



# Federal Emergency Management Agency

Washington, D.C. 20472

July 19, 2017

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

The Honorable Michael Collins  
Mayor, Town of Paradise Valley  
6401 East Lincoln Drive  
Paradise Valley, AZ 85253

IN REPLY REFER TO:

Case No.: 17-09-0673R  
Community Name: Town of Paradise Valley, AZ  
Community No.: 040049

Dear Mayor Collins:

We are providing our comments with the enclosed Conditional Letter of Map Revision (CLOMR) on a proposed project within your community that, if constructed as proposed, could revise the effective Flood Insurance Study report and Flood Insurance Rate Map for your community.

If you have any questions regarding the floodplain management regulations for your community, the National Flood Insurance Program (NFIP) in general, or technical questions regarding this CLOMR, please contact the Director, Mitigation Division of the Federal Emergency Management Agency (FEMA) Regional Office in Oakland, California, at (510) 627-7175, or the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

Sincerely,

Patrick "Rick" F. Sacbabit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration

List of Enclosures:

Conditional Letter of Map Revision Comment Document

cc: The Honorable W.J. "Jim" Lane  
Mayor, City of Scottsdale

Mr. Paul Mood, P.E.  
Town Engineer  
Town of Paradise Valley

Ms. Ashley Couch  
Stormwater Manager  
City of Scottsdale

Mr. Len Erie, P.E.  
President  
Erie & Associates, Inc.



# 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             | Town of Paradise Valley<br>Maricopa County<br>Arizona | BRIDGE<br>FILL<br>CHANNELIZATION                                                            | FLOODWAY<br>HYDRAULIC ANALYSIS<br>NEW TOPOGRAPHIC DATA |
|                       | COMMUNITY NO.: 040049                                 |                                                                                             |                                                        |
| IDENTIFIER            | PV Triangle/Scottsdale Rd. & Indian Bend Wash         | APPROXIMATE LATITUDE & LONGITUDE: 33.553, -111.927<br>SOURCE: USGS QUADRANGLE DATUM: NAD 83 |                                                        |
| AFFECTED MAP PANELS   |                                                       |                                                                                             |                                                        |
| TYPE: FIRM*           | NO.: 04013C1770L DATE: November 4, 2015               | * FIRM - Flood Insurance Rate Map                                                           |                                                        |

### FLOODING SOURCE(S) AND REACH DESCRIPTION

Indian Bend Wash - from approximately 835 feet downstream of Scottsdale Road to approximately 2,240 feet upstream of Scottsdale Road

### PROPOSED PROJECT DESCRIPTION

| Flooding Source  | Proposed Project                               | Location of Proposed Project                                                                                                   |
|------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Indian Bend Wash | A 6 bay, 42'-span, 10.33'-high Con-arch Bridge | At Scottsdale Road                                                                                                             |
|                  | Fill Placement                                 | At Scottsdale Road                                                                                                             |
|                  | Drainage Swale                                 | From approximately 125 feet east of Northern Avenue and Golf Drive intersection to Northern Avenue and Golf Drive intersection |

### SUMMARY OF IMPACTS TO FLOOD HAZARD DATA

| Flooding Source  | Effective Flooding | Proposed Flooding | Increases | Decreases |
|------------------|--------------------|-------------------|-----------|-----------|
| Indian Bend Wash | Zone AE            | Zone AE           | Yes       | Yes       |
|                  | Floodway           | Floodway          | Yes       | Yes       |
|                  | BFEs*              | BFEs*             | 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 Map Information 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 <http://www.fema.gov/nfip>.

Patrick "Rick" F. Sacbitt, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



# Federal Emergency Management Agency

Washington, D.C. 20472

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

### OTHER COMMUNITIES AFFECTED BY THIS CONDITIONAL REQUEST

**CID Number:** 045012

**Name:** City of Scottsdale, Arizona

#### AFFECTED MAP PANELS

TYPE: FIRM\*

NO.: 04013C1770L

DATE: November 4, 2015

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Map Information 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 <http://www.fema.gov/nfip>.

A handwritten signature in black ink, appearing to read "Rick F. Sacbibit".

Patrick "Rick" F. Sacbibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



# Federal Emergency Management Agency

Washington, D.C. 20472

## 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: Indian Bend Wash |                  | BFE Change (feet) | Location of maximum change                           |
|-----------------------------------|------------------|-------------------|------------------------------------------------------|
| Effective vs. Existing            | Maximum increase | 2.13              | Approximately 1,300 feet upstream of Scottsdale Road |
|                                   | Maximum decrease | 1.33              | Approximately 430 feet downstream of Scottsdale Road |
| Existing vs. Proposed             | Maximum increase | 0.09              | Approximately 2,240 feet upstream of Scottsdale Road |
|                                   | Maximum decrease | 1.42              | Approximately 985 feet upstream of Scottsdale Road   |
| Effective vs. Proposed            | Maximum increase | 1.97              | Approximately 1,300 feet upstream of Scottsdale Road |
|                                   | Maximum decrease | 1.35              | Approximately 430 feet downstream of Scottsdale Road |

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 regulatory floodway that will cause BFE increases in excess of those permitted under Paragraph 60.3(d)(3).

The table above shows BFE increases caused by existing development in the floodplain/regulatory floodway. These BFE increases exceed those permitted under Paragraph 60.3(d)(3) of the NFIP regulations. Therefore, our Regional Office in Oakland, CA will review the existing development as a potential violation of the NFIP regulations. This comment on the proposed project does not consider changes to the existing development that may be necessary to resolve the potential violation.

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.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Map Information 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 <http://www.fema.gov/nfip>.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



# Federal Emergency Management Agency

Washington, D.C. 20472

## 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 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 [http://www.fema.gov/plan/prevent/fhm/dl\\_mt-2.shtm](http://www.fema.gov/plan/prevent/fhm/dl_mt-2.shtm), 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 (1-percent-annual-chance) flood 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 Indian Bend Wash
- 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)

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Map Information 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 <http://www.fema.gov/nfip>.

Patrick "Rick" F. Sacibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency  
Washington, D.C. 20472

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

**COMMUNITY INFORMATION (CONTINUED)**

• FEMA's fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps may be accessed at [http://www.fema.gov/plan/prevent/flm/frm\\_fees.shtm](http://www.fema.gov/plan/prevent/flm/frm_fees.shtm). 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.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Map Information 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 <http://www.fema.gov/nfip>.

A handwritten signature in black ink, appearing to read "Rick Sacbibit".

Patrick "Rick" F. Sacbibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration



## Federal Emergency Management Agency

Washington, D.C. 20472

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

#### 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:

Mr. Jeffrey D. Lusk  
Director, Mitigation Division  
Federal Emergency Management Agency, Region IX  
1111 Broadway, Suite 1200  
Oakland, CA 94607-4052  
(510) 627-7175

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Map Information 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 <http://www.fema.gov/nfip>.

A handwritten signature in black ink, appearing to read "Rick F. Sacbibit".

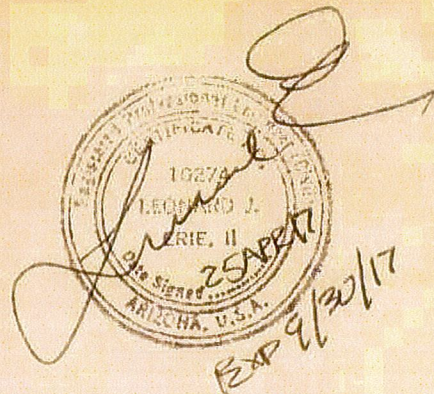
Patrick "Rick" F. Sacbibit, P.E., Branch Chief  
Engineering Services Branch  
Federal Insurance and Mitigation Administration

**Drainage Study / CLOMR Report**  
**PV Triangle Parcel**  
**NWC Scottsdale Road and Northern Avenue (alignment)**  
**Paradise Valley, Maricopa County, Arizona**  
**FEMA Case #17-09-0673R**

**Prepared for:**  
**Geoffrey Edmunds & Associates**  
**7070 East Foothill Drive**  
**Paradise Valley, AZ 85253**

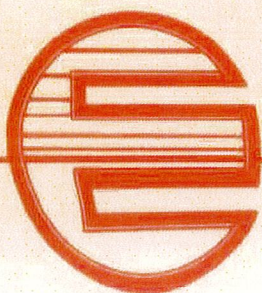
**For submittal to:**  
**Town of Paradise Valley**  
**City of Scottsdale**  
**FEMA**

**Prepared by:**  
**Erie & Associates, Inc.**  
**3120 North 24th Street**  
**Phoenix, Arizona 85016**



**EA #2136.04**

**November 22, 2016**  
**Revised: April 25, 2017**



**Erie & Associates, Inc.**  
**CONSULTING ENGINEERS**  
3120 N. 24th St. / Phoenix, Arizona 85016 / (602) 954-6399

## Drainage Narrative

This 9.636 acre parcel is to be developed in such a manner that it will be free from inundation from the west, the south and the east and protected by masonry walls on the west, south and east as well as the regrading of the Indian Bend wash thru the CLOMR/LOMR process.

The development will be responsible for retaining that quantity of water generated using the pre vs: post formula as set forth in the Town of Paradise Valley "Storm Drain Design Manual" (1987 Edition) or the "First Flush Volume" whichever is greater. Emergency outfall will be to the Indian Bend Wash.

"PRELIMINARY  
NOT FOR  
CONSTRUCTION  
OR  
RECORDING"



Phone: 602.264.6831 • E-mail: cvl@cvlci.com