



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

STAFF SUBMITTAL

for the meeting of the
COMMISSION ON WATER RESOURCE MANAGEMENT

November 19, 2008
Honolulu, Hawaii

Application for Stream Channel Alteration Permit (SCAP.2023.8)
Installation of Culvert Crossing on Lanikepu Stream and
Grouted Rip-Rap Lining on Lanikepu and Keanuiomano Streams
Kamuela, Hawaii, TMK: (3) 6-6-001:054 and (3) 6-6-004:012

APPLICANT:

Department of Hawaiian Home Lands
91-5420 Kapolei Parkway
Kapolei, HI 96805

LANDOWNER:

Same

SUMMARY OF REQUEST:

Application for a Stream Channel Alteration Permit (SCAP) for the installation of a culvert crossing on Lanikepu Stream and grouted rip-rap (GRP) lining on Lanikepu and Keanuiomano Streams, Kamuela, Hawaii, TMK: (3) 6-6-001:054 and (3) 6-6-004:012, (SCAP.2023.8).

LOCATION: Exhibits 1a and 1b.

BACKGROUND:

On September 28, 2005, the Commission approved a Stream Channel Alteration Permit (SCAP HA-386) to the Department of Hawaiian Home Lands (DHHL) to construct a new vehicular culvert crossing across Lanikepu Stream and fill portions of Lanikepu and Keanuiomano Stream banks to raise the existing elevation above the Federal Emergency Management Agency (FEMA) 100-year flood elevation to reduce the hazard of flooding. DHHL planned to construct two new subdivisions (East and West) with 37 new, single family housing lots.

The culvert crossing on Lanikepu Stream would consist of a pre-cast concrete arched culvert to provide two lanes of traffic. The culvert would be approximately eight feet above the bed of Lanikepu Stream, and the bottom of the culvert would be approximately 32 feet wide and 62 feet long and consist of GRP. Both ends of the culvert would match the existing grade of the Lanikepu Stream bed.

A ditch diversion was constructed to allow the installation of the concrete arch culvert, and excavation work for approximately one-half of the footings for the culvert was completed. Approximately 13,300

cubic yards (CY) of fill material were placed on the north bank of Keanuiomano Stream (East Subdivision) to raise the residential lot elevations and to protect against stream bank erosion. Approximately 3,000 CY of material were placed on the south bank of Lanikepu Stream (West Subdivision). Construction stopped in November 2007 because the contractor went bankrupt, and the U.S. Army Corps, Department of Health and the Commission's permits had expired.

DESCRIPTION:

A portion of this project has already been completed under the previously approved SCAP. The existing elevations for the new East and West Subdivisions were raised by filling along the stream banks of Lanikepu and Keanuiomano Streams, and excavation work for a portion of the foundation for the culvert was completed. Work to be completed includes the installation of the concrete arch culvert to provide a new access crossing over Lanikepu Stream and the installation of grouted rip rap lining along the stream banks of Lanikepu and Keanuiomano Streams to protect the stream bank from erosion. A new SCAP is required because SCAP HA-386 has expired, and the scope of work has changed.

The following is a summary of the work that has been completed and the work to be done:

<u>West Subdivision (Lanikepu and Keanuiomano Streams)</u>	
Earthwork (on-site material)	3,000 CY*
Stream lining (GRP)	80 CY
Arched culvert footing (reinforced concrete)	140 CY
<u>East Subdivision (Keanuiomano Stream)</u>	
Earthwork (on-site material)	13,300 CY*
Stream lining (GRP)	680 CY**

*Completed under SCAP HA-386.

**New scope of work.

Sand bags will be placed at the base of the fill area to divert the stream; then excavation and fill work will be done. The sand bags will be removed after the fill and compaction operations have been completed. To minimize the potential for pollutants from construction activities entering the stream, silt fences will be erected and maintained in the construction area.

ANALYSIS:

Agency Reviews

On September 26, 2008, the U.S. Army Corps of Engineers (COE) requested comments on a Pre-Construction Notification (PCN) Coordination for the proposed project for a nationwide Permit (NWP) No. 13, Bank Stabilization; NWP No. 14, Linear Transportation Activities; and, NWP No. 33, Temporary Construction, Access and Dewatering. The COE determined that:

- The proposed project is subject to regulation under Section 404 of the Clean Water Act and has been determined to comply with the terms and conditions of NWPs 13, 14 and 33.
- Pursuant to Section 7 of the Endangered Species Act (ESA), the proposed project will have no effect on species listed as threatened or endangered under the ESA.
- The project will not adversely affect any Essential Fish Habitat (EFH) as defined in the Magnuson-Stevens Fishery Conservation and Management Act due to the limited scope and overall minor impacts of the proposed work.

- Best Management Practices intended to prevent any discharge of potential pollutants into waters of the U.S. would be required as part of the COE's authorization, if issued.
- No cultural or historic resources are located within the Area of Potential Effect (APE) for the proposed project.

The Department of Health Clean Water Branch commented that the project is subject to Clean Water Act Section 401, Water Quality Certification (WQC) and Section 402, National Pollutant Discharge Elimination System (NPDES) permit requirements.

Hawaii County Planning Department commented that the subject parcels are not in the County's Special Management Area (SMA), and SMA rules and regulations are not applicable.

Historic Preservation commented that no historic properties will be affected by the project because previously grubbing/grading has altered the land.

The Division of Aquatic Resources (DAR) previously commented that it had no objections to this project since the streambeds for both the Lanikepu and Keanuiomano Streams will be natural. In addition, DAR did not object to the GRP channel bottom at the culvert crossing, provided that the culvert inlet and outlet transitions meet the natural grade to provide for the migration of aquatic life.

The Department of Hawaiian Home Lands, Land Division, State Parks and Forestry and Wildlife had no objections to the project.

The U.S. Fish and Wildlife Service, University of Hawaii Environment Center, Office of Hawaiian Affairs, and Engineering did not submit comments as of the date of preparation of this submittal.

RECOMMENDATION:

That the Commission approve a Stream Channel Alteration Permit (SCAP) for the installation of a culvert crossing on Lanikepu Stream and grouted rip-rap lining along Lanikepu and Keanuiomano Streams, Kamuela, Hawaii, TMK: (3) 6-6-001:054 and (3) 6-6-004:012. The permit shall have a term of two (2) years subject to the Commission's standard permit conditions in Exhibit 4.

Respectfully submitted,


 KEN C. KAWAHARA, P.E.
 Deputy Director

- Exhibits:
1. Location Maps 1a, 1b and 1c.
 2. Site Plans and Elevations
 3. Photos
 4. Standard Stream Channel Alteration Permit Conditions

APPROVED FOR SUBMITTAL:


 LAURA H. THIELEN
 Chairperson

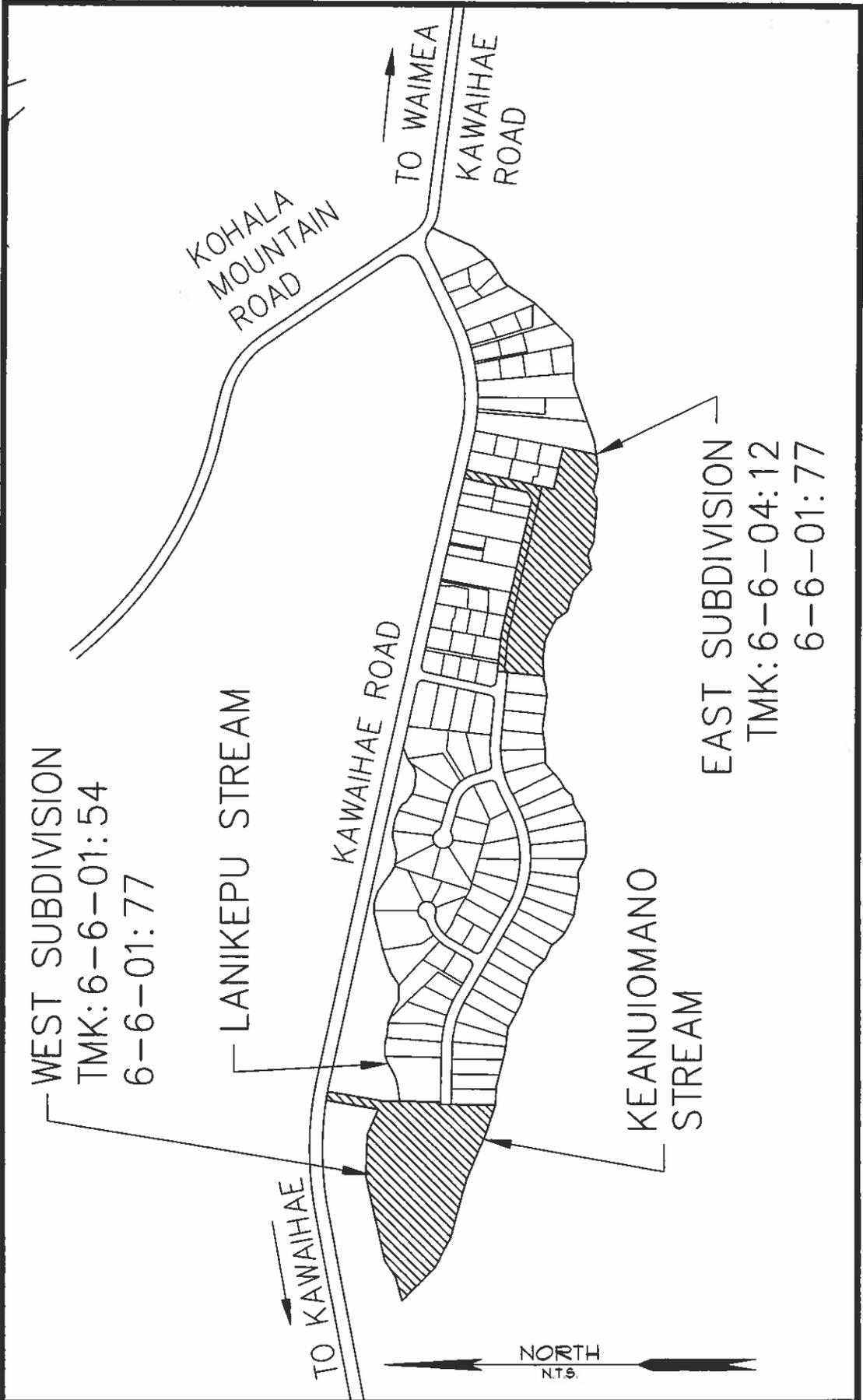


EXHIBIT 1C

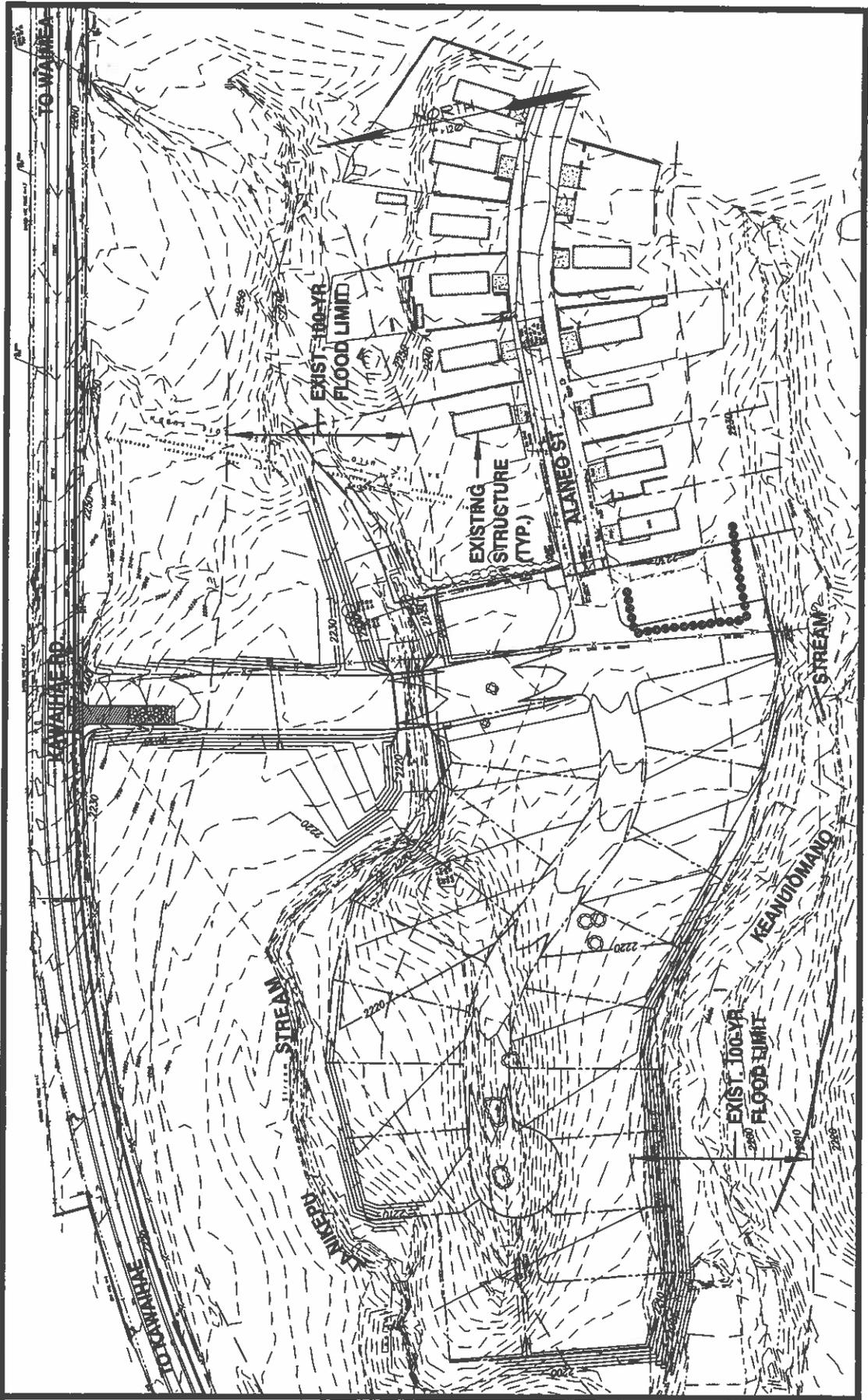


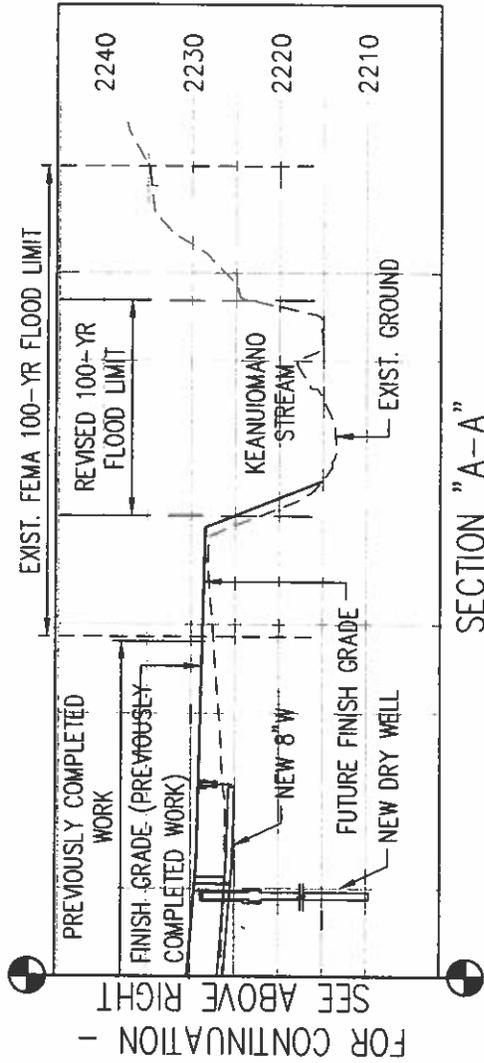
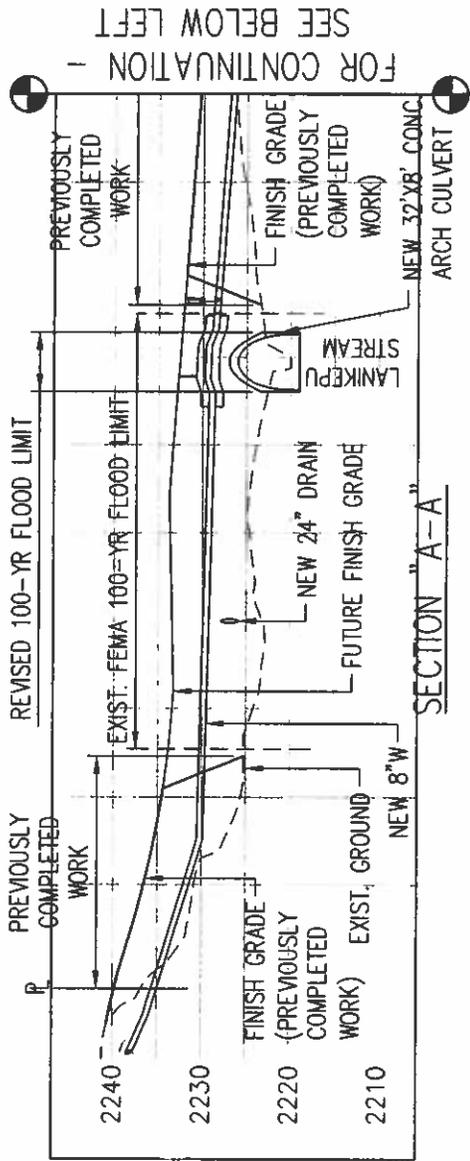
EXHIBIT 2

ITEM B-3b - TOPOGRAPHIC SITE PLAN- WEST SUBDIVISION
SCALE: 1"=120'

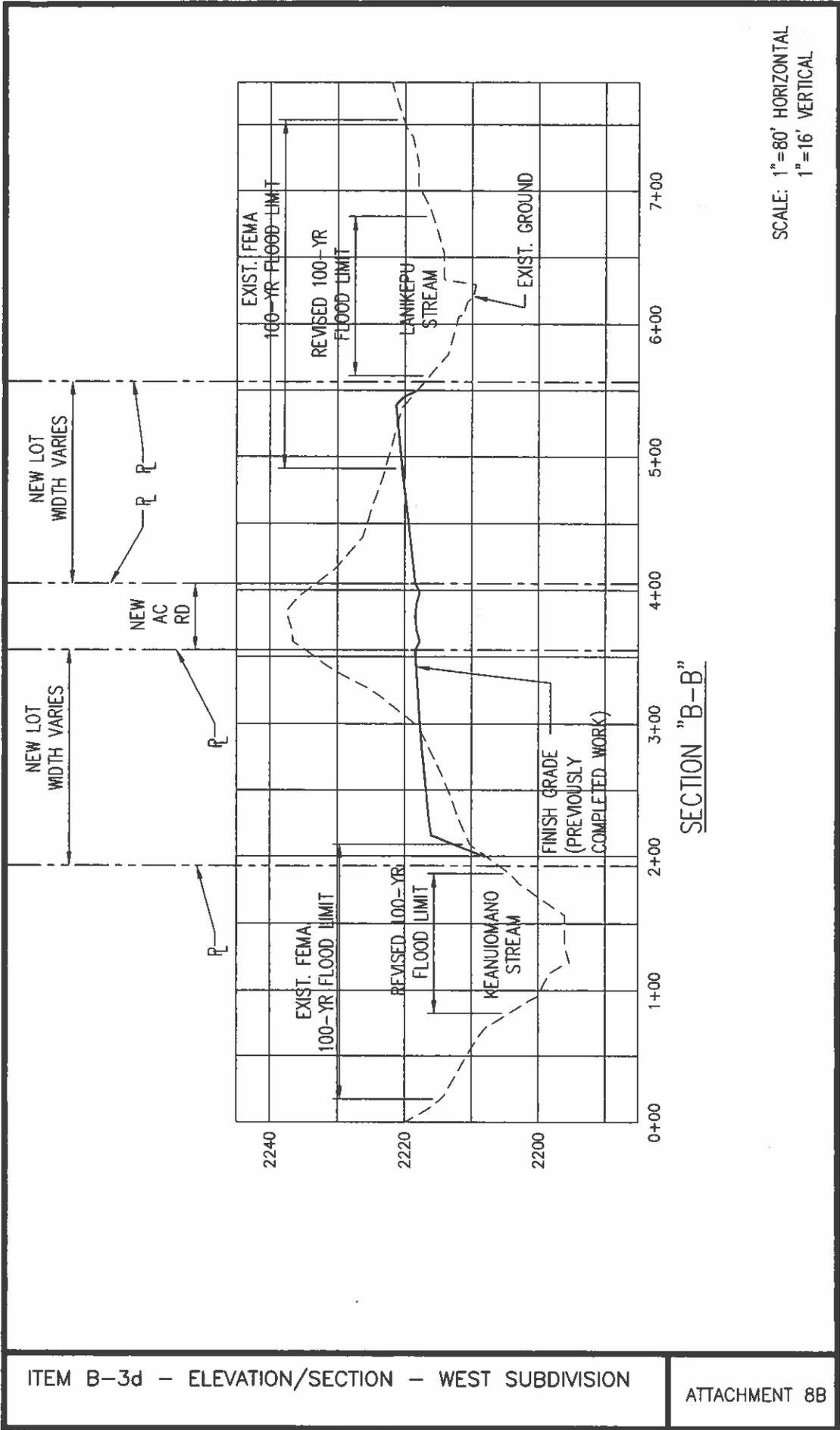
ATTACHMENT 6A

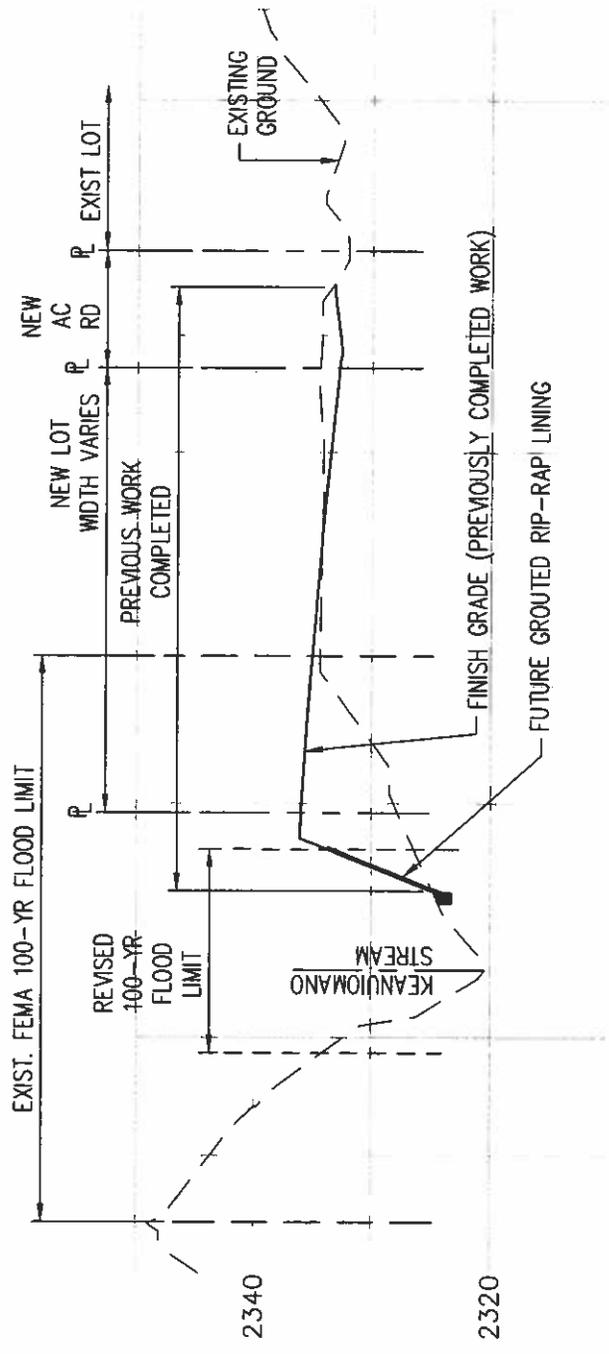


ITEM B-3b - TOPOGRAPHIC SITE PLAN-EAST SUBDIVISION
 SCALE: 1"=120'

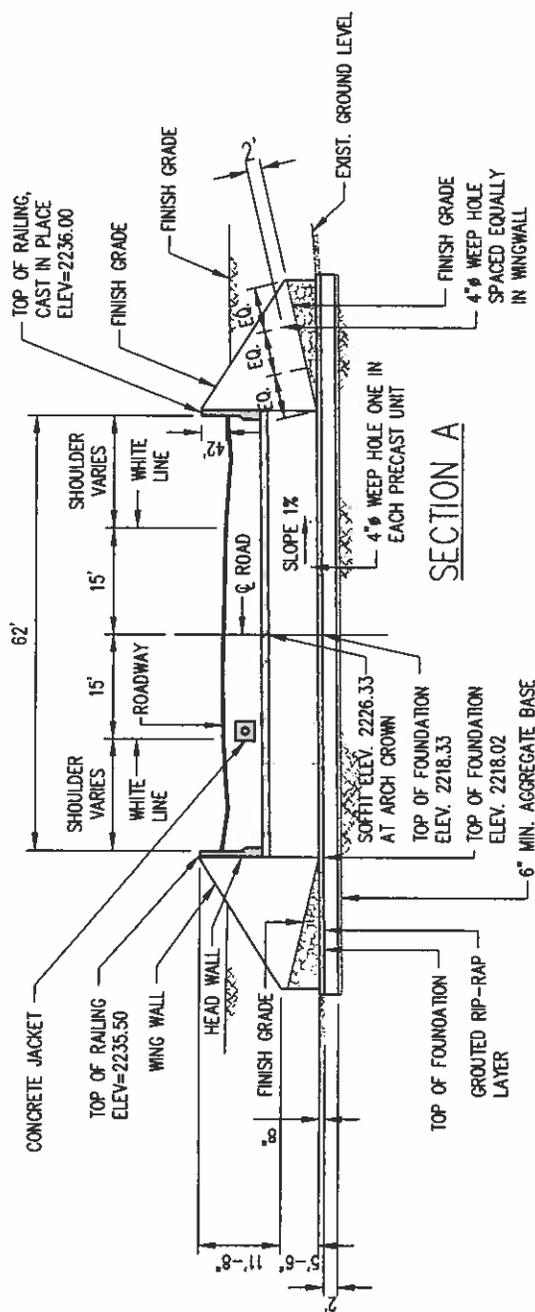


SCALE: 1"=80' HORIZONTAL
1"=16' VERTICAL

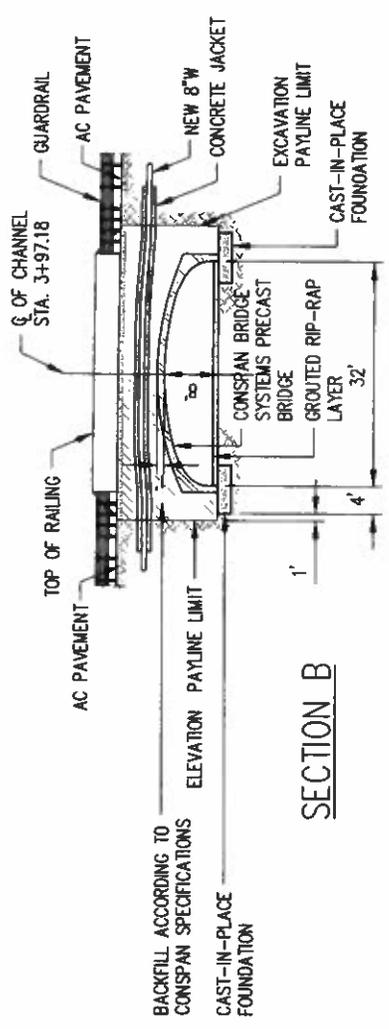




SCALE: 1"=60' HORIZONTAL
 1"=6' VERTICAL

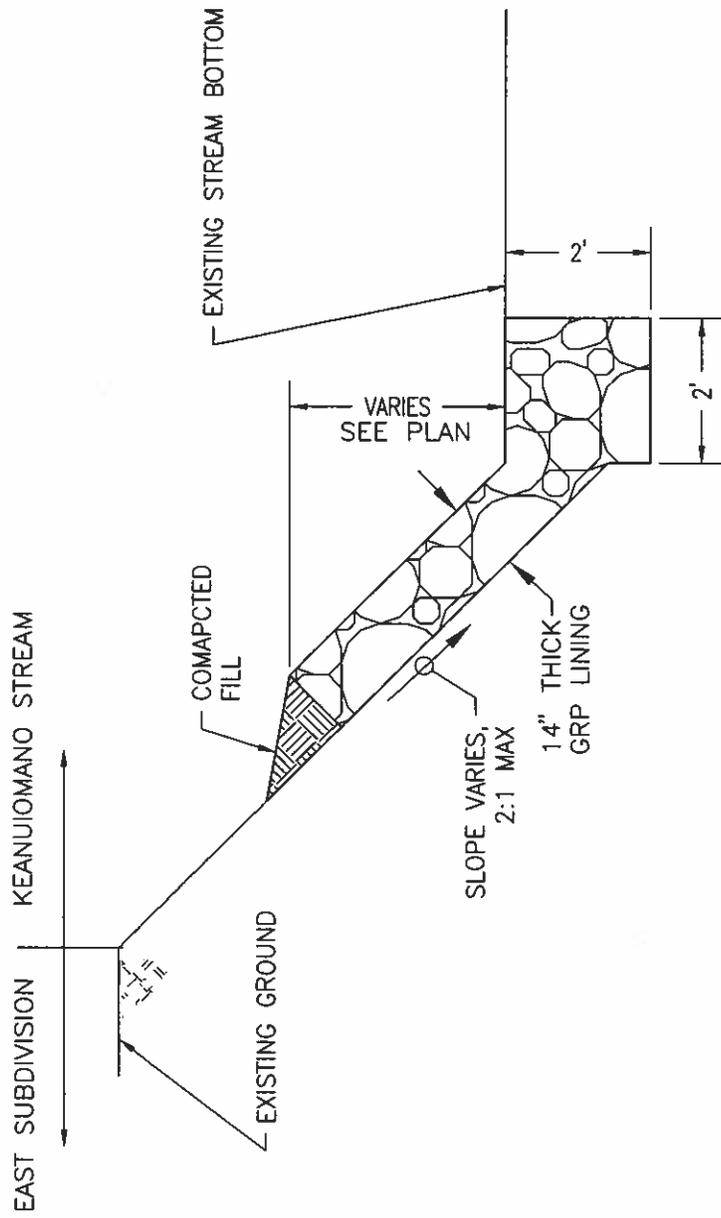


SECTION A



SECTION B

ITEM B-3d - ELEVATION/SECTION -
 32'X8' CONCRETE ARCH CULVERT SECTIONS
 SCALE: 1"=20'



GRP SLOPE PROTECTION

SCALE: NTS



lot 2 facing makai 2.jpg



lot 3 looking east.jpg

EXHIBIT 3



Footings for culvert btwn lot 19 and 20.jpg



stream diversion channel looking upstream.jpg



stream diversion looking downstream.jpg

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 19, 2008, 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.