to original or better condition upon completion of construction and there would be no effect on public access to and along the shoreline or along any public trail during long-term operation of the Project.

2. **Does the proposed use have an effect (positive/negative) on beach processes?**

The Project would not affect beach processes, including waves, tides, currents, weathering, drift, or changes in sea level. As shown on the HDD Plan and Profile Drawing (**Figure 2**), the landing pipes would be installed at a depth of approximately 31 feet (9 m) beneath the shoreline ensuring that beach processes would remain unaltered.

3. **Will the proposed use cause increased sedimentation?**

Construction of the landing pipes could cause a temporary increase in sedimentation when the HDD bore exits the seafloor approximately 4,300 to 5,400 feet (1,311 to 1,646 m) from the shoreline (**Figure 2**). The bore hole to install the landing pipe would be approximately 12" in diameter and the total amount of seabed disturbance around each HDD exit point could be up to 10 feet by 10 feet (3 m by 3 m). Subsea cables would be laid on the seafloor without trenching or burying. Subsea cable installation has the potential to increase turbidity during installation due to disturbance of bottom sediments. These impacts would be temporary and localized around the cable footprint. The level of sedimentation caused by landing pipe and subsea cable installation would be negligible compared to natural sediment movement in the nearshore environment.

The HDD process utilizes an inert, nontoxic mixture of water and bentonite clay. This mixture, known as drilling mud, is necessary to facilitate the drilling process. Bentonite is a non-toxic, naturally occurring clay commonly used in farming practices; however, if large volumes of bentonite are discharged, the clay can act like a concentrated silt and cause environmental degradation. To reduce the potential for release of drilling mud into the marine environment, the drilling fluid would be changed to water at the end of the bore hole. This would minimize the release of drilling fluid when the drill bit exits the seafloor.

During boring operations, it is possible that fractures in the underlying rock substrate may potentially result in the inadvertent release of bentonite clay into the environment. This event is described as an Inadvertent Drilling Fluid Release (IDFR) and typically occurs in highly fractured soils or if the bore path is shallow. To minimize adverse impacts on marine water quality, an IDFR Contingency Plan was prepared. The IDFR Contingency Plan includes procedures for prevention, timely detection, containment, and response should an inadvertent release of drilling fluid occur. The potential for inadvertent release of drilling fluid would only be present during drilling

operations for the landing pipes. Once landing pipes and subsea cables are installed, there would be no further sources of sedimentation in the marine environment.

4. Will the proposed use cause any visual impact on any individual or community?

The construction phase of the Project would involve the temporary presence of cable laying vessels and construction equipment visible to users of Barbers Point Beach Park, but this would not substantially affect public views toward the shoreline and ocean. Upon completion of the installation, vessels and construction equipment would be removed, and only ground-level manholes and vault covers would be visible at the beach park. Project components within the marine environment would not be visible following construction.

5. Please describe any sustainable design elements that will be incorporated into the proposed land use.

Not applicable. The proposed use of the Conservation District is entirely on submerged lands and would not construct buildings or structures that could incorporate sustainable design principles.

6. If the project involves landscaping, please describe how the landscaping is appropriate to the Conservation District.

Not applicable. The proposed use of the Conservation District is entirely on submerged lands and does not involve landscaping.

7. Please describe Best Management Practices that will be used during construction and implementation of the proposed land use.

Please refer to *Best Management Practices* included in this CDUA above for measures that will be adhered to during installation of landing pipes and subsea cables.

8. Please describe the measures that will be taken to mitigate the proposed land use's environmental and cultural impacts.

The *Best Management Practices* included in this CDUA would be implemented to minimize the potential for environmental impacts for marine portions of the Project that are within the Conservation District. Consultation on cultural impacts was completed for the Project overall (terrestrial and marine portions) as described in Final EA Section 2.3, *Cultural Resources and Practices* and the measures that the Applicants will implement to avoid and minimize impacts on cultural resources and practices during implementation of the Project are described in Final EA Section 2.3.3, *Avoidance and Minimization Measures*. These measures include avoidance of previously recorded submerged cultural resources identified during the desktop review such as the *Arthur* and the *Liliu* (see Existing Conditions).

To minimize impacts on biocultural resources like *limu*, coral, and marine ecosystems, dive surveys were utilized to identify the most favorable (least impactful) locations for siting the HDD exit points on the seafloor, seaward of Barbers Point Beach Park (see Final EA Section 2.7.1.1) and disturbance of the seafloor would be minimized through directional drilling for landing pipe installation and surface laying of subsea cables. The Applicants will implement an IDFR Contingency Plan during drilling operations to reduce the potential for an inadvertent release of drilling fluid in marine waters and comply with all the General Conditions of the blanket WQC issued with the NWP to avoid degradation of marine water quality during Project construction.

Single Family Residential Standards

The single family residential standards outlined in HAR Chapter 13-5, Exhibit 4 are not applicable to the proposed use of the Conservation District.

References

ICF. 2025. O‘ahu Subsea Cable Telecommunications Project Final Environmental Assessment and Finding of No Significant Impact. October. Available at: https://files.hawaii.gov/dbedt/erp/Doc_Library/2025-10-08-OA-FEA-Oahu-Subsea-Cable-Telecommunications-Project.pdf

Hawaii Department of Health—Clean Water Branch (HDOH CWB). 2025. *Water Quality Standards and Maps*. Available: https://health.hawaii.gov/cwb/clean-water-branch-home-page/water-quality-standards/. Accessed: March 28, 2025.

Marine Research Consultants, Inc. (MRC). 2025. *Marine Biota Survey – Subsea Cable Telecommunications Project, Barbers Point, O‘ahu, Hawai‘i*. May.

Pacific Legacy. 2025. *Cultural Impact Assessment for the Proposed O‘ahu Subsea Cable Telecommunications Project, Honouliuli Ahupua‘a, ‘Ewa Moku, Island of O‘ahu*. Prepared by Jillian A. Swift, Ph.D. and Mara A. Mulrooney, Ph.D. Prepared for ICF International. March.

Attachment 1:
State Historic Preservation Division Letter (HICRIS No. 2025PR00447)

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STATE OF HAWAIʻI | KA MOKUʻĀINA ʻO HAWAIʻI
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA ʻOIHANA KUMUWAIWAI ʻĀINA

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

June 23, 2025

IN REPLY REFER TO:
Project No.: 2025PR00447
Doc. No.: 2506AM05
Archaeology, Architecture

Dawn Takeuchi Apuna
Director
City and County of Honolulu, Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaiʻi 96813
c/o Ryan Mori
ryan.mori@honolulu.gov

Fawn Y. Yamada
Right-of Way Manager
Right-of-Way Branch
State of Hawaiʻi, Department of Transportation
601 Kamokila Boulevard
Kapolei, Hawaiʻi 96707
c/o Kemamo Ho
kemamo.kl.ho@hawaii.gov

Dear Dawn Takeuchi Apuna and Fawn Y. Yamada:

SUBJECT: **Hawaii Revised Statutes (HRS) Chapter 6E-8 and 6E-42 Historic Preservation Review –**
City and County of Honolulu, Department of Planning and Permitting (DPP)
SMA Major Permit Application 2024/ELOG-2108; 2024CP-216
State of Hawaii, Department of Transportation – Highways Right-of-Way Branch
Use and Occupancy Permit Application UOA No. 623, UOA No. 643
Oahu Subsea Cable Telecommunications Project
State Project No. PMT-901A-01-98, Project No. D-AD-1(2)
Request for a Project Effect Determination
Honouliuli Ahupuaʻa, ʻEwa Districts, Island of Oʻahu
TMK: (1) 9-1-016:179 por., and 222 por.; (1) 9-1-026:027 por., and 999 (Olai Street, Kalaeloa Boulevard, Kamokila Boulevard, and Farrington Highway Right-of-Ways [ROWs])

This letter provides the State Historic Preservation Division's (SHPD's) review of the City and County of Honolulu, Department of Planning and Permitting's (DPP's) request for an effect determination for the Oahu Subsea Cable Telecommunications Project. SHPD received the submission on April 11, 2025, which consisted of maps and photographs of the project area, construction plans, two letters from the State of Hawaii, Department of Transportation (HDOT) Highways Division to BHC Civil Engineering regarding Use and Occupancy Agreement applications associated with the project (March 20, 2025, HWY-RM 3.99262 and HWY-RM 3.99263), a DPP Special Management Area Permit Determination Form and Site Development Division Master Application Form, an HRS 6E Submittal Filing Fees Form, an HRS 6E Submittal Form, an archaeological literature review and field inspection (LRFI) report (Swift et al., April 2025), and a letter from DPP initiating the HRS §6E-42 historic preservation review process and requesting the SHPD's review and comment on the project.

Humuhumu Services LLC and Starfish Infrastructure, Inc. proposes the Oahu Subsea Cable Telecommunications project within a 112-acre project area. The project includes the installation of a subsea fiber optic cable in State marine waters and State submerged lands, a cable landing site at Barbers Point Beach Park, and an underground conduit system to be installed in public road rights-of-ways (ROWs) between the cable landing site and a new telecommunication facility to be located at the University of Hawai‘i (UH) West O‘ahu Campus.

The onshore components of the project include a cable landing site at Barbers Point Beach Park where four beach manholes, three vaults, four ocean ground beds, and the onshore extent of six landing pipes would be installed. An underground conduit system for fiber optic and power cables (the fronthaul system) would be constructed within the ROWs between the cable landing site and the telecommunication facility that would be constructed on a 4.2-acre site. The fronthaul system would primarily be installed using directional boring; however, some limited areas of trenching would also be required. The project proponent is planning to use directional boring to cross beneath the OR&L Railroad, bridges, canals, storm drains, culverts and ditches.

The marine portion of the project includes the offshore extent of six landing pipes that would be directionally drilled between the shoreline and an exit point on submerged lands, and three subsea fiber optic cables that would be installed in State marine waters seaward of the cable landing site. Subsea cables would be laid directly on the surface of the ocean floor without burial to the end of the landing pipe and then pulled through the landing pipe to the beach manhole. No trenching or plowing would be involved with cable installation. Three subsea cables would be permitted and installed as part of the proposed project with plans for up to three additional subsea cables would be installed by cable suppliers at a later date.

Pacific Legacy, Inc. produced an archaeological LRFI report (Swift et al., April 2025) in support of the historic preservation review process. Pacific Legacy, Inc. conducted the field inspection over the course of four non-consecutive days: September 24, 2024, September 25, 2024, October 24, 2024, and March 6, 2025. The report includes summaries of historic land-use practices and previous archaeological investigations that have occurred within a 0.5-mile radius of the project area. Pacific Legacy, Inc. identified 17 possible significant historic properties and two artifacts within the project area. These include two previously identified historic properties consisting of a crushed limestone gravel road (State Inventory of Historic Places [SIHP] Site 50-80-12-08933) and a portion of the Oahu Railway and Land Company (OR&L) Railroad ROW (SIHP Sites 50-80-12-07387 and 50-80-12-09714). Pacific Legacy, Inc. recommends the completion of an archaeological inventory survey (AIS) with subsurface testing and the completion of an architectural reconnaissance level (RLS) survey to complete the identification of historic properties within the project area.

At this time, SHPD has insufficient information regarding the potential for the subject project to impact architectural and subsurface archaeological historic properties within the project area.

SHPD requests the following inventory surveys be completed in order to continue the HRS §6E historic preservation review process:

1. An AIS with a subsurface testing component. The report shall meet the requirements of HAR §13-276-5 and be submitted to SHPD for review and acceptance prior to issuance of the permits. **Additionally,** the project proponent and archaeological firm shall consult with our office regarding an appropriate testing strategy prior to the initiation of the AIS field work. The testing strategy should be developed in consultation with individuals knowledgeable about the project area's history including Native Hawaiian Organizations (NHOs), other interested organizations, and individuals that a project could affect historic properties of interest to them.

2. An architectural RLS report for the historic properties within the project area (ref page 85 of draft LRFI). The RLS is considered an architectural survey report and thus subject to filing fees of $450 per HAR §13-284-4(3)/HAR 13-275-4(3). The RLS must be completed by a Secretary of the Interior (SOI) qualified architect, architectural historian, or historic architect. Additionally, the report must include an assessment of integrity and site significance in accordance with Criteria a-e, as specified in HAR §13-284-6/HAR §13-275-6. The report will also include an assessment of the project’s impact to the historic properties and provide, if applicable, proposed mitigation. The RLS is part of the identification and inventory of historic resources process and SHPD may request subsequent reports per HAR §13-284-8/HAR §13-275-8.

SHPD shall notify the DPP and HDOT when the AIS report, the architectural RLS report, and any required mitigation plans are accepted, and the permitting process may continue.

Although the literature review report does not fulfill the requirements of an AIS report as specified in HAR §13-276, it serves to facilitate project planning and supports the historic preservation review process. Please send one hard copy of the document, clearly marked FINAL, along with a copy of this letter and a text-searchable PDF version of the report to the Kapolei SHPD office, attention SHPD Library. Also, submit a text- searchable PDF copy of the report to shpd.archaeology.library@hawaii.gov.

Please submit the requested survey reports along with the required filing fee ($450 each) by responding to our request in HICRIS Project No. 2025PR00447.

Please contact Mary Kodama, Architecture Branch Chief, at Mary.Kodama@hawaii.gov, for any matters regarding architectural resources, and Susan A. Lebo, PhD, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov, for any concerns regarding archaeological resources or this letter.

Aloha,

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