



Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT

COMMUNITY INFORMATION		PROPOSED PROJECT DESCRIPTION	BASIS OF CONDITIONAL REQUEST
COMMUNITY	Hawaii County Hawaii	CULVERT CHANNELIZATION	UPDATED TOPOGRAPHIC DATA FLOODWAY 1D HYDRAULIC ANALYSIS
	COMMUNITY NO.: 155166		
IDENTIFIER	Hawaii County Project	APPROXIMATE LATITUDE & LONGITUDE: 19.614, -155.971 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
AFFECTED MAP PANELS			
TYPE: FIRM*	NO.: 1551660951F	DATE: September 29, 2017	* FIRM - Flood Insurance Rate Map

FLOODING SOURCE(S) AND REACH DESCRIPTION

See Page 2 for Additional Flooding Sources

Horseshoe Bend Drainageway – From confluence with Holualoa Drainageway to approximately 765 feet downstream of Kuakini Highway.

PROPOSED PROJECT DESCRIPTION

Flooding Source	Proposed Project	Location of Proposed Project
Horseshoe Bend Drainageway	New (12x4-foot Box) Culvert	Double Barrel 12x4 - foot Box Culvert along Royal Poinciana Drive extension from approximately 1,480 downstream of Kuakini Highway.
	Channelization	From approximately 1,620 feet downstream to 795 feet downstream of Kuakini Highway.

SUMMARY OF IMPACTS TO FLOOD HAZARD DATA

Flooding Source	Effective Flooding	Proposed Flooding	Increases	Decreases
Horseshoe Bend Drainageway	BFEs*	BFEs	Yes	Yes
	Floodway	Floodway	Yes	Yes
	Zone AE	Zone AE	Yes	Yes
	Zone X (shaded)	Zone X (shaded)	Yes	Yes

* BFEs - Base (1-percent-annual-chance) Flood Elevations

COMMENT

This document provides the Federal Emergency Management Agency's (FEMA's) comment regarding a request for a CLOMR for the project described above. This document is not a final determination; it only provides our comment on the proposed project in relation to the flood hazard information shown on the effective National Flood Insurance Program (NFIP) map. We reviewed the submitted data and the data used to prepare the effective flood hazard information for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. Your community is responsible for approving all floodplain development and for ensuring that all permits required by Federal or State/Commonwealth law have been received. State/Commonwealth, county, and community officials, based on their knowledge of local conditions and in the interest of safety, may set higher standards for construction in the Special Flood Hazard Area (SFHA), the area subject to inundation by the base flood. If the State/Commonwealth, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

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CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

ADDITIONAL FLOODING SOURCES AFFECTED BY THIS CONDITIONAL REQUEST

FLOODING SOURCE(S) AND REACH DESCRIPTION

Holualoa Drainageway – From approximately 220 feet downstream of the confluence with Horseshoe Bend Drainageway to approximately 45 feet downstream of Kuakini Highway.

PROPOSED PROJECT DESCRIPTION

Flooding Source	Proposed Project	Location of Proposed Project
Holualoa Drainageway	Channelization	From approximately 1,250 feet downstream to 125 feet downstream of Kuakini Highway.

SUMMARY OF IMPACTS TO FLOOD HAZARD DATA

Flooding Source	Effective Flooding	Proposed Flooding	Increases	Decreases
Holualoa Drainageway	BFEs*	BFEs	Yes	Yes
	Floodway	Floodway	Yes	Yes
	Zone AE	Zone AE	Yes	Yes
	Zone X (shaded)	Zone X (shaded)	Yes	Yes

* BFEs - Base (1-percent-annual-chance) Flood Elevations

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**CONDITIONAL LETTER OF MAP REVISION
COMMENT DOCUMENT (CONTINUED)**

COMMUNITY INFORMATION

To determine the changes in flood hazards that will be caused by the proposed project, we compared the hydraulic modeling reflecting the proposed project (referred to as the proposed conditions model) to the hydraulic modeling used to prepare the Flood Insurance Study (FIS) (referred to as the effective model). If the effective model does not provide enough detail to evaluate the effects of the proposed project, an existing conditions model must be developed to provide this detail. This existing conditions model is then compared to the effective model and the proposed conditions model to differentiate the increases or decreases in flood hazards caused by more detailed modeling from the increases or decreases in flood hazards that will be caused by the proposed project.

The table below shows the changes in the BFEs:

BFE Comparison Table

Flooding Source: Horseshoe Bend Drainageway		BFE Change (feet)	Location of maximum change
Existing vs. Effective	Maximum increase	4.0	Approximately 420 feet upstream of the confluence with Holualoa Drainageway
	Maximum decrease	0.1	Approximately 870 feet upstream of the confluence with Holualoa Drainageway
Proposed vs. Existing	Maximum increase	1.2	Approximately 60 feet upstream of the confluence with Holualoa Drainageway
	Maximum decrease	3.4	Approximately 190 feet upstream of the confluence with Holualoa Drainageway
Proposed vs. Effective	Maximum increase	4.0	Approximately 420 feet upstream of the confluence with Holualoa Drainageway
	Maximum decrease	3.4	Approximately 190 feet upstream of the confluence with Holualoa Drainageway
Flooding Source: Holualoa Drainageway		BFE Change (feet)	Location of maximum change
Existing vs. Effective	Maximum increase	0.1	Approximately 990 feet upstream of the confluence with Horseshoe Bend
	Maximum decrease	1.1	Approximately 970 feet upstream of the confluence with Horseshoe Bend
Proposed vs. Existing	Maximum increase	2.0	Approximately 70 feet downstream of the confluence with Horseshoe Bend
	Maximum decrease	3.5	Approximately 330 feet upstream of the confluence with Horseshoe Bend
Proposed vs. Effective	Maximum increase	0.5	Approximately 135 feet upstream of the confluence with Horseshoe Bend
	Maximum decrease	4.4	Approximately 120 feet upstream of the confluence with Horseshoe Bend

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COMMUNITY INFORMATION (CONTINUED)

Increases due to the proposed project that exceed those permitted under Paragraphs (c)(10) or (d)(3) of Section 60.3 of the NFIP regulations must adhere to Section 65.12 of the NFIP regulations. With this request, your community has complied with all requirements of Paragraph 65.12(a) of the NFIP regulations. Compliance with Paragraph 65.12(b) also is necessary before FEMA can issue a Letter of Map Revision when a community proposes to permit encroachments into the effective floodplain/regulatory floodway that will cause BFE increases in excess of those permitted under Paragraph 60.3(d)(3).

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

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CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

DATA REQUIRED FOR FOLLOW-UP LOMR

Upon completion of the project, your community must submit the data listed below and request that we make a final determination on revising the effective FIRM and FIS report. If the project is built as proposed and the data below are received, a revision to the FIRM FBFM, and FIS report would be warranted.

- Form 1, entitled "Overview & Concurrence Form". Detailed application and certification forms must be used for requesting final revisions to the maps. Therefore, when the map revision request for the area covered by this letter is submitted, Form 1 must be included. If as-built conditions differ from the proposed plans, please submit new forms, which may be accessed at <https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-2>, or annotated copies of the previously submitted forms showing the revised information.
- Form 2, entitled "Riverine Hydrology & Hydraulics Form"
- Form 3, entitled "Riverine Structures Form"
- Hydraulic analyses, for as-built conditions, of the base flood; the 10-percent, 2-percent, and 0.2 percent annual chance floods; and the regulatory floodway, together with a topographic work map showing the revised floodplain and floodway boundaries. Please ensure that the revised information ties in with the current effective information at the downstream and upstream ends of the revised reach.
- An annotated copy of the FIRM, at the scale of the effective FIRM, that shows the revised floodplain and floodway boundary delineations shown on the submitted work map and how they tie into the floodplain and floodway boundary delineations shown on the current effective FIRM at the downstream and upstream ends of the revised reach.
- As-built plans, certified by a registered professional engineer, of all proposed project elements.
- A copy of the public notice distributed by your community, stating its intent to revise the regulatory floodway, or a signed statement by your community that it has notified all affected property owners and affected adjacent jurisdictions.
- Documentation of the individual legal notices sent to property owners who will be affected by any widening/shifting of the base floodplain and/or any BFE increases along Holualoa Drainageway and Horseshoe Bend Drainageway.
- Evidence that your community has, prior to approval of the proposed encroachment, adopted floodplain management ordinances that incorporate the increased BFEs and revised floodway boundary delineations to reflect the post-project conditions, as stated in Paragraph 65.12(b).

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COMMUNITY INFORMATION (CONTINUED)

- A letter stating that your community will adopt and enforce the modified regulatory floodway, OR, if the State/Commonwealth has jurisdiction over either the regulatory floodway or its adoption by your community, a copy of your community's letter to the appropriate State/Commonwealth agency notifying it of the modification to the regulatory floodway and a copy of the letter from that agency stating its approval of the modification
- FEMA's fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps may be accessed at <https://www.fema.gov/flood-maps/change-your-flood-zone/status/flood-map-related-fees>. The fee at the time of the map revision submittal must be received before we can begin processing the request. Payment of this fee can be made through a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card (Visa or MasterCard only). Please forward the payment, along with the revision application, to the following address:

LOMC Clearinghouse
3601 Eisenhower Avenue, Suite 500
Alexandria, VA 22304-6426

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM and FIS report. Because the flood hazard information (i.e., base flood elevations, base flood depths, SFHAs, zone designations, and/or regulatory floodways) will change as a result of the project, a 90-day appeal period will be initiated for the revision, during which community officials and interested persons may appeal the revised flood hazard information based on scientific or technical data.

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COMMUNITY INFORMATION (CONTINUED)

COMMUNITY REMINDERS

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Kathryn Lipiecki
Director, Mitigation Division
Federal Emergency Management Agency, Region IX
1111 Broadway, Suite 1200
Oakland, CA 94607-4052
(510) 627-7211

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