BLE and Letters of Map Amendment (LOMAs)

The Federal Emergency Management Agency (FEMA) employs a variety of standards for engineering modeling and mapping when preparing Flood Insurance Rate Maps (FIRMs) to assure that the information shown on FIRMs is based on technically credible, reproducible information. FIRMs are intended to review flood risk across a watershed, producing flood hazard information for natural drainage areas that move storm water through our nation's communities. The scale at which the FIRMs are produced (1" = 500', 1" = 1000' or 1" = 2000') may show small areas of natural high ground as within the 1 percent annual chance floodplain.

These cases, referred to as "inadvertent inclusions", may be removed from the SFHA through the Letter of Map Amendment (LOMA) process. LOMAs are intended for properties that have naturally high ground. For other small areas, earthen fill may have been placed during construction,

The Special Flood Hazard Area (SFHA) designation can be removed from structures by officially amending the effective FIRM through a:

LOMA – for properties on naturally high ground; or

LOMR-F – for properties elevated by the placement of fill.

thereby elevating a small area within the SFHA to an elevation that is at or above the BFE. This construction may have taken place during the time the engineering study was being performed or subsequent to that study. When construction activities have added engineered fill, the Letter of Map Revision - Based on Fill (LOMR-F) process may be used to review site specific information. When fill is placed on individual lots or along a length of a stream embankment, it does not immediately show up on the FIRM.

LOMA LOMR-F

PURPOSE: Determine if a specific property/structure is in/out of the Special

Flood Hazard Area (SFHA) based on effective information

RESULT: FEMA issues letter/document

TYPES: Letter of Map Amendment (LOMA), Conditional Letter of Map

Amendment (CLOMA), Letter of Map Revision Based on Fill (LOMR-F), Conditional Letter of Map Revision Based on Fill (CLOMR-F)

BLE as Best Available Information. The LOMA and LOMR-F processes review a Base Flood Elevation (BFE) at the site of interest against the Lowest Adjacent Grade (LAG). Base Level Engineering (BLE) data can provide Base Flood Elevations to assist the determination of these reviews for possible removal of the mandatory purchase requirement for flood insurance from a structure and/or portion of a property. The table below references three items – first column identifies the different types of Letter of Map Amendment types in the MT-1 forms, second column includes the list of possible effective flood zones for a project area. Finally, the last column outlines the use of information from the Base Level Engineering results as Best Available Information, when available in a property area.

PROPOSED SUBMITTAL	WHAT IS THE EFFECTIVE FLOOD ZONE?	CAN BLE DATA BE USED AS BAI?
LOMA, CLOMA LOMR-F, CLOMR-F	 No Effective Information or Zone X (unshaded) Zone X (shaded) Zone A Zone AE (with or without Floodway) 	 LOMA/LOMR-F not required, however, if elevation is identified it should be used LOMA/LOMR-F not required, but 0.2% elevations available for use YES, when similar in shape/width NO, use effective FIRM data





Finding your Base Flood Elevation. The FIRM depicts a bird's eye view and provides an indication of the expected flood extents during a large storm event, with no understanding of how the structure in question was constructed. The LOMA and LOMR-F processes require two elevations to provide a more site-specific and data rich review of flood risk at the site of interest. The two elevations that are needed to complete an Elevation Certificate are:

Base Flood Elevation (BFE) – The elevation of the water surface (top of the water) that is expected during the 1% annual chance flood event. A 1% annual chance event is a one in one-hundred chance that this storm could occur each calendar year. The FIRM and the Estimated BFE Viewer can assist in determining the BFE at your location.

Lowest Adjacent Grade (LAG) - The lowest point of the ground level immediately next to a building. This elevation may be located at several locations, for example - structural supports (piers, posts, columns), attached garage, attached

O.2% ANNUAL CHANCE
(500-YEAR)
FLOOD ELEVATION

1% ANNUAL CHANCE
(100-YEAR)
FLOOD ELEVATION (BFE)

10% ANNUAL CHANCE
(10-YEAR)
FLOOD ELEVATION

Flood ELEVATION

Figure provides a visual reference to review items requested in Elevation Certificates

stairs, or bottom of window wells. This elevation will require a registered land surveyor to take measurements at the structure of interest.

A **Finished Flood Elevation (FFE)** may also be vital to review the flood risk at your structure of interest. Ask your surveyor if this elevation is needed for your type of building construction.

The workflow graphic below outlines how to find the BFE at your point of interest:

Check Effective FIRM
If yes, document flood
zone

If no, move to next step

Check Base Level Engineering data If yes, run site report or use 1% WSEL grid If no, use effective

Is BLE = BAI

If yes, BLE is BFE

If no, effective is
BFE

Submit MT1
Forms
Use paper, online or eLOMA*
processes

*eLOMA only available for LOMAs

JUICK FACTS

- LOMA will result in a "removal" if the LAG is at or above the BFE.
- LOMR-F will result in a "removal" if the LAG is at or above the BFE and community floodplain officials determine that land and existing/proposed structures to be removed from SFHA are "reasonably safe from flooding".
- According to FEMA's Technical Bulletin 10-01 "to be reasonably safe from flooding during the Base Flood condition, the basement must (1) be dry, not have any water in it, and (2) be structurally sound, not have loads that either exceed the structural capacity of walls or floors or cause unacceptable deflections."
- LOMA submittals that include more than one structure The lowest point on each lot/ structure must be at or above the BFE.
- FEMA does not charge a fee to review a LOMA request, but there is a fee for the engineering review of CLOMAs, LOMR-Fs, and CLOMR-Fs.
- The requester is responsible for providing all the information needed for the review, including (if necessary) elevation information certified by a licensed land surveyor or registered professional engineer.

