U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, California 94607

FEMA

November 21, 2017

Mr. Seimone Jurjis, PE, CBO
Assistant Community Development Director
City of Newport Beach
100 Civic Center Drive
Newport Beach, CA 92660

Case No.: 112-09-1324S
Community Name: Newport Beach, California
Community No: 060227

RE: California Coastal Analysis and Mapping Project / Open Pacific Coast Study

Dear Mr. Jurjis:

The Federal Emergency Management Agency (FEMA) is evaluating the issues raised in your submittals dated August 30, 2017 and September 6, 2017 regarding the preliminary Flood Insurance Rate Map (FIRM) panels and Flood Insurance Study (FIS) report for the City Newport Beach, California, which were issued on August 15, 2016. Since the submittal comments are based on the flood hazard data shown on the preliminary copy of the FIRM, they are being reviewed in accordance with the provisions of Title 44, Chapter I, Part 67 of the Code of Federal Regulations (44 CFR Part 67).

An initial review of the submittal has been completed, and additional information is requested to resolve the comments in the referenced submittals pertaining to the Newport Bay analysis. The requested information includes:

1) For purposes of the National Flood Insurance Program (NFIP), FEMA, in its flood hazard and risk mapping effort, will only recognize coastal flood protection structures that meet, and continue to meet, minimum design and maintenance standards that are consistent with the level of protection sought through the comprehensive floodplain management criteria established by 44 CFR Part 60.3. Please submit a detailed technical review of all coastal protection structures that are included in the flood hazard analysis and mapping, demonstrating that the coastal flood protection structure will survive during the base flood. Specific criteria for evaluating coastal structures are contained in FEMA Guidance for Flood Risk Analysis and Mapping: Coastal Structures (November 2015).
2) Submitted raster data for the seawalls around Newport Bay do not accurately represent conditions on the ground for the following reasons:
    - Survey data point density is very low with considerable interpolation between survey points. Higher density of survey points for individual seawalls is needed to interpolate between points, particularly in areas where individual seawalls for each property are present.

- The width of the seawall crests in the raster dataset is about 20 feet. Whereas the actual width of the seawall crests is generally less than 5 feet.

Please modify the seawall raster dataset used in the HEC-RAS model to accurately represent ground conditions.

3) The wind wave estimation was done using the median wind speed. This approach is not consistent with the study objective of looking at the 1%-annual-chance coastal flood event. Please examine wave effects from wind speeds concurrent with the surge return period of interest.

4) Long (swell) wave energy will penetrate the Newport Bay entrance channel. Depending on the frequency and direction of the swell waves and the nearshore bathymetry, this may have a significant effect on flooding in the bay. Please examine long wave penetration and evolution of long wave energy into Newport Bay as a contributing factor to flooding.

5) The Newport Bay HEC-RAS model was validated qualitatively by looking at flood extents for the Jan 10, 2005 flood event. Please provide additional model validation to ensure accuracy of the HEC-RAS model using historic water level observations in Newport Bay. Below are a few examples of data sources that may be used to complete this validation.
   - NOAA hourly tide data from the Newport Bay Entrance Channel (Station ID 9410580) from 1979-1994.
   - US Army Corps of Engineers (USACE), Los Angeles District, Upper Newport Bay Model Development – Baseline Conditions Analysis, 1998. This study validated an RMA hydrodynamic model of Newport Bay using observed water level data from 1992 at various locations around the bay.

The requested information should be provided to FEMA Region IX at 1111 Broadway, Suite 1200, Oakland, CA 94607 (Attention: Juliette Hayes) within 30 days of the date of this letter, in order that the submittal can be fully reviewed. If you are unable to provide the requested data within this timeframe, you may submit a Letter of Map Revision (LOMR) at a later date.

We appreciate your comments and commitment to having the most accurate floodplain information available reflected on the City Newport Beach's FIRM and FIS report. If you have additional questions, please contact Ed Curtis of our FEMA staff in Oakland, California, either by telephone at either by telephone at (510) 627-7207 or by e-mail at Edward.Curtis@fema.dhs.gov.

Sincerely,

Juliette Hayes, Chief
Risk Analysis Branch

cc: The Honorable Kevin Muldoon, Mayor, City of Newport Beach
Floodplain Administrator, City of Newport Beach
Dave Kiff, City Manager
Kim Brandt, AICP, Community Development Director
Samir Ghosn, PE, Principal Civil Engineer
Ying Poon, Everest International Consultants, Inc.
James Eto, State NFIP Coordinator, California Department of Water Resources