STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

March 21, 2023
Honolulu, Hawai'i

Approval of Stream Channel Alteration Permit Application (SCAP.5955.3) and Special Conditions to State of Hawai'i, Department of Transportation Bridge Widening and H-1 Eastbound Highway Improvements
Kalihi Stream, Kalihi, O'ahu, TMK: (1) 1-3-002:044 (west bank); no TMK (east bank)

APPLICANT
State of Hawai'i
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813

LANDOWNER
City and County of Honolulu

SUMMARY OF REQUEST

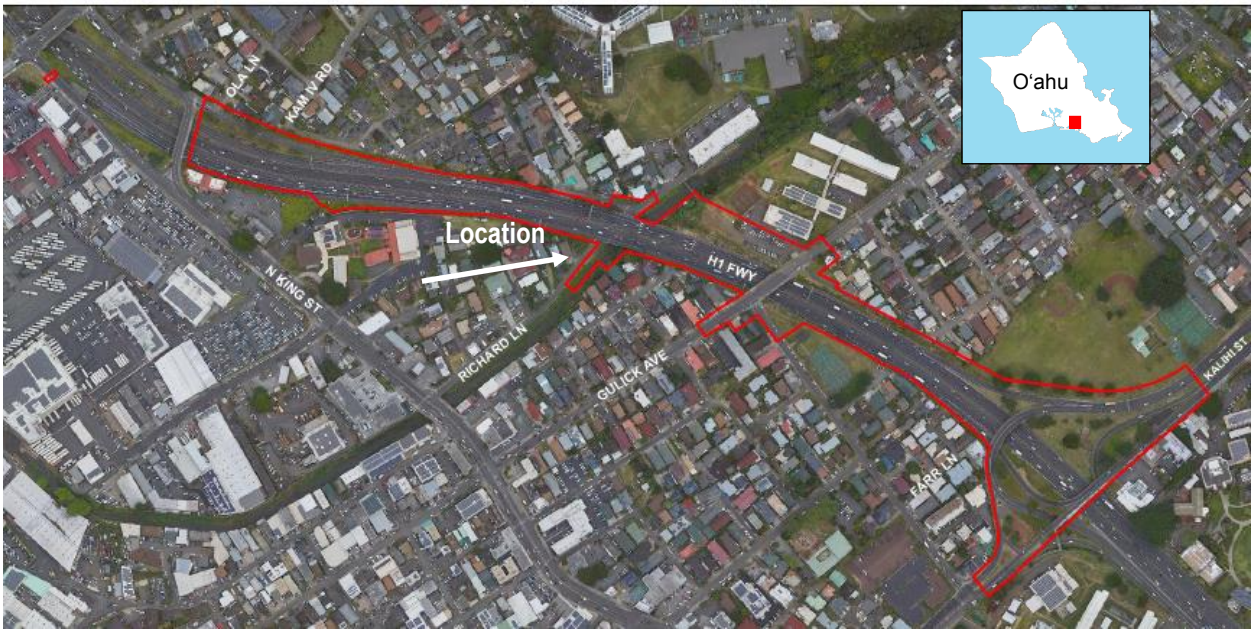
Approve Stream Channel Alteration Permit (SCAP.5955.3) by the State of Hawai'i, Department of Transportation. The project proposes to widen the Kalihi Stream bridge on the ocean side (makai) of the H-1 Highway and affect approximately 14 linear feet of the east and west bank wall to accommodate the extended bridge abutments and foundations.

BACKGROUND

On October 11, 2022, the Department of Transportation filed a complete stream channel alteration permit application that is available online at https://files.hawaii.gov/dlnr/cwrm/swreview/SCAP_5955_3.pdf.

LOCATION: Kalihi, O'ahu. See **Figure 1**.

Figure 1: Location, Makai Side H-1, Kalihi Stream, Kalihi, O‘ahu.



STREAM DESCRIPTION

The National Hydrography Dataset and the Division of Aquatic Resources classified the Kalihi Stream as perennial. The total drainage area is 5.34 square miles with a maximum basin elevation of 2,720 feet. The mean annual precipitation 104 inches and the longest flow path is 5.6 miles. The average depth of the channel is 1-foot and is tidally influenced. The substrate of the stream consists of fine cobble, rubble, and silt. The lower stretches of the Kalihi stream are channelized with rip-rap and concrete. See **Figure 2**.

PROJECT DESCRIPTION

Limited portions of the concrete-reinforced masonry (CRM) walls on both sides of Kalihi Stream will need to be demolished for construction access. After the drilled shafts and support structures have been installed, the walls will be reconstructed from salvaged lava rocks and will match the existing conditions to the extent practicable. Portions of the affected CRM wall that are below grade will be strengthened as needed to maintain structural integrity. Following the extension of the bridge abutments, two prestressed girders with a concrete deck will be added over Kalihi Stream. This will be accomplished by pouring concrete within set forms to tie the new extension bridge to the existing structure.

Prior to removing portions of the existing CRM wall, steel plates will be placed adjacent to the wall for scour protection. The steel plates will be part of the trench shield that would be needed to create space and hold the soil in place while the drilled shafts are being installed. On the Kalihi Stream side, the steel plates will be installed to a depth of approximately 5 to 6 feet below grade. Once the demolition of portions of the CRM wall is completed, construction of the concrete drilled shafts will be accomplished by grading the area, placing a 5-foot diameter permanent steel casing at the drilled shaft location, and oscillating below the ground surface.

Following placement of the permanent steel casing, the drilled shaft will be installed within the permanent steel casing and excavated to the specified tip elevation. A reinforcing spiral steel cage will then be installed in the drilled shaft, and concrete will be poured into the drilled shaft.

Figure 2: Project site.

Downstream of H-1 looking upstream (left) and downstream (right).

Under H-1 viaduct looking upstream (left) and downstream (right).

No excavation or placement of fill or material within Kalihi Stream will occur as part of the proposed activities except for the temporary placement of the steel sheet piles and best management practices (BMPs) (See **Exhibit 1**) during demolition of the existing CRM walls along the stream. Spoils removed from the drilled holes will be placed directly into lined dump trucks or other lined receptacles to be transported to an offsite upland location determined by the

contractor for temporary storage and proper disposal. BMPs to manage and contain runoff will be implemented at the storage area in accordance with the National Pollutant Discharge Elimination System (NPDES) requirements. Following completion of the drilled shafts, the shaft caps and abutment walls will be constructed by placing rebars and forms on the drilled shafts and pouring concrete. As the drilled shaft locations are behind (or outside) the existing CRM wall along Kalihi Stream, no impacts to the stream are anticipated.

AGENCY REVIEW COMMENTS

City and County of Honolulu, Department of Planning and Permitting: No comments received.

Department of Hawaiian Home Lands (DHHL): DHHL lands on Oʻahu comprise approximately 8,154 acres. None of its landholdings are located in the immediate vicinity of the project area. While the vicinity of the project area consists of a rich cultural and historical landscape, it does not appear the proposed work will negatively impact public trust uses of water including traditional and customary Native Hawaiian practices nor DHHL's current or future water needs.

Dept. of Health (DOH), Clean Water Branch: The DOH standard comments can be reviewed on the DOH website at: https://health.hawaii.gov/cwb/files/2018/05/Memo-CWB-Standard-Comments.pdf.

> *CWRM staff response:* The lead agency for the protection of water quality is the Department of Health, Clean Water Branch, which administers the Federal Clean Water Act (33 U.S.C. §1251 et seq.) and the State Water Pollution Act (HRS Ch. 342D; HAR Ch. 11-54 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control). HAR §11-54-1 through §11-54-8 defines Best Management Practices and water quality criteria applicable to inland and nearshore waters and are based on the Federal Clean Water Act. HAR Ch. 11-55 Appendix C defines discharges of storm water associated with construction activity. HRS 174C-66 states that the DOH oversees the State's water quality control program.

Department of Land and Natural Resources (DLNR), Aha Moku: No comments received.

DLNR, Aquatic Resources: Though heavily urbanized throughout the majority of its lower and middle sections, Kalihi Stream provides important habitat to a variety of native and endemic aquatic species. As noted in the Natural Resource Assessment attached to the application, ʻōpae kalaʻole (*Atyoida bisulcata*), ʻōpae ʻoehaʻa (*Macrobrachium grandimanus*) and ʻoʻopu nākea (*Awaous stamineus*) have all been documented in the middle section of Kalihi Stream. DAR records also indicate that ʻoʻopu ʻakupa (*Eleotris sandwicensis*) occurs in the lower section. Hawaiʻi's endemic shrimp and gobies are diadromous, meaning that they rely on both marine and freshwater environments to complete their life cycles. Maintained open passage though the lower and middle sections of Kalihi stream is therefore indispensable not only to these animals that live within them, but those living in the more intact ecosystem upstream as well. It is also important to note that the water flowing through Kalihi Stream eventually meets the ocean, where it immediately forms a muliwai or estuary. Muliwai are critical to a variety of species

including the culturally important ‘ama‘ama (*Mugil cephalus*). The presence of important marine and estuarine downstream habitat means that care should be taken to ensure that all impacts of the proposed project stay contained to the immediate area.

To protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. Most importantly, that a) passage through the stream remain unimpeded at all times, and b) all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction are minimized and contained to the greatest extent possible. DAR recognizes that the applicants offer multiple site-specific best management practices (BMPs) that would address these concerns when implemented. Lastly, DAR requests that they be contacted immediately in the event that an unforeseen event poses a potential threat to the aquatic environment.

CWRM Staff Response: Added as a special condition by reference. See **Exhibit 2**.

DLNR, Engineering: No comments received.

CWRM staff response: The project area is in Zone AE, a flood zone that has a 1% chance of being equaled or exceeded in any given year.

DLNR, Forestry and Wildlife (DOFAW): DOFAW concurs with the following measures included in Attachment 6 (*Final Environmental Assessment and Finding of No Significant Impact*) of the application intended to avoid construction and operational impacts to State-listed species, including the Hawaiian Hoary bat (*Lasiurus cinereus semotus*), waterbirds, seabirds, and aquatic biota; as well as measure outlined to prevent the introduction and spread of invasive species.

- Any fences erected as part of the project would have barbless top-strand wire to prevent entanglements of the Hawaiian hoary bat on barbed wire.
- In general, no trees taller than 15 feet (4.6 meters) would be trimmed or removed between June 1 and September 15, when juvenile bats that are not yet capable of flying may be roosting in the trees. However, if a limited number of trees need to be cleared during that time period, a qualified biologist would use appropriate protocols to survey for bats before trimming or cutting.
- Should an endangered waterbird appear on the Project site during construction, work in that area must cease until the animal voluntarily leaves the area.
- If nighttime construction is anticipated, lights would be properly shielded and aimed towards the ground. Outdoor lighting guidelines to avoid deleterious impacts to transiting seabirds will be provided by the DLNR Division of Forestry and Wildlife.
- Best Management Practices (BMPs) will be developed and employed during construction to prevent degradation of water quality in Kalihi Stream and to protect the aquatic biota.
- Project BMPs will be monitored closely to ensure that native stream fauna are not adversely impacted by impairments to water quality.
- The spread of noxious weeds would be managed through the implementation of BMPs.

DOFAW provided the following additional comments regarding the potential for the proposed work to affected listed species in the vicinity of the project area.

- For illustrations and guidance related to seabird-friendly light styles that also protect the dark, starry skies of Hawai‘i please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.
- DOFAW recommends using native plant species for landscaping appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.
- The invasive Coconut Rhinoceros Beetle (CRB) or *Oryctes rhinoceros* is known to occur on O‘ahu. On July 1, 2022, the Hawai‘i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O‘ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: *Washingtonia*, *Livistona*, and *Pritchardia* (all commonly known as fan palms), *Cocos* (coconut palms), *Phoenix* (date palms), and *Roystonea* (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.

  We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible.

  CWRM Staff Response: Added as a special condition by reference. See **Exhibit 3**.

DLNR, Historic Preservation (SHPD): No concurrence letter received.

CWRM Staff Response: Approval of the application is subject to SHPD concurrence. If SHPD requires conditions, delegation authority to Deputy Director will be added as a special condition.

DLNR, Land Division: No comments received.

DLNR, State Parks: No comments.

Office of Hawaiian Affairs: No comments received.

US Army Corps of Engineers: No comments received.

U.S. Fish and Wildlife Service (FWS): No objections.

PUBLIC COMMENTS

No public comments were received.

TRADITIONAL AND CUSTOMARY PRACTICES

1) The identity and scope of cultural, historical, or natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

   The Applicant stated "There are no cultural, historical, or natural resources within the project area in which traditional or customary native Hawaiian rights are exercised. For safety reasons, pedestrian access is prohibited within the freeway corridor."

   CWRM Staff Response: No comments were received by DLNR Aha Moku. No comments were received from the public. The stream is located within urban Honolulu and the project area is located within a channelized section with natural bottom. No impacts to traditional and customary native Hawaiian rights which may be exercised in the area are anticipated.

2) The extent to which those resources, including traditional and customary native Hawaiian rights, will be affected or impaired by the proposed action.

   The Applicant stated, "Cultural resources and practices are not expected to be affected by the proposed project. If cultural resources or human remains were inadvertently discovered during construction, the contractor would comply with state law and administrative rules for handling them."

   CWRM Staff Response: There are no anticipated impacts to traditional and customary practices or upstream/downstream movement of native macrofauna due to the project's limited impacts to the stream bed.

3) What feasible action, if any, could be taken by the Commission in regards to this application to reasonably protect native Hawaiian rights.

   The Applicant stated, "The proposed project does not require any action by the Commission to protect Native Hawaiian rights."

   CWRM Staff Response: The project BMPs are feasible actions that will be employed during the project period to ensure water and stream resources mauka and makai of the project area are not impacted to the detriment of traditional and customary practices of Native Hawaiians.

HRS CHAPTER 343 – ENVIRONMENTAL ASSESSMENT (EA) COMPLIANCE

Under Hawaii Revised Statutes (HRS) §343-5(a), an EA shall be required for actions, as summarized in part below, that propose:

(1) use of state land or county lands, or the use of state or county funds;
(2) use within any land classified as a conservation district;
(3) use within a shoreline area;
(4) use within any historic site as designated in the National Register or Hawaii Register;
(5) use within the Waikiki area of O‘ahu;
(6) any amendments to existing county general plans where the amendment would result in designations other than agriculture, conservation, or preservation;
(7) any reclassification of any land classified as a conservation district;
(8) construction of new or the expansion or modification of existing helicopter facilities within the State, that may affect: (A) any land classified as a conservation district; (B) a shoreline area; or (C) any historic site as designated in the National Register or Hawaii Register;
(9) any (A) wastewater treatment unit, except an individual wastewater system or a wastewater treatment unit serving fewer than fifty single-family dwellings or the equivalent; (B) Waste-to-energy facility; (C) Landfill; (D) Oil refinery; or (E) Power-generating facility.

CWRM Staff Response: The project triggers an EA because it proposes (1) the use of state or county lands or the use of state or county funds. A Final Environmental Assessment (FEA) and Finding of No Significant Impact (FONSI) were published on February 8, 2022. The FEA and FONSI are available on the Office of Planning and Sustainable Development, website at: https://files.hawaii.gov/dbedt/erp/Doc_Library/2022-08-23-OA-FEA-Interstate-H1-Eastbound-Improvements,-Ola-Lane-to-Likelike-Highway-Off-ramp.pdf.

CONSISTENCY WITH THE HAWAI‘I WATER PLAN

The Water Resource Protection Plan (WRPP), updated in 2019, provides an outline for the conservation, augmentation, and protection of statewide ground and surface water resources, watersheds, and natural stream environments. The legal framework of the Code for the issuance of Stream Channel Alteration Permits, as outlined in this submittal, is covered in more detail and context in the WRPP, Appendix I.

The proposed stream channel alteration will not divert any water from Kalihi Stream and should not impact the quantity or quality of water resources, public trust uses, or water rights.

STAFF REVIEW

Review of the permit application by Commission staff is subject to the consideration of the legal authorities cited in **Exhibit 5**.

HAR §13-169-52(b) Based upon the findings of fact concerning an application for a stream channel alteration permit, the Commission shall either approve in whole, approve in part, approve with modifications, or reject the application for a permit.

(1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.

CWRM Staff Response: Upon approval of the construction plans as proposed, the quantity and quality of stream water should not be adversely affected. The actions are incompliance with the terms and conditions of Nationwide Permit #14 (Linear Transportation Projects) or NWP 18 (Minor Discharge). All mitigation measures, including BMPs and water quality monitoring, are included in the SCAP application.

(2) Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.

CWRM Staff Response: HRS §174C-71, requires the Commission to protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. The identified instream uses include fish habitat and streamflow contribution to the nearshore waters, among others. The project is not anticipated to impact the status quo interim instream flow standard which was established on December 10, 1988, pursuant to HAR §13-169-49.

(3) The proposed channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

CWRM Staff Response: The proposed work plan is limited to the project area and should not interfere with instream or non-instream uses, including existing diversions. There is one (1) registered diversion located over 3 miles upstream. No adverse impact is anticipated.

RECOMMENDATION

That the Commission:

1. Approve Stream Channel Alteration Permit (SCAP.5955.3) Application subject to the standard conditions in **Exhibit 4** and the special conditions below.

    a. Approval is subject to SHPD concurrence. If SHPD requires conditions, authority shall be delegated to the Deputy Director to attach those as a condition of the stream channel alteration permit.

    b. In conformance with the Hawaiʻi Division of Aquatic Resources recommendations, the permittee shall ensure streamflow connectivity around the project site at all times, with no more than 50-percent of the stream channel being diverted around the project area to enable ʻoʻopu and ʻōpae passage (incorporated by reference to **Exhibit 2**). Contact the Division of Aquatic Resources should unforeseen events pose a potential threat to the aquatic environment.

    c. In conformance with the Hawaiʻi Division of Forestry and Wildlife recommendations, the permittee seek to minimize impacts to native species, utilize native plant species for landscaping, and prevent the introduction and spread of invasive species (incorporated by reference to **Exhibit 3**).

Ola i ka wai,

M. KALEO MANUEL
Deputy Director

Exhibits:
1. Site-specific Best Management Practices (BMPs)
2. Division of Aquatic Resources letter dated January 11, 2023.
3. Division of Forestry and Wildlife letter dated January 23, 2023.
4. Standard Stream Channel Alteration Permit Conditions.
5. Legal Authorities.

APPROVED FOR SUBMITTAL:

DAWN N. S. CHANG
Chairperson

Site-specific Best Management Practices (BMPs)

(Excerpt from page 13-15 of Stream Channel Alteration Permit Application SCAP.5955.3)

Site-specific Best Management Practices (BMPs)

The purpose of site-specific BMPs is to isolate and confine pollutants, thereby preventing pollutants from entering waters of Kalihi Stream. With the implementation of BMPs, impacts to stream water quality and any potential erosion impacts are anticipated to be none to minimal. The following types of BMPs will be implemented during construction:

Laydown/Staging Area BMPs

- Staging and stockpiling of construction equipment and material will occur on the designated laydown/staging area located upland and away from the stream.
- Filter socks will be placed around the boundary of the temporary laydown/staging area.
- Additional erosion control and mitigation measures specified as part of the NPDES permit for the laydown/staging area will be followed.

General Site BMPs

- Dust generation
  Dust generation will be minimized by using water to dampen the surfaces to be demolished, when feasible. Requirements of Hawaii Administrative Rules (HAR) 11-60.1 will be followed for preventing the release of dust during construction activities. Measures will be taken to reduce and eliminate sediment from leaving the work area, whether it is airborne or in the form of silty water. These additional measures can include (but are not limited to):
  - Use of dust fence around the construction area,
  - Spraying water to eliminate dust,
  - Sand bags,
  - Drain inlet protection,
  - Silt fence,
  - Gutter buddies,
  - Bio-socks,
  - Green snake bags (if appropriate),
  - Any alternative or equivalent means to prevent silts/sediments or pollutants from leaving the jobsite and/or entering Kalihi Stream.
- Concrete Wash-Out
  A lined container will be used to contain concrete wash-out or waste. The area will be maintained to prevent migration of concrete contaminated wash water from entering Kalihi Stream. No dumping of waste concrete will occur at the jobsite. Except for rinsing of the hopper and delivery chute (and for wheel washing where required), concrete trucks will not be cleaned at the jobsite. Wash water from concrete trucks will be contained and will not enter adjacent waters or drains.
- Stabilized Construction Entrances
  Hauling trucks exiting the site will be inspected to ensure they are clean and do not track materials across adjacent streets when entering or exiting the project site. Trucks will be cleaned to prevent the tracking of mud or debris over roads.
- Rubbish and Construction Debris

EXHIBIT 1

The jobsite will be kept free of rubbish and construction debris. The project site will be cleaned daily and the materials will be collected in roll-off containers. These materials will be disposed of on a routine basis in accordance with all applicable regulations.

- Material Storage
  In order to control spills, materials will be properly stored in a container, on dunnage, or as required by the manufacturer to avoid contact with storm water or waterways. Any construction materials stored on-site will be stored within the project limits.

BMPs for Upland Construction
The contractor will be required to follow erosion control and mitigation measures specified as part of the National Pollutant Discharge Elimination System (NPDES) permit and the project specific Storm Water Pollution Prevention Plan (SWPPP). General BMPs for construction in upland areas adjacent to Kalihi Stream include, but are not limited to, the following:

- Steel Sheet Piles
  Steel sheet piles will be used adjacent to the existing CRM wall where demolition/reconstruction activities will take place to isolate the work area.
- Perimeter Control
  To minimize and manage potential runoff during demolition/reconstruction of the CRM wall, BMPs will be developed and implemented. Silt fences with filter socks will be placed around the entire perimeter of the work area to contain any potential runoff from reaching Kalihi Stream. The silt fences will be secured in place with rebars. Weather conditions will be monitored for rainfall events that may require removal of in-stream BMPs. An erosion control plan that includes details, specifications, and BMPs to manage erosion and potential runoff at Kalihi Stream is included as Attachment 5
- Drainage Structures
  Drainage structures near any excavation work will be covered with non-woven geotextile to prevent the migration of fines into the drain lines as appropriate. All site BMPs, including inlet structures, will be inspected daily or after a significant rain event. At any time, if the inlet protection has failed or is clogged in any way, the inlet protection will be replaced immediately.
- Excavated Material
  If any excavated material generated during construction needs to be temporarily stored on site, it will be covered daily, and the perimeter contained via eco-socks. All excavated material not reused onsite as backfill will be hauled off-site to the local landfill.
- Monitoring
  The site will be inspected daily to ensure the BMP Plan is followed and to ensure that the construction activities do not result in adverse impacts to the environment. Any deficiencies noted will be corrected immediately.

BMPs for Overhead Construction
The following BMPs will be implemented during all overhead construction:

- A work platform with netting placed below the existing bridge to catch falling debris

- Toe boards to be placed along the edge of the existing bridge deck to prevent loose material from being knocked off
- Material to be secured to prevent discharge into the stream or other areas below

STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: 1/10/2023
DAR # AR0277

MEMORANDUM

TO: Brian J. Neilson
DAR Administrator

FROM: Bryan Ishida, Aquatic Biologist

SUBJECT: Comments RE: DOT Stream Channel Alteration Permit (SCAP.5955.3) Application.
Bridge Widening and H1 Eastbound Highway Improvements

Request Submitted by: Kaleo Manuel, Deputy Director, CWRM

Location of Project: Kalihi Stream, Kalihi, O'ahu
TMK: (1) 1-3-002:044 (west bank); no TMK (east bank)

Brief Description of Project:

The primary goal of the proposed project is the widening of a section of eastbound Interstate Highway 1 (H1) to accommodate an auxiliary lane. The project limits extend from just east of the Ola Lane overpass over H1 (approximately Milepost 18.9) to the off-ramp to Likelike Highway, Exit 20A (approximately Milepost 19.6). The project includes the widening of the Kalihi Stream bridge by approximately feet on the makai side of H1 to make room for the new lane.

The stream channel at the project site is composed of a natural bottom confined between existing concrete-rubble masonry (CRM) walls. This stretch of Kalihi stream is heavily urbanized.

Comments:

☐ No Comments ☒ Comments Attached

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plan, DAR requests the opportunity to review and comment on those changes.

Comments Approved: _____ Date: Jan 11, 2023
Brian J. Neilson
DAR Administrator

EXHIBIT 2

Staff Submittal March 21, 2023
SCAP.5955.3 Kalihi Stream, O‘ahu

DAR# AR0277

Comments

Though heavily urbanized throughout the majority of its lower and middle sections, Kalihi Stream provides important habitat to a variety of native and endemic aquatic species. As noted in the Natural Resource Assessment attached to the application, ‘ōpae kala‘ole (Atyoida bisulcata), ‘ōpae ‘oeha‘a (Macrobrachium grandimanus) and ‘o‘opu nākea (Awaous stamineus) have all been documented in the middle section of Kalihi Stream. DAR records also indicate that ‘o‘opu ‘akupa (Eleotris sandwicensis) occurs in the lower section. Hawaii's endemic shrimp and gobies are diadromous, meaning that they rely on both marine and freshwater environments to complete their life cycles. Maintained open passage though the lower and middle sections of Kalihi stream is therefore indispensable not only to these animals that live within them, but those living in the more intact ecosystem upstream as well. It is also important to note that the water flowing through Kalihi Stream eventually meets the ocean, where it immediately forms a muliwai or estuary. Muliwai are critical to a variety of species including the culturally important ‘ama‘ama (Mugil cephalus). The presence of important marine and estuarine downstream habitat means that care should be taken to ensure that all impacts of the proposed project stay contained to the immediate area.

To protect aquatic environments directly adjacent to the proposed project as well as those up and downstream, DAR requests that all necessary precautionary measures be taken throughout the project. Most importantly, that a) passage through the stream remain unimpeded at all times, and b) all sediment, silt, chemicals, debris, or any other byproducts of the demolition and construction are minimized and contained to the greatest extent possible. DAR recognizes that the applicants offer multiple site-specific best management practices (BMPs) that would address these concerns when implemented. Lastly, DAR requests that they be contacted immediately in the event that an unforeseen event poses a potential threat to the aquatic environment.

Mahalo for the opportunity to provide comment

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STATE OF HAWAI‘I | KA MOKU‘ĀINA ‘O HAWAI‘I
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813

January 23, 2023

MEMORANDUM *Log no. 3945*

TO: M. Kaleo Manuel, Deputy Director
Commission on Water Resource Management

FROM: LAINIE BERRY, Wildlife Program Manager
Division of Forestry and Wildlife

SUBJECT: **Division of Forestry and Wildlife Comments for the Stream Channel Alteration Permit (SCAP.5955.3) Application for the Bridge Widening and H1 Eastbound Highway Improvements at Kalihi Stream on O‘ahu**

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) has received your request for comments for the SCAP.5955.3 Application for the bridge widening and H1 eastbound highway improvement at Kalihi Stream located in Kalihi, on the island of O‘ahu; TMK: (1) 1-3-002:044 (west bank); no TMK (east bank). The proposed project consists of widening the Kalihi Stream bridge affecting approximately 14 linear feet of the east and west bank wall to accommodate the extended bridge abutments and foundations.

DOFAW concurs with the following measures included in Attachment 6 (*Final Environmental Assessment and Finding of No Significant Impact*) of the application intended to avoid construction and operational impacts to State-listed species, including the Hawaiian Hoary bat (*Lasiurus cinereus semotus*), waterbirds, seabirds, and aquatic biota; as well as measure outlined to prevent the introduction and spread of invasive species.

- Any fences erected as part of the project would have barbless top-strand wire to prevent entanglements of the Hawaiian hoary bat on barbed wire.
- In general, no trees taller than 15 feet (4.6 meters) would be trimmed or removed between June 1 and September 15, when juvenile bats that are not yet capable of flying may be roosting in the trees. However, if a limited number of trees need to be cleared during that time period, a qualified biologist would use appropriate protocols to survey for bats before trimming or cutting.
- Should an endangered waterbird appear on the Project site during construction, work in that area must cease until the animal voluntarily leaves the area.
- If nighttime construction is anticipated, lights would be properly shielded and aimed towards the ground. Outdoor lighting guidelines to avoid deleterious impacts to transiting seabirds will be provided by the DLNR Division of Forestry and Wildlife.
- Best Management Practices (BMPs) will be developed and employed during construction to prevent degradation of water quality in Kalihi Stream and to protect the aquatic biota.

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EXHIBIT 3

Project BMPs will be monitored closely to ensure that native stream fauna are not adversely impacted by impairments to water quality.
- The spread of noxious weeds would be managed through the implementation of BMPs.

DOFAW provides the following additional comments regarding the potential for the proposed work to affect listed species in the vicinity of the project area.

- For illustrations and guidance related to seabird-friendly light styles that also protect the dark, starry skies of Hawai‘i please visit https://dlnr.hawaii.gov/wildlife/files/2016/03/DOC439.pdf.
- DOFAW recommends using native plant species for landscaping appropriate for the area; i.e., plants for which climate conditions are suitable for them to thrive, plants that historically occurred there, etc. Please do not plant invasive species. DOFAW also recommends referring to www.plantpono.org for guidance on the selection and evaluation of landscaping plants and to determine the potential invasiveness of plants proposed for use in the project.
- The invasive Coconut Rhinoceros Beetle (CRB) or *Oryctes rhinoceros* is known to occur on O‘ahu. On July 1, 2022, the Hawai‘i Department of Agriculture (HDOA) approved Plant Quarantine Interim Rule 22-1. This rule restricts the movement of CRB-host material within or to and from the island of O‘ahu, which is defined as the Quarantine Area. Regulated material (host material or host plants) is considered a risk for potential CRB infestation. Host material for the beetle specifically includes a) entire dead trees, b) mulch, compost, trimmings, fruit and vegetative scraps, and c) decaying stumps. CRB host plants include the live palm plants in the following genera: *Washingtonia*, *Livistona*, and *Pritchardia* (all commonly known as fan palms), *Cocos* (coconut palms), *Phoenix* (date palms), and *Roystonea* (royal palms). When such material or these specific plants are moved there is a risk of spreading CRB because they may contain CRB in any life stage. For more information regarding CRB, please visit https://dlnr.hawaii.gov/hisc/info/invasive-species-profiles/coconut-rhinoceros-beetle/.

We appreciate your efforts to work with our office for the conservation of our native species. These comments are general guidelines and should not be considered comprehensive for this site or project. It is the responsibility of the applicant to do their own due diligence to avoid any negative environmental impacts. Should the scope of the project change significantly, or should it become apparent that threatened or endangered species may be impacted, please contact our staff as soon as possible. If you have any questions, please contact Myrna N. Girald Pérez, Protected Species Habitat Conservation Planning Associate at (808) 265-3276 or myrna.girald-perez@hawaii.gov.

Sincerely,

Lainie Berry

LAINIE BERRY
Wildlife Program Manager

STREAM CHANNEL ALTERATION PERMIT STANDARD CONDITIONS
(Revised December 15, 2020)

1. The permit application and staff submittal approved by the Commission at its meeting on the above date shall be incorporated herein by reference.
2. The project may require other agency approvals regarding wetlands, water quality, grading, stockpiling, endangered species, and floodways. The permittee shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments, including, but not limited to, instream flow standards.
3. The permittee, his successors, assigns, officers, employees, contractors, agents, and representatives, shall indemnify, defend, and hold the State of Hawaii harmless from and against any claim or demand for loss, liability, or damage including claims for property damage, personal injury, or death arising out of any act or omission of the permittee or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.
4. The permittee shall notify the Commission, by letter, of the actual dates of project initiation and completion. The permittee shall submit a set of as-built plans and photos in pdf format of the completed work to the Commission upon completion of this project. This permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months, unless otherwise specified. The proposed work under this stream channel alteration permit shall be completed within two (2) years from the date of permit approval, unless otherwise specified. The permit may be extended by the Commission upon showing of good cause and good-faith performance. A request to extend the permit shall be submitted to the Commission no later than three (3) months prior to the date the permit expires. If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.
5. Before proceeding with any work authorized by the Commission, the permittee shall submit one set of construction plans and specifications in PDF format to determine consistency with the conditions of the permit and the declarations set forth in the permit application.
6. The permittee shall implement site-specific, construction Best Management Practices in consultation with the DOH Clean Water Branch and other agencies as applicable, that are designed, implemented, operated, and maintained by the permittee and its contractor to properly isolate and confine activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting State waters per HRS Ch. 342D Water Pollution; HAR §11-54-1 through §11-54-8 Water Quality Standards; and HAR Ch. 11-55 Water Pollution Control, Appendix C.
7. The permittee shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The permittee shall plant or cover lands denuded of vegetation as quickly as possible to prevent erosion and use native plant species common to riparian environments to improve the habitat quality of the stream environment.
8. In the event that subsurface cultural remains such as artifacts, burials or deposits of shells or charcoal are encountered during excavation work, the permittee shall stop work in the area of the find and contact the Department’s Historic Preservation Division immediately. Work may commence only after written concurrence by the State Historic Preservation Division.

EXHIBIT 4

LEGAL AUTHORITIES

Water as a Public Trust. The four public trust purposes are:

1. Maintenance of waters in their natural state;
2. Domestic water use of the general public, particularly drinking water;
3. The exercise of Native Hawaiian and traditional and customary rights, including appurtenant rights. Waiahole I, 94 Hawaii 97; 9 P.3d 409 (2000).
4. Reservations of water for use on Hawaiian home lands. Waiola O Molokai, Inc., 103 Hawaii 401; 83 P.3d 664 (2004).

Activities on undeveloped lands. Public Access Shoreline Hawaii v. Hawaii County Planning Commission (PASH I). 79 Hawaii 246 (1993).

HRS §174C-71 Protection of instream uses. The commission shall establish and administer a statewide instream use protection program. In carrying out this part, the commission shall cooperate with the United States government or any of its agencies, other state agencies, and the county governments and any of their agencies. In the performance of its duties the commission shall:

(2) Establish interim instream flow standards;
  (D) In considering a petition to adopt an interim instream flow standard, the commission shall weigh the importance of the present or potential instream values with the importance of the present or potential uses of water for non-instream purposes, including the economic impact of restricting such uses;
(3) Protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses;
  (A) The commission shall require persons to obtain a permit from the commission prior to undertaking a stream channel alteration; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit;
  (C) The commission shall establish guidelines for processing and considering applications for stream channel alterations consistent with section 174C-93;

HAR §13-169-2 Definitions.

“Channel alteration” means to obstruct, diminish, destroy, modify, or relocate a stream channel; to change the direction of flow of water in a stream channel; to place any material or structures in a stream channel; or to remove any material or structures from a stream channel.

“Stream channel” means a natural or artificial watercourse with a definite bed and banks which periodically or continuously contains flowing water.

HAR §13-169-49 Interim instream flow standard for Leeward Oahu. The Interim Instream Flow Standard for all streams on Leeward Oahu, as adopted by the commission on water resource management on October 19, 1988, shall be that amount of water flowing in each stream on the effective date of this standard, and as that flow may naturally vary throughout the year and from year to year without further amounts of water being diverted offstream through new or expanded diversions, and under the stream conditions existing on the effective date of the standard.

EXHIBIT 5

HAR §13-169-50 Permit required. (a) Stream channels shall be protected from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses. No stream channel shall be altered until an application for a permit to undertake the work has been filed and a permit is issued by the commission; provided that routine streambed and drainageway maintenance activities and maintenance of existing facilities are exempt from obtaining a permit.

HAR §13-169-52 Criteria for ruling on application. (a) The commission shall act upon an application within ninety calendar days after acceptance of the application.

(b) Based upon the findings of fact concerning an application for a stream channel alteration permit, the commission shall either approve in whole, approve in part, approve with modifications, or reject the application for a permit.

(c) In reviewing an application for a permit, the commission shall cooperate with persons having direct interest in the channel alteration and be guided by the following general considerations:

(1) Channel alterations that would adversely affect the quantity and quality of the stream water or the stream ecology should be minimized or not be allowed.
(2) Where instream flow standards or interim instream flow standards have been established pursuant to subchapters 3 and 4, no permit shall be granted for any channel alteration which diminishes the quantity or quality of stream water below the minimum established to support identified instream uses, as expressed in the standards.
(3) The proposed channel alteration should not interfere substantially and materially with existing instream or non-instream uses or with channel alterations previously permitted.

(c) Notwithstanding subparagraph (b) above, the commission may approve a permit pursuant to subparagraph (a) above in those situations where it is clear that the best interest of the public will be served, as determined by the commission.

HAR §13-169-53 Term of permit. (a) Every permit approved and issued by the commission shall be for a specified period, not to exceed two years, unless otherwise specified in the permit.