



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

November 20, 2013
Honolulu, Hawaii

Application for a Stream Channel Alteration Permit (SCAP.3842.6)
County of Maui, Department of Public Works
Haiku Road Culvert Replacement, Lilikoi Gulch, Haiku, Maui
TMKs: (2) 2-7-003:056 (por.) and 2-7-020:009 (por.)

APPLICANT:

David Goode, Director
County of Maui, Dept. of Public Works
200 South High Street, 4th floor
Wailuku, HI 96793

LANDOWNER:

Alexander & Baldwin, LLC
Contact: Grant Chun
PO Box 156
Kahului, HI 96732
(2) 2-7-003:056 (por.)

George M. Fukushima, et al.
835 Haiku Road
Haiku, HI 96708
(2) 2-7-020:009 (por.)

SUMMARY OF REQUEST:

The County of Maui Department of Public Works is applying for a Stream Channel Alteration Permit (SCAP.3842.6) to reconstruct a portion of the existing concrete box culvert located under Haiku Road, Lilikoi Gulch, Haiku, Maui. The culvert collapsed in 2007 after a large storm event. Construction will consist of grading to repair existing and new embankments, reconstruction of a portion of the existing reinforced concrete box culvert, an outlet headwall, grated inlet and drainline, installation of an energy dissipator basin and concrete transition on the downstream side of the culvert to slow down water exiting the culvert, and drilled shafts for the foundation. Fencing and a 12-foot wide gravel road will provide site access for maintenance.

LOCATION: Haiku Road, Lilikoi Gulch, Haiku, Maui. See Exhibit 1.

BACKGROUND:

In December 2007, a storm caused extensive damage to the existing concrete box culvert drainage system and embankment on Haiku Road. Exhibits 2 and 3. A section of the concrete box culvert broke away and caused erosion of the adjacent embankment to the north of Haiku Road. The erosion undermined the shoulder and guardrail.

On August 13, 2013, the Commission received a completed SCAP application from Munekiyo & Hiraga, Inc., on behalf of the applicant.

On August 27, 2013, the Commission sent a letter acknowledging receipt of the SCAP application to the applicant and Munekiyo & Hiraga, Inc. This initiated the Commission's agency review of the project.

DESCRIPTION:

Lilikoi Gulch, a tributary of the Kuiaha Stream, is an intermittent stream that flows through the urban and agricultural districts in Haiku. The watershed area of the stream is 5.7 square miles. Lilikoi Gulch is a narrow, steep-sided gulch about 6 miles long. The gulch is dry most of the time but can flow with high energy following heavy rainfall which averages about 60 inches/year. Irrigation water may also be pumped into the gulch. The Ordinary High Water Mark (OHWM), assumed to be equal to the scour line of the existing bank, is about eight feet above the bottom of the gulch¹, and represents a clear delineation in channel bank slope and the erosion of vegetation.

The gulch is a dense jungle over-story of 80-foot tall trees (common non-native species such as African tulip and Chinese banyan) and an understory of large vines and shade-loving shrubs, herbs, and ferns. No endangered or threatened plant or bird species were found. No aquatic species were present. There are no indications of or known traditional and cultural practices associated with the project site.

The proposed project involves grading to repair the existing embankment, the construction of new embankments, the reconstruction of a portion of the existing 6-foot by 6-foot reinforced concrete box culvert, an outlet headwall, grated inlet and 18-inch drain line, 21-foot wide by 72-foot long energy dissipater basin and 54-foot long curved concrete transition (Exhibit 4). These structures will be constructed by typical excavation and backfill methods to convey storm runoff and prevent erosion. The new box culvert will have fourteen 24-inch diameter drilled shafts for foundation support, and a 12-foot wide gravel access road for maintenance. Temporary activities include a filter berm and silt fencing for on-site erosion control during construction. Construction is estimated to begin January 2014 and end September 2014.

¹ The "ordinary high water mark" on non-tidal rivers is the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. 33 CFR 329.11(a) (1).

ANALYSIS:

Agency Review Comments:

Army Corps of Engineers: A Department of the Army permit is required for this project due to the placement of fill below the OHWM.

Department of Business, Economic Development & Tourism, Coastal Zone Management (CZM): The application for a CZM federal consistency review is incomplete. The Army Corps of Engineers confirmed that the Dept. of the Army permit application has been accepted. The Department of Health (DOH) Water Quality Certification and National Pollutant Discharge Elimination System (NPDES) Section 401 permit is complete.

Department of Land and Natural Resources (DLNR), Aquatic Resources (DAR): DAR supports improvements and replacement of the box culvert. DAR is concerned about future clogging due to vegetation overgrowth in the gulch. DAR strongly recommends best management practices during construction to reduce sedimentation and drainage runoff.

DLNR, Land Division: No objections.

DOH, Clean Water Branch: Any project and its potential impacts to State waters must meet the following criteria: (a) Anti-degradation policy (HAR, § 11-54-1.1) which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected; (b) Designated uses (HAR, § 11-54-3), as determined by the classification of the receiving State waters; and, (c) Water quality criteria (HAR, §§. 11-54-4 through 11-54-8). All discharges related to the project construction or operation activities must comply with the State's Water Quality Standards--- whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required.

DOH, Office of Environmental Quality Control: The applicant's proposed action triggered an environmental assessment because County lands and funds will be used for site improvements (HRS §343-5(a)). On March 23, 2013, a Final Environmental Assessment and Finding of No Significant Impact for the Haiku Road and Culvert Improvements were published in the Environmental Notice by the Office of Environmental Quality Control.

University of Hawaii, Environmental Center: Suggested that stream data be coordinated with the National Hydrography Dataset users.

Staff Review:

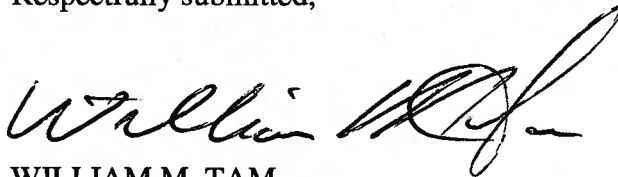
Haw. Rev. Stat. §174C-71(3) , directs the Commission to protect stream channels from alteration whenever practicable to provide for fishery, wildlife, recreational, aesthetic, scenic, and other beneficial instream uses; and a permit from the Commission prior to undertaking a stream channel alteration.

The improvements proposed in this SCAP will reduce future damage to the drainage way, improve public safety, protect water quality downstream by preventing erosion and sediment from entering downstream waters, and maintain the reliability of Haiku Road and drainage system. The improvements are not expected to have an adverse impact on existing uses in the area.

RECOMMENDATION:

Approve a Stream Channel Alteration Permit (SCAP.3842.6) for the County of Maui, Department of Public Works' Haiku Road Culvert Replacement, Lilikoi Gulch, Haiku, Maui, TMKs: (2) 2-7-003:056 (por.) and 2-7-020:009 (por.) subject to the standard conditions in Exhibit 5.

Respectfully submitted,

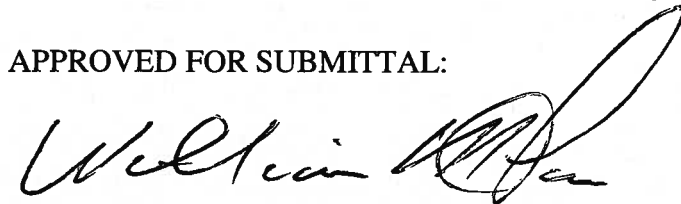


WILLIAM M. TAM
Deputy Director

Exhibits:

1. Location Map.
2. Scour Pool in Lilikoi Gulch with Upended Box Culvert on the Left.
3. Damaged Box Culvert (top photo) and Scour Pool (below photo).
4. Site Plan.
5. Standard Stream Channel Alteration Permit Conditions.

APPROVED FOR SUBMITTAL:


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WILLIAM J. AILA, JR.
Chairperson

Location Map.

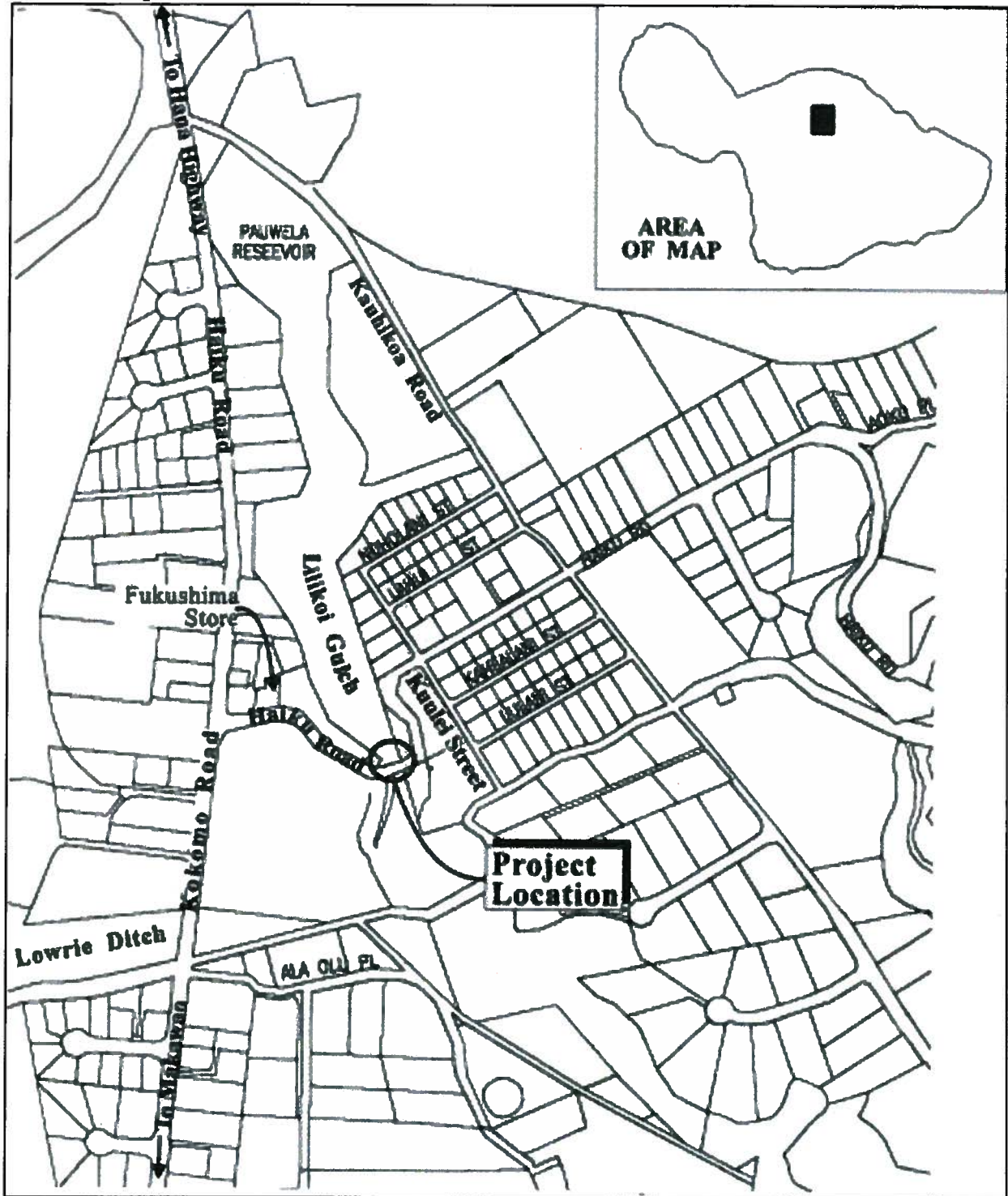


EXHIBIT 1

Damaged Box Culvert (top photo) and Scour Pool (below photo).



EXHIBIT 2

Scour Pool in Lilikoi Gulch with Upended Box Culvert on the Left.

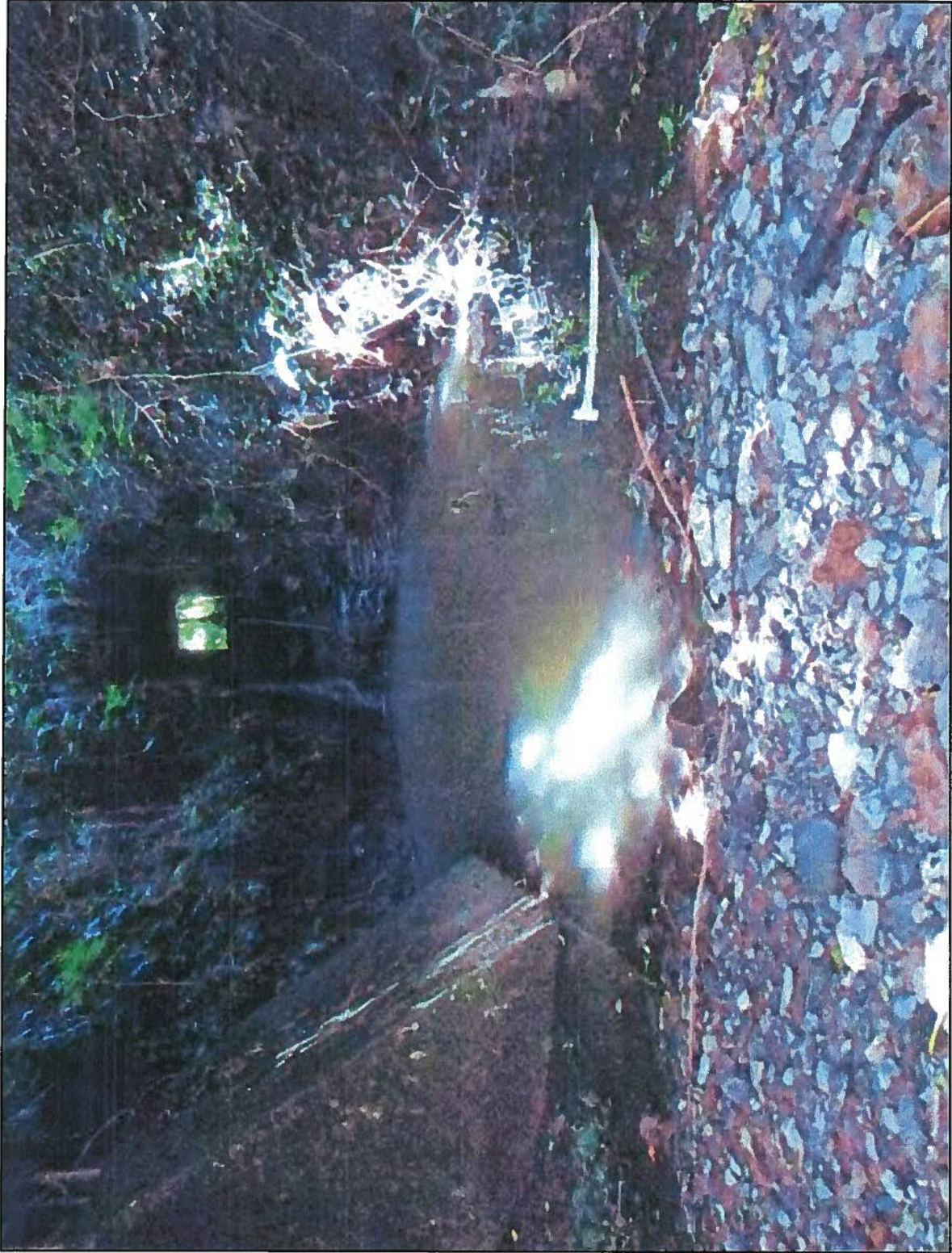


EXHIBIT 3

Site Plan.

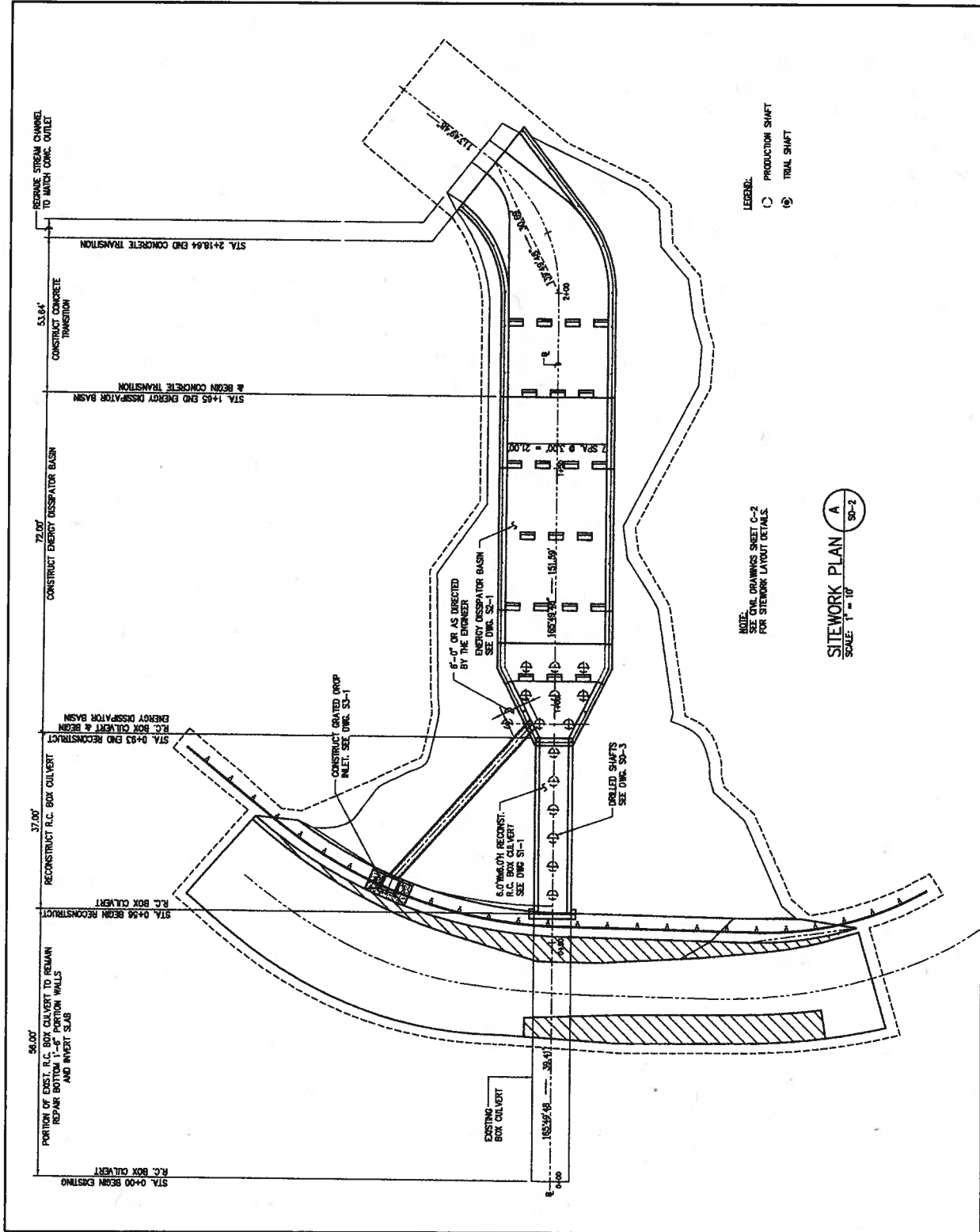


EXHIBIT 4

STANDARD STREAM CHANNEL ALTERATION PERMIT CONDITIONS
(Revised 9/19/07)

1. The permit application and staff submittal approved by the Commission at its meeting on November 20, 2013, shall be incorporated herein by reference.
2. The applicant shall comply with all other applicable statutes, ordinances, and regulations of the Federal, State and county governments.
3. The applicant, 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 applicant or his successors, assigns, officers, employees, contractors, and agents under this permit or related to the granting of this permit.
4. The applicant shall notify the Commission, by letter, of the actual dates of project initiation and completion. The applicant shall submit a set of as-built plans and photos 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 applicant shall submit one set of construction plans and specifications to determine consistency with the conditions of the permit and the declarations set forth in the permit application.
6. The applicant shall develop site-specific, construction best management practices (BMPs) that are designed, implemented, operated, and maintained by the applicant and its contractor to properly isolate and confine construction activities and to contain and prevent any potential pollutant(s) discharges from adversely impacting state waters. BMPs shall control erosion and dust during construction and schedule construction activities during periods of low stream flow.
7. The applicant shall protect and preserve the natural character of the stream bank and stream bed to the greatest extent possible. The applicant 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 applicant 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 5