F.E.M.A.
LETTER OF
MAP CHANGE

One Surveyor's Foray Into
The Process

Presented by: Jonathan Payne, PLS

1

Course Areas of Discussion

- Program History
- Initial Client Call

- Sources of Information
- Forms and Paperwork Needed
- Methods of Submitting Applications

These 3 are Intertwined

2

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

Mid 1800s through Early 1900s

Various flood control laws and legislation aimed at ***controlling*** flood waters by way of levees.

1929

Private insurers stop covering flood losses

1930s

TVA created (1933)

Flood Control Act of 1936

Disaster relief in the form of loans from the federal government

Source cited can be downloaded from Google Drive here: https://shorturl.at/BB5T8

3

We won't watch it as part of the seminar, but here is a link to an interesting YouTube video, from the channel Practical Engineering, that discusses the trouble with the idea of controlling a river. If you are interested in that discussion, please follow the link.

https://youtu.be/vLZEllYHmAI

4

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1950s

Disaster Relief Act of 1950 allows for disaster relief response without need for congress to act.

Requires formal declaration of a "major disaster" by POTUS at behest of a State

Truman:

"*The lack of a national system of flood insurance is now a major gap in the means by which a man can make his home, his farm, or his business secure against events beyond his control.*"

Various Acts for flood studies and flood control

5

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1950s

The Federal Flood Insurance Act of 1956

- Up to $10,000 insurance per dwelling
- Encourage private insurers to provide coverage over that amount
- Cost the same no matter location

Lack of data leads to lack of appropriations which means the program losses traction

More studies and reports developed to round out the decade

6

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1960s

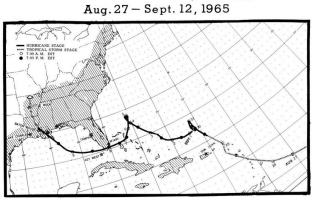
Amendments to the Flood Control Act allow C.O.E. to provide information to state and local agencies (beginnings of Flood Plain Management)

Variety of additional studies and relief acts

TVA aids communities in incorporating floodplain regulations in zoning and subdivision regulations. California is encouraging local governments to do the same.

7

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps



1965

Hurricane Betsy

- Reached Category 4
- 1st 1 Billion Dollar damage hurricane ($1.42 B)
- Wind damage reached as far as Kentucky and Illinois
  - 81 deaths
- Betsy name retired from list of tropical cyclone names

8

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1960s

(1966) "A Unified National Program for Managing Flood Losses", developed by The Task Force on Federal Flood Control Policy, examines means of addressing flood losses other than by flood control.

- Federally subsidized insurance to incentivize "participating communities"
- Limited test run before going national
- Warns if not done correctly could exacerbate problems
- Expects subsidies for existing high-risk properties to last only 25-years

9

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1960s

(1966) Executive Order No. 11296 (Johnson): *Evaluation of Flood Hazard in Locating Federally Owned or Financed Buildings, Roads, and Other Facilities, and in Disposing of Federal Lands and Properties*

- Requires heads of departments involved in federally backed development to consider potential flood risks on projects before funds are used to mitigate actions in a flood plain

10

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1960s

(1966) A feasibility study titled *Insurance and Other Programs for Financial Assistance to Flood Victims*, is submitted to Congress by Johnson.

- Aid individuals with flood insurance
- Discourage 'unwise' use of flood plain
- Subsidies for premiums
- Encourage widespread participation

"…lending institutions entrusted with savings or deposits and under any form of Federal supervision…shall require in high-risk areas flood insurance at unsubsidized rates on all new mortgages based on new residences…"

11

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1960s

Agencies ramp up for the coming insurance program and the flood plain management (versus flood control) which is to be implemented.

Some states begin early adoption of implementing flood plain management requirements.

Use of Bulletin No. 15 *"A Uniform Technique for Determining Flood Flow Frequency"*, is adopted for federal planning and recommended for state and local governments.

12

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1960s

National Flood Insurance Act of 1968

- Creates the National Flood Insurance Program
- Provide flood insurance option for participating communities
- Identify flood hazards and establish insurance rates based on the existing hazard
- Existing structures subsidized, new structure to pay actuarial premiums
- Flood zones to be determined in all flood prone areas within 15 years

13

Sad Side Note

From the same session, we can see that the phrase "going postal" which gained infamy in the 1980s and 1990s was already a developing matter within the United States Postal Service:

Public Law 90-449

AN ACT

August 2, 1968
[H. R. 15387]

To amend title 39, United States Code, to provide for disciplinary action against employees in the postal field service who assault other employees in such service in the performance of official duties, and for other purposes.

14

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1970s

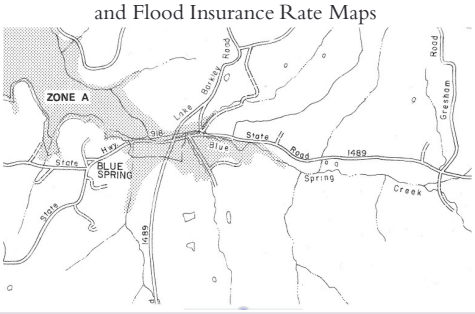
1969/70 – First Flood Insurance Policies through the NFIP are purchased (4 participating communities and 16 policies in place)

1972 – Subsidized rates lowered to incentivize increased participation

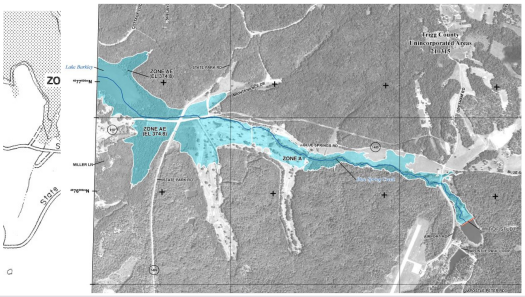
1973 – Mapping demand is large enough that outside consultants are hired to develop Flood Hazard Boundary Maps

15

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps



16



17

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1970s

Flood Disaster Protection Act of 1973 (purpose)

- Increase limits of coverage authorized under the NFIP;
- Provide expeditious identification of and dissemination of information concerning, flood-prone areas;
- Require States or local communities, as a condition of future Federal financial assistance, to participate in the flood insurance program and to adopt adequate flood plain ordinances with effective enforcement provisions consistent with Federal standards to reduce or avoid future flood losses; and
- Require the purchase of flood insurance by property owners who are being assisted by Federal programs or by federally supervised, regulated, or insured agencies or institutions in the acquisition or improvement of land or facilities located or to be located in identified areas having special flood hazards

18

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1970s

January 1974 – rates lowered to encourage participation

July 1974 – rates further reduced

1978 – *Texas Landowners Rights Association v. Harris* challenges the policy of withholding federal financial assistance (including FHA and VA loans). It fails.

1979 – FIA and NFIP moved from Department of Housing and Urban Development to newly created FEMA

19

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1980s

1981 – rates on pre-FIRM structures raised twice in this year (leads to decline in policy purchase by 1983)

1982 – *"National Flood Insurance: Marginal Impact on Flood Plain Development, Administrative Improvements Needed"*, posits concerns over premiums based on incorrectly rated flood zones and recommends better monitoring to ensure flood plain regulation compliance in participating communities.

1983 – intended private insurance participation begins to take place

20

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1980s

October 1987 – NFIP is first defined as self-supporting with premiums covering "historical average loss year". December of that year, net operating deficit of $652 million.

November 1988 – Robert T. Stafford Disaster Relief and Emergency Assistance Act proposes more "buyout" funds to discourage rebuilding in SFHAs

September 1989 – Hurricane Hugo hits. Buildings up to NFIP levels performed better than those not up to standard.

21

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1990s

1993 should be the 25 years after the National Flood Insurance Act of 1968, so subsidized flood insurance was expected to no longer be in place

June 1993 – Flooding all along the Mississippi covering much of the mid-west. $16 billion in damages. Only 1 in 10 affected structures have flood insurance.

June 1994 – *Sharing the Challenge: Floodplain Management Into the 21st Century* (a.k.a the Galloway Report) notes overly generous federal disaster assistance may reduce individual responsibility. Also states 5 day waiting period was too short and allowed for an additional $82 million in claims – recommended 15 day wait for policy to take effect.

22

A levee in Monroe County, IL, fails and the Mississippi River flows through. Aug. 1, 1993. The house was removed from its foundation and carried downstream. AP photo by: James R. Finley

23

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1990s

National Flood Insurance Reform Act of 1994

- requires banks to obtain flood insurance if borrower does not have proof of insurance
- impose penalties for failure to require flood insurance, fees for flood determination
- increase coverage limit
- increases waiting period for policy to 30 days
- Require review and assessment of need to update FIRM every 5 years

24

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1990s

Variety of studies on mitigation and insurance rates

1994 – *Florida Key Deer v. Stickney* decision made that FEMA must comply with the Endangered Species Act

1995 – *Audit of the Accuracy of Flood Zone Ratings* indicates incorrect zone in ¼ of flood insurance policies, premiums incorrect for 10% of policies, notes flood maps are difficult to read and rules for writing policies are too complex. No change from FEMA until 1999.

25

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1990s

1995 – Due to extensive flooding in the preceding 12 months, NFIP must borrow $265 million from the Treasury

1996 – Due to extensive flooding during the past 12 months, NFIP must borrow additional funds from the Treasury reaching $626 million and adding an additional $192 million in the ensuing six months

1997 – Continued flood related losses leads to loan value from the Treasury totaling $917 million

1998 – FIA estimates 38% of homes with a mortgage in a SFHA don't have flood insurance

1999 – FEMA asks Congress to allow a $15 fee on every federally insured mortgage to fund map modernization. FEMA instructed to look for alternatives.

26

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

1990s

1999 – A recurring theme from the past is addressed in a hearing at the U.S. House of Representatives: multiple claims on the same property.

Over 100 million acres of SFHAs have been mapped and designated as such at a cost of ±$1.3 billion dollars.

27

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2000s

2000 – International Building Code published including NFIP construction requirements.

2000 – *Opportunities to Enhance Compliance with Homeowner Flood Insurance Purchase Requirements* finds that of mortgages with federally regulated lending institutions which should require flood insurance, 10% do not have the required coverage

October 2000 – Use of FEMA elevation certificate becomes mandatory; the Disaster Mitigation and Cost Recovery Act requires states to prepare a comprehensive state program for emergencies in order to be eligible for receive funds from FEMA.

28

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2000s

2001 – NFIP 'eliminates' its debt to the Treasury

2002 – NFIP pays off $650 million borrowed to cover $1 billion in claims due to Hurricane Allison

2004 – *Actions to Address Repetitive Loss Properties* notes that about 38% of claim costs have been the result of repetitive loss properties costing $4.6 billion dollars since 1978. June of that year, Bush signs Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 to address repetitive loss

2004 – Hurricane season leads to $225 million in borrowing to pay claims

29

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2000s

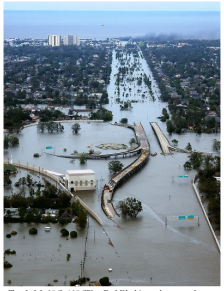
2005 – Hurricane Katrina. NFIP borrowing limit raised from $1.5 billion to $3.5 billion. Funds borrowed not expected to be repaid before at least 10 years. Katrina and Rita claims will exceed $22 billion and the entire preceding history of payments from NFIP was only $15 billion. So, borrowing limit was raised to $18.5 billion to be able to settle claims.

2005 (also) – Tropical Storm Tammy drops 12 inches of rain in 30 hours in New Hampshire. Considered a once in 500-year event.

2006 – Mount Rainier National Park closed due to heavy flooding in Washington states

2006 – Online LOMA submissions and e-LOMA processes made available through the map modernization program "Mapping Information Platform"

30



Flooded I-10/I-610/West End Blvd interchange and surrounding area of northwest New Orleans and Metairie, Louisiana
AP Photo/U.S. Coast Guard, Petty Officer 2nd Class Kyle Niemi

New Hampshire Flooding in a town called Surry, NH just a short 11 miles from where a dam was breached in Alstead, NH.
Lt Joel Huntley - Surry Police Dept
https://www.ccdx.org/scrapbook/SurryFlood/2005/flood05.htm

31

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2000s

2007 - (repeated more widely in 2008) Midwest flooding. 18-inches of rain during the week in some places. $100M in damages in Minnesota and Wisconsin.

2009 - Flooding in Alabama, Georgia, Tennessee, and North Carolina.

2010 – Flooding in New England. 12 inches of rain on top of an already wet season led to flooding in Rhode Island that saw the Pawtuxet River crest at a record setting 12 feet above flood stage. A sewage treatment plant fails and contaminates surrounding waters.

2010 – Tennessee flooding. In May of 2010, Tennessee sees a 1000-year flooding event. This affects Middle and West Tennessee as well as Western Kentucky. 31 deaths and $2.3B in damages.

32

A goose swims by a 23-foot figure of William Clark that is surrounded by the waters of the Mississippi River along the St. Louis riverfront.Credit...Peter Newcomb for The New York Times

Photo from FOURSQUARE CITY GUIDE
By User "Charles"
https://foursquare.com/v/the-captains-return-statue/4c8c092fc37a6dcb1aa3f37a

33

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2010s

2011 – Missouri River flooding. With more than double the annual snowpack in the Rocky Mtns and a year's worth of rain falling in one half of the month of May, this event is estimated to have cause $2.8B in economic damages

2011 – Mississippi River flooding affects Missouri, Illinois, Tennessee, Arkansas, Mississippi, Louisiana Kentucky. Birds Point-New Madrid Floodway used for the first time since 1937. An estimated $2.8B in economic damages

2011 – Mid Atlantic flooding due to Tropical Storm Lee which had tracked across much of the south. An estimated $1B in damages to the mid-Atlantic area.

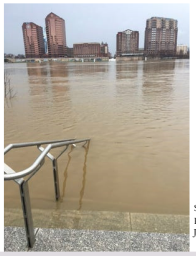
2012 – Hurricane Sandy spanning 1150 miles caused approx. $70 billion in damages from the Caribbean up to Canada.

34

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2010s

2018 – Ohio River flooding. We may have some in attendance that will recall that flooding. But, according to the National Weather Service, that flooding was only the 22nd worst in Cincinnati since NWS started keeping records. The water crested at 60.53 feet compared to 1937 when it hit 80.00 feet!



Smale Riverfront Park in Cincinnati.
Photo by:
Jeanne Houck / The Enquirer.

35

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2020s so far

2021 – Tennessee flooding covering Western Middle Tennessee and Western Kentucky. McEwen Tennessee faced a recording breaking 20 inches of rain in a 24-hour period. Five counties received 1/4th of their normal ANNUAL rainfall in a 12-hour period!

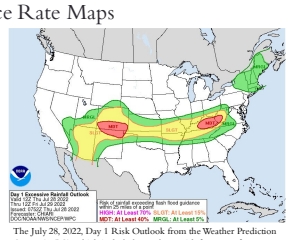
Pinewood Church of Christ along the Piney River north of Nunnelly
Photo by:
NWS Nashville - U.S. National Weather Service

36

Historical Context for National Flood Insurance Program and Flood Insurance Rate Maps

2020s so far

2022 – Eastern Kentucky flooding where the North Fork of the Kentucky River swelled to 21 feet before gauge failure, which was well above the prior record of 14.7 feet set in 1957. This was brought about by between 14 to 16 inches of rainfall in a 5-day period. With some areas experiencing rainfall at a rate of 4 inches per hour.



The July 28, 2022, Day 1 Risk Outlook from the Weather Prediction Center (WPC), which included a moderate risk for parts of Eastern Kentucky and West Virginia.
Weather Prediction Center –
https://twitter.com/NWSWPC/status/1552563342471925760

37

38

I need an elevation thingy

39

I need an elevation thingy

My realtor told me you could help me get my property out of a flood zone

40

I need an elevation thingy

My realtor told me you could help me get my property out of a flood zone

I just got a letter from my bank telling me I'm in a flood zone and I know I'm not

41

I need an elevation thingy

My realtor told me you could help me get my property out of a flood zone

I just got a letter from my bank telling me I'm in a flood zone and I know I'm not

I'm trying to sell my house and they're (?) telling me I'm in a flood zone. I looked it up and according to the elevation from my iPhone, I'm not.

42

I need an elevation thingy

My realtor told me you could help me get my property out of a flood zone

I just got a letter from my bank telling me I'm in a flood zone and I know I'm not

I'm trying to sell my house and they're (?) telling me I'm in a flood zone. I looked it up and according to the elevation on my iPhone, I'm not.

I need an Elevation Certificate.

43

Hopefully Discussed Points From the Preceding "Ring. Ring." Scenarios

The caller may not know what they really need

44

Hopefully Discussed Points From the Preceding "Ring. Ring." Scenarios

The caller may not know what they really need

The caller will most likely not understand why they need what they need

45

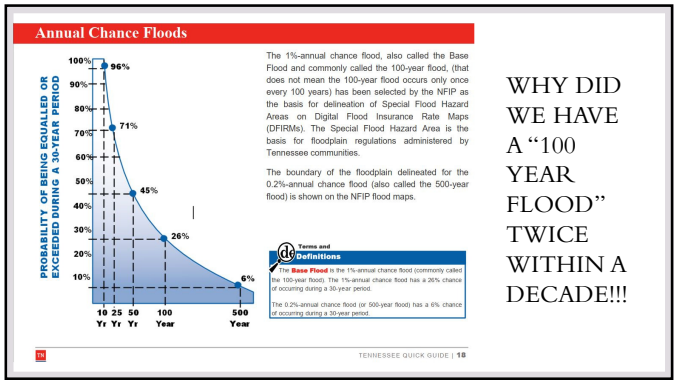
Hopefully Discussed Points From the Preceding "Ring. Ring." Scenarios

The caller may not know what they really need

The caller will most likely not understand why they need what they need

The caller may think they aren't in a flood zone because of the facts they are aware of

46



WHY DID WE HAVE A "100 YEAR FLOOD" TWICE WITHIN A DECADE!!!

47

Hopefully Discussed Points From the Preceding "Ring. Ring." Scenarios

The caller may not know what they really need

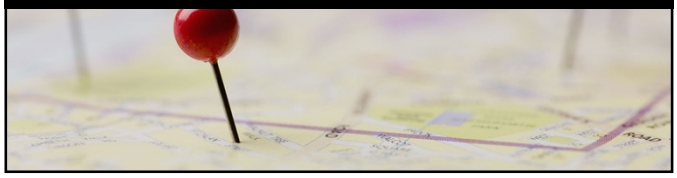
The caller will most likely not understand why they need what they need

The caller may think they aren't in a flood zone because of the facts they are aware of

The caller may want a particular product (i.e., Elevation Certificate), but could also use further PROFESSIONAL assistance

48

SOURCES OF INFORMATION
FORMS AND PAPERWORK NEEDED
METHODS OF SUBMITTING APPLICATIONS



49

FEMA

NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

INSTRUCTIONS

2019 EDITION

Note: Expired ~~MT-EZ, MT-1, and MT-2 forms may be used until further notice.~~ Please proceed to use these forms when completing your Letter of Map Change (LOMC) application.

- Updated periodically
- Sometimes outdated w/ note to use outdated form until updated

50

National Flood Insurance Program

Elevation Certificate

and Instructions

2022 EDITION

FEMA

- This is the current cover page

51

https://www.fema.gov/glossary/elevation-certificate

An official website of the United States government Here's how you know

Español Tiếng Việt 简体中文

FEMA

Search

Prepare for Disasters Get Flood Insurance + Apply for Assistance ✓ Check Application Status

Disasters & Assistance Grants Floods & Maps Emergency Management About Work With Us

About
Reports & Data
Glossary
Annual Reports
Data Visualizations
Disaster Relief Fund Reports
FEMA Guidance Documents
OpenFEMA
Resilience Analysis & Planning Tool
About Us
News & Multimedia
FEMA in Action

Elevation Certificate

A community's permit file must have an official record that shows new buildings and substantial improvements in all identified Special Flood Hazard Areas (SFHA)are properly elevated. This elevation information is needed to show compliance with the floodplain management ordinance. FEMA encourages communities to use the Elevation Certificate developed by FEMA to fulfill this requirement since it also can be used by the property owner to obtain flood insurance. Communities participating in the Community Rating System (CRS) are required to use the FEMA Online Elevation Certificate (FEMA 81-31).

National Flood Insurance Program Requirements

- Requirement to Obtain Lowest Floor Elevation in Zone A
- 60.3 (d) (2) Requirement to Obtain Elevation of Lowest Horizontal Structural Member in Zone V

Last updated July 12, 2023

https://www.fema.gov/glossary/elevation-certificate

52

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

OMB Control No. 1660-0008
Expiration Date: 06/30/2019

ELEVATION CERTIFICATE AND INSTRUCTIONS

PAPERWORK REDUCTION ACT NOTICE

Public reporting burden for this data collection is estimated to average 3.75 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20742. Paperwork Reduction Project (1660-0008). NOTE: Do not send your completed form to this address.

PRIVACY ACT STATEMENT

Authority: Title 44 CFR § 61.7 and 61.8.

Principal Purpose(s): This information is being collected for the primary purpose of documenting compliance with National Flood Insurance Program (NFIP) floodplain management ordinances for new or substantially improved structures in designated Special Flood Hazard Areas. This form may also be used as an optional tool for a Letter of Map Amendment (LOMA), Conditional LOMA (CLOMA), Letter of Map Revision Based on Fill (LOMR-F), or Conditional LOMR-F (CLOMR-F), or for flood insurance rating purposes in any flood zone.

Routine Use(s): The information on this form may be disclosed as generally permitted under 5 U.S.C. § 552a(b) of the Privacy Act of 1974, as amended. This routine use is to the extent necessary and relevant to the NFIP. Routine uses may be shared with the National Flood Insurance Program Files System of Records Notice 73 Fed. Reg. 19747 (May 16, 2014) and upon written request, written consent, by agreement, or as required by law.

Disclosure: The disclosure of information on this form is voluntary; however, failure to provide the information requested may impact the flood insurance premium through the NFIP. Information will only be released as permitted by law.

PURPOSE OF THE ELEVATION CERTIFICATE

The Elevation Certificate is an important administrative tool of the NFIP. It can be used to provide elevation information necessary to ensure compliance with community floodplain management ordinances, to affirm the proper insurance premium, and to support a request for a LOMA, CLOMA, LOMR-F, or CLOMR-F.

The Elevation Certificate is used to document floodplain management compliance for Post-Flood Insurance Rate Map (FIRM) buildings, which are buildings constructed after publication of the FIRM, located in flood Zones A1–A30, AE, A99, AH, AO, A (with Base Flood Elevation (BFE)), VE, V1–V30, V (with BFE), AR, ARA, ARAE, ARH-A30, ARAH, ARAO, and A99. It may also be used to provide elevation information for Pre-FIRM buildings or buildings in any flood zone.

As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt floodplain management ordinances that, at a minimum, require that all new buildings and substantially improved buildings be elevated to or above the elevation of the lowest floor (including basement) of all new and substantially improved buildings, and maintain a record of such information. The Elevation Certificate provides a way for a community to document compliance with the community's floodplain management ordinance.

Use of this certificate does not provide a waiver of the flood insurance purchase requirement. Only a LOMA or LOMR-F from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the federal mandate for a lending institution to require the purchase of flood insurance on a property. Only a Letter of Map Revision (LOMR) or Conditional LOMR (CLOMR) can change the FIRM issued by FEMA. The Elevation Certificate may be used to support a LOMA, CLOMA, LOMR-F, or CLOMR-F request. Lowest Adjacent Grade (LAG) elevations certified by a land surveyor, engineer, or architect, as authorized by state law, will be required if the certificate is submitted in support of a LOMA, CLOMA, LOMR-F, or CLOMR-F request. If the Elevation Certificate is submitted in support of a request with either a completed FEMA MT-EZ or MT-1 application package, a floodwaver is appropriate. If the certificate will only be completed to support a LOMA, CLOMA, LOMR-F, or CLOMR-F request, there is an option to document the certified LAG elevation on the Elevation Form included in the MT-EZ and MT-1 application.

This certificate is used only to certify building elevations. A separate certificate is required for floodproofing. Under the NFIP, non-residential buildings may be floodproofed to the BFE. Section A Item A8 of the Elevation Certificate provides a place to document the height of the watertight (or potentially impermeable to floodwaters) below the BFE. Floodproofing of residential buildings is not permitted under the NFIP unless FEMA has granted the community an exception for residential floodproofed basements. The community must adopt standards for floodproofed residential basements before FEMA can grant the exception. Information on the requirements for floodproofing non-residential buildings and residential floodproofed basements in communities that have been granted an exception by FEMA, a floodproofing certificate is required.

The expiration date on the form herein does not apply to certified and completed Elevation Certificates, as a completed Elevation Certificate does not expire, unless there is a physical change to the building that invalidates information in Section A Items A9 or A6, Section C, Section D, or Section E. In addition, this form is intended for the specific building referenced in Section A and is not invalidated by the transfer of building ownership.

Additional guidance can be found in FEMA Publication 467-1, *Floodplain Management Bulletin: Elevation Certificate*.

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (10/22). Page 1 of 19

- Estimated 3.75 hrs to complete
- Purposes –
  - determine appropriate insurance premium rates,
  - ensure compliance w/ community floodplain management,
  - support a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR–F) request

53

RATE TABLE 5. REGULAR PROGRAM – PRE-FIRM AND POST-FIRM ELEVATION-RATED RATES[1]

ANNUAL RATES PER $100 OF COVERAGE (Basic/Additional)

FIRM ZONES AR AND AR DUAL ZONES[2] — BUILDING RATES

ELEVATION OF LOWEST FLOOR ABOVE OR BELOW THE BFE	1 FLOOR No Basement/Enclosure/ Crawlspace[3]		MORE THAN 1 FLOOR No Basement/Enclosure/ Crawlspace[3]		MORE THAN 1 FLOOR With Basement/Enclosure/ Crawlspace[3]		MANUFACTURED (MOBILE) HOME[4]	
	1–4 Family	Other Residential, Non-Residential Business, Other Non-Residential[6]	1–4 Family	Other Residential, Non-Residential Business, Other Non-Residential[6]	1–4 Family	Other Residential, Non-Residential Business, Other Non-Residential[6]	Single Family	Non-Residential Business, Other Non-Residential[6]
+4	.31 / .09	.28 / .13	.27 / .08	.22 / .08	.24 / .08	.20 / .08	.32 / .16	.31 / .29
+3	.35 / .09	.32 / .15	.31 / .08	.25 / .08	.27 / .08	.23 / .09	.37 / .18	.35 / .33
+2	.51 / .11	.46 / .20	.44 / .08	.36 / .08	.32 / .08	.28 / .10	.54 / .24	.50 / .44
+1	.96 / .17	.84 / .31	.80 / .08	.66 / .09	.46 / .08	.36 / .12	1.02 / .32	.95 / .60
0	1.12 / .32	1.06/ .32	1.12 / .32	1.06 / .32	.68 / .08	.58 / .14	1.12 / .32	1.34 / .60
–1[5]	SEE FOOTNOTE 5							

54

INSTRUCTIONS FOR COMPLETING THE ELEVATION CERTIFICATE

The Elevation Certificate is to be completed by a land surveyor, engineer, or architect who is authorized by state law to certify elevation information when elevation information is required or used for Zones A1–A30, AE, AH, AO, A (with Base Flood Elevation (BFE)), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, or A99.

Community officials who are authorized by law or ordinance to provide floodplain management information (herein referred to as "local floodplain management official") may also complete this form. For Zones AO, AR/AO, and A (without BFE), a local floodplain management official, a property owner, or an owner's authorized representative may provide floodplain management compliance information on this certificate in Section E, unless the elevations are intended for use in supporting a request for a LOMA, CLOMA, LOMR-F, or CLOMR-F. Certified elevations must be included if the purpose of completing the Elevation Certificate is to obtain a LOMA, CLOMA, LOMR-F, or CLOMR-F.

The property owner, the owner's authorized representative, or local floodplain management official can complete Section A and Section B. The partially completed form can then be given to the land surveyor, engineer, or architect to complete Section C. The land surveyor, engineer, or architect should verify the information provided by the property owner or owner's representative to ensure that this certificate is complete.

For insurance purposes only, a local floodplain management official, a property owner, or an owner's authorized representative may provide First Floor Height details in Section H for any zone.

In Puerto Rico only, elevations for building information and flood hazard information may be entered in meters.

Note: Section C can be used for insurance and compliance in any zone; however, Section E can be used only for compliance in Zone AO and Zone A.

55

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

OMB Control No. 1660-0008
Expiration Date: 06/30/2026

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION	FOR INSURANCE COMPANY USE
A1. Building Owner's Name:	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:	Company NAIC Number:
City: State: ZIP Code:	
A3. Property Description (e.g., Lot and Block Numbers or Legal Description) and/or Tax Parcel Number:	
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.):	
A5. Latitude/Longitude: Lat. Long. Horizontal Datum: ☐ NAD 1927 ☐ NAD 1983 ☐ WGS 84	
A6. Attach at least two and when possible four clear photographs (one for each side) of the building (see Form pages 7 and 8).	
A7. Building Diagram Number:	

56

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s): _____ sq. ft.

b) Is there at least one permanent flood opening on two different sides of each enclosed area? ☐ Yes ☐ No ☐ N/A

c) Enter number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade:
Non-engineered flood openings: _____ Engineered flood openings: _____

d) Total net open area of non-engineered flood openings in A8.c: _____ sq. in.

e) Total rated area of engineered flood openings in A8.c (attach documentation – see Instructions): _____ sq. ft.

f) Sum of A8.d and A8.e rated area (if applicable – see Instructions): _____ sq. ft.

A9. For a building with an attached garage:

a) Square footage of attached garage: _____ sq. ft.

b) Is there at least one permanent flood opening on two different sides of the attached garage? ☐ Yes ☐ No ☐ N/A

c) Enter number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade:
Non-engineered flood openings: _____ Engineered flood openings: _____

d) Total net open area of non-engineered flood openings in A9.c: _____ sq. in.

e) Total rated area of engineered flood openings in A9.c (attach documentation – see Instructions): _____ sq. ft.

f) Sum of A9.d and A9.e rated area (if applicable – see Instructions): _____ sq. ft.

57

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION
B1.a. NFIP Community Name: B1.b. NFIP Community Identification Number:
B2. County Name: B3. State: B4. Map/Panel No.: B5. Suffix:
B6. FIRM Index Date: B7. FIRM Panel Effective/Revised Date:
B8. Flood Zone(s): B9. Base Flood Elevation(s) (BFE) (Zone AO, use Base Flood Depth):
B10. Indicate the source of the BFE data or Base Flood Depth entered in Item B9: ☐ FIS ☐ FIRM ☐ Community Determined ☐ Other:
B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☐ NAVD 1988 ☐ Other/Source:
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☐ No Designation Date: ☐ CBRS ☐ OPA
B13. Is the building located seaward of the Limit of Moderate Wave Action (LiMWA)? ☐ Yes ☐ No

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (10/22) Page 2 of 19

58

https://msc.fema.gov/portal/home

FEMA

Navigation

Search

MSC Home
MSC Search by Address
MSC Search All Products
MSC Products and Tools
Hazus
LOMC Batch Files
Product Availability
MSC Frequently Asked Questions (FAQs)
MSC Email Subscriptions
Contact MSC Help

FEMA Flood Map Service Center: Welcome!

Looking for a Flood Map?

Enter an address, place, or longitude/latitude coordinates:

Enter an address, a place, or longitude/latitude coordinates | Search

Looking for more than just a current flood map?

Visit **Search All Products** to access the full range of flood risk products for your community.

About Flood Map Service Center

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.

FEMA flood maps are continually updated through a variety of processes. Effective information that you download or print from this site may change or become superseded by new maps over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet

59

FEMA

Navigation

Search

MSC Home
MSC Search by Address
MSC Search All Products
MSC Products and Tools
Hazus
LOMC Batch Files
Product Availability
MSC Frequently Asked Questions (FAQs)
MSC Email Subscriptions
Contact MSC Help

FEMA Flood Map Service Center: Search By Address

Enter an address, place, or coordinates:

persimmon place cadiz kentucky | Search

Whether you are in a high risk zone or not, you may need flood insurance because most homeowners insurance doesn't cover flood damage. If you live in an area with low or moderate flood risk, you are 5 times more likely to experience flood than a fire in your home over the next 30 years. For many, a National Flood Insurance Program's flood insurance policy could cost less than $400 per year. Call your insurance agent today and protect what you've built.

Learn more about steps you can take to reduce flood risk damage.

Search Results—Products for **TRIGG COUNTY UNINCORPORATED AREAS** | Show ALL Products »

The flood map for the selected area is number **21221C0205D**, effective on **4/19/2019**

DYNAMIC MAP — VIEW ONLY FORMAT

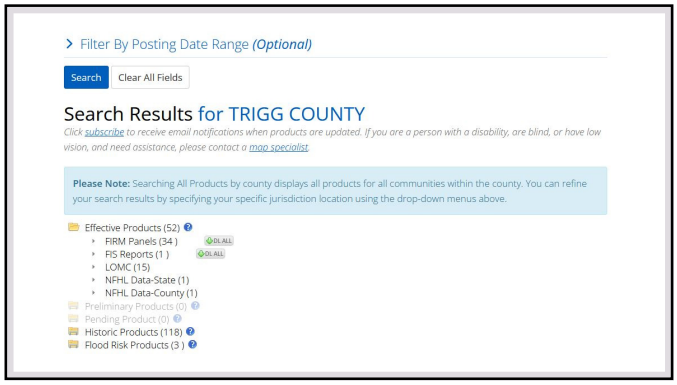
MAP IMAGE — DOWNLOAD FIRM PANEL

Changes to this FIRM
- Revisions (0)
- Amendments (5)
- Revalidations (1)

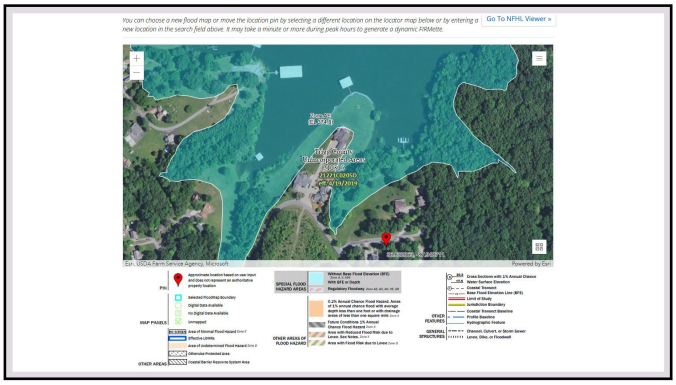
You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMette.

Go To NFHL Viewer »

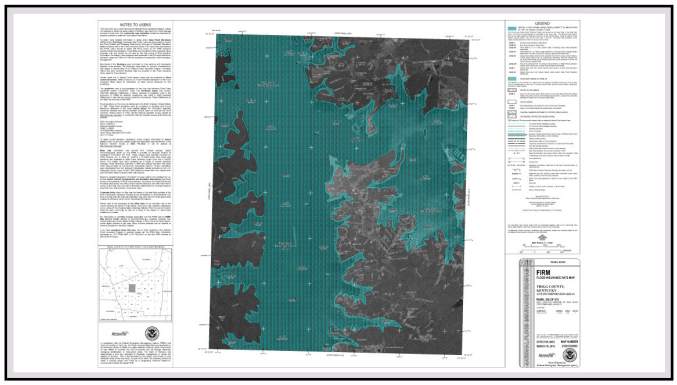
60



61

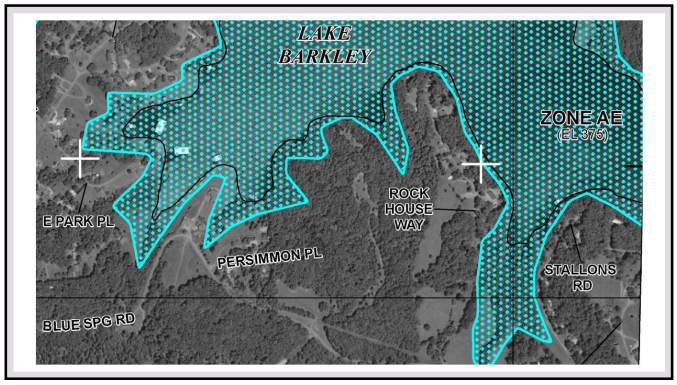


62

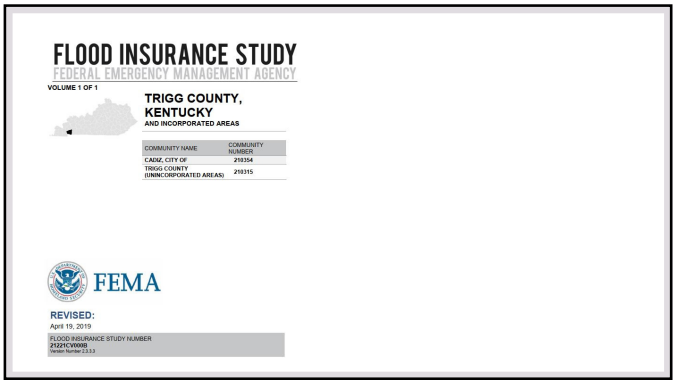


63

64



65



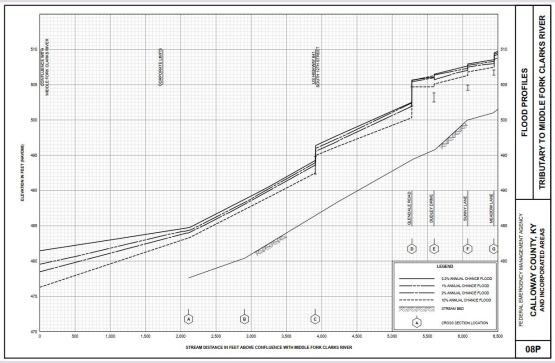
66

Table 11: Summary of Non-Coastal Stillwater Elevations

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Kentucky Lake	Trigg County Unincorporated Areas	*	*	*	374.8	*
Lake Barkley	Trigg County Unincorporated Areas	*	*	*	374.8	*

*Not calculated for this Flood Risk Project

67



68

LETTER OF MAP AMENDMENT
DETERMINATION DOCUMENT (NON-REMOVAL)

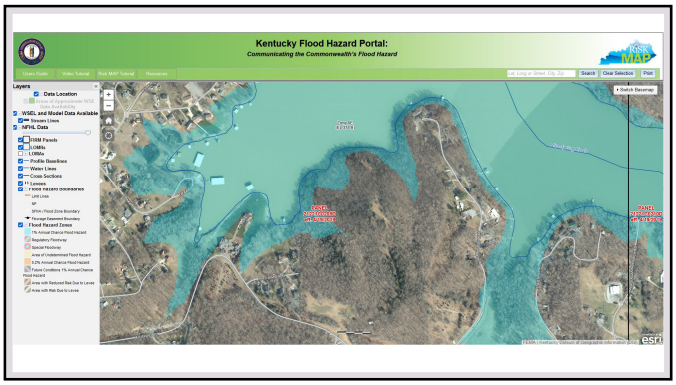
COMMUNITY AND MAP PANEL INFORMATION		LEGAL PROPERTY DESCRIPTION
COMMUNITY	TRIGG COUNTY, KENTUCKY (Unincorporated Areas)	A parcel of land, as described in the Deed recorded as Document No. 200746, Book D305, Pages 238, 239, and 240, in the Office of the County Clerk, Trigg County, Kentucky
	COMMUNITY NO.: 210315	
AFFECTED MAP PANEL	NUMBER: 21221C0205D	
	DATE: 4/19/2019	
FLOODING SOURCE: LAKE BARKLEY		APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY:36.833548, -87.949845 SOURCE OF LAT & LONG: LOMA LOGIC DATUM: NAD 83

DETERMINATION

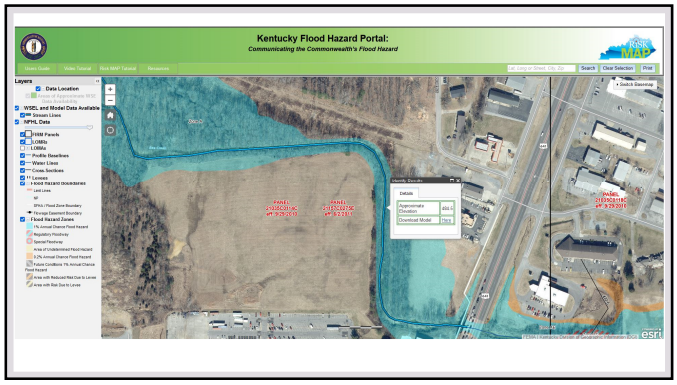
LOT	BLOCK/ SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS NOT REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NAVD 88)	LOWEST ADJACENT GRADE ELEVATION (NAVD 88)	LOWEST LOT ELEVATION (NAVD 88)
--	--	--	4544 Blue Springs Road	Structure (Residence)	AE	374.8 feet	373.5 feet	--

Special Flood Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood).

69



70



71

User Guide Introduction

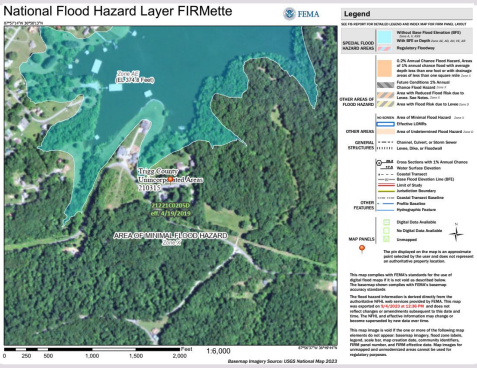
The Flood Hazard Portal User Guide is intended to provide information regarding how to use the mapping application portion of the portal and download data supporting the floodplain boundaries shown on the maps. If you require additional assistance, or have questions about the intended purpose or functionality of this portal site that are not answered by this user guide, please contact the Division of Water, by email at KYriskMAP@ky.gov or by phone at (502) 564-3410.

NOTE All counties have been populated with data on this portal as of February 2019. The exception to this is Jefferson County as Louisville MSD provides BFE determinations at the following website: https://apps.lojic.org/msdflooddetermination/

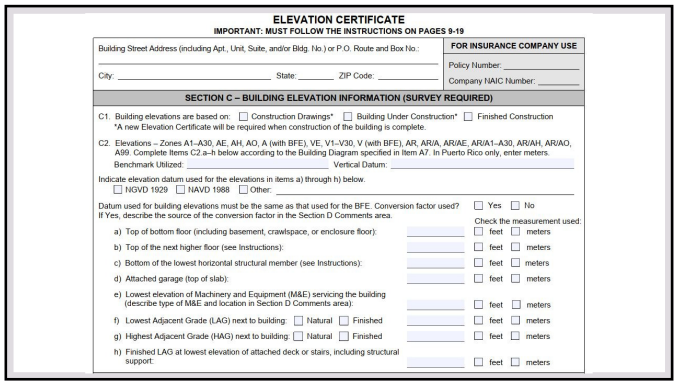
Some Zone A areas are not yet available on the portal, such as sinkhole elevations. If your area of interest is not yet populated with data, please email KYriskMAP@ky.gov to obtain the information you need.

72

73



74



ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: _____

City: _____ State: _____ ZIP Code: _____

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.
Benchmark Utilized: _____ Vertical Datum: _____

Indicate elevation datum used for the elevations in items a) through h) below.
☐ NGVD 1929 ☐ NAVD 1988 ☐ Other: _____

Datum used for building elevations must be the same as that used for the BFE. Conversion factor used? ☐ Yes ☐ No
If Yes, describe the source of the conversion factor in the Section D Comments area.

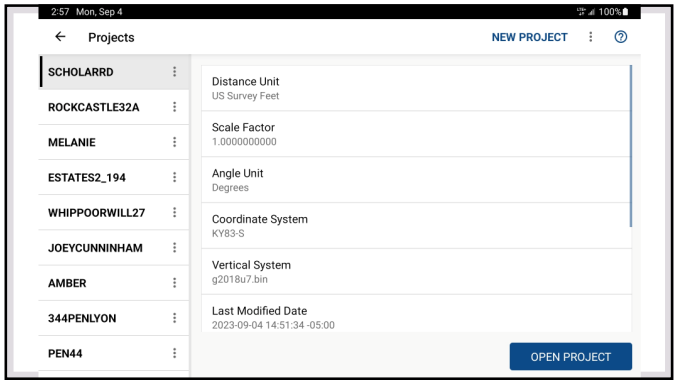
		Check the measurement used:
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):	_____	☐ feet ☐ meters
b) Top of the next higher floor (see Instructions):	_____	☐ feet ☐ meters
c) Bottom of the lowest horizontal structural member (see Instructions):	_____	☐ feet ☐ meters
d) Attached garage (top of slab):	_____	☐ feet ☐ meters
e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area):	_____	☐ feet ☐ meters
f) Lowest Adjacent Grade (LAG) next to building: ☐ Natural ☐ Finished	_____	☐ feet ☐ meters
g) Highest Adjacent Grade (HAG) next to building: ☐ Natural ☐ Finished	_____	☐ feet ☐ meters
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:	_____	☐ feet ☐ meters

75

Z: 3772925.000(m) 0.012(m) 3772924.875(m) 0.012(m)

LAT: 36 29 58.19653 0.018(m) 36 29 58.22093 0.018(m)
E LON: 270 36 32.09263 0.022(m) 270 36 32.06173 0.022(m)
W LON: 89 23 27.90737 0.022(m) 89 23 27.93827 0.022(m)
EL HGT: 59.077(m) 0.007(m) 57.850(m) 0.007(m)
ORTHO HGT: 87.398(m) 0.017(m) [NAVD88 (Computed using GEOID12A)]

76



77

Figure 2. FIRM Notes to Users

PROJECTION INFORMATION: The projection used in the preparation of the map was Lambert Conformal Conic, Kentucky Zone 1600. The horizontal datum was NAD83. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

78

Table 11: Summary of Non-Coastal Stillwater Elevations

Flooding Source	Location	Elevations (feet NAVD88)				
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Kentucky Lake	Trigg County Unincorporated Areas	*	*	*	374.8	*
Lake Barkley	Trigg County Unincorporated Areas	*	*	*	374.8	*

*Not calculated for this Flood Risk Project

79

SCALE

Map Projection:
State Plane Lambert Conformal Conic, Kentucky Zone 1600;
North American Datum 1983; Vertical Datum: NAVD 88

1 inch = 1,000 feet **1:12,000**

N

0 1,000 2,000 4,000 Feet

0 250 500 1,000 Meters

80

Estimated Water Surface Elevations

Produce Estimated Water Surface Elevation

Zoom in until aerial photography and stream centerlines are visible as seen in the screen capture above. Left Click on the stream centerline at the point of interest to produce an estimated flood elevation of that location in the **Identify Results** window. Results are returned in feet above mean sea level, North American Vertical Datum 1988 (MSL-NAVD88).

Back to Table of Contents

81

ELEVATION CERTIFICATE
IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:
City: State: ZIP Code:

FOR INSURANCE COMPANY USE
Policy Number:
Company NAIC Number:

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, AO, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, A99. Complete Items C2.a–h below according to the Building Diagram specified in Item A7. In Puerto Rico only, enter meters.
Benchmark Utilized: Vertical Datum:

Indicate elevation datum used for the elevations in items a) through h) below.
☐ NGVD 1929 ☐ NAVD 1988 ☐ Other:

Datum used for building elevations must be the same as that used for the BFE. Conversion factor used? ☐ Yes ☐ No
If Yes, describe the source of the conversion factor in the Section D Comments area.

		Check the measurement used:
a) Top of bottom floor (including basement, crawlspace, or enclosure floor):		☐ feet ☐ meters
b) Top of the next higher floor (see Instructions):		☐ feet ☐ meters
c) Bottom of the lowest horizontal structural member (see Instructions):		☐ feet ☐ meters
d) Attached garage (top of slab):		☐ feet ☐ meters
e) Lowest elevation of Machinery and Equipment (M&E) servicing the building (describe type of M&E and location in Section D Comments area):		☐ feet ☐ meters
f) Lowest Adjacent Grade (LAG) next to building: ☐ Natural ☐ Finished		☐ feet ☐ meters
g) Highest Adjacent Grade (HAG) next to building: ☐ Natural ☐ Finished		☐ feet ☐ meters
h) Finished LAG at lowest elevation of attached deck or stairs, including structural support:		☐ feet ☐ meters

82

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by state law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

Were latitude and longitude in Section A provided by a licensed land surveyor? ☐ Yes ☐ No

☐ Check here if attachments and describe in the Comments area.

Certifier's Name: License Number:
Title:
Company Name:
Address:
City: State: ZIP Code:
Signature: Date:
Telephone: Ext.: Email:

Place Seal Here

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including source of conversion factor in C2; type of equipment and location per C2.e; and description of any attachments):

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (10/22) Page 3 of 19

83

ELEVATION CERTIFICATE
IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.:
City: State: ZIP Code:

FOR INSURANCE COMPANY USE
Policy Number:
Company NAIC Number:

SECTION E – BUILDING MEASUREMENT INFORMATION (SURVEY NOT REQUIRED)
FOR ZONE AO, ZONE AR/AO, AND ZONE A (WITHOUT BFE)

For Zones AO, AR/AO, and A (without BFE), complete Items E1–E5. For Items E1–E4, use natural grade, if available. If the Certificate is intended to support a Letter of Map Change request, complete Sections A, B, and C. Check the measurement used. In Puerto Rico only, enter meters.

Building measurements are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☐ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.

E1. Provide measurements (C.2.a in applicable Building Diagram) for the following and check the appropriate boxes to show whether the measurement is above or below the natural HAG and the LAG.

a) Top of bottom floor (including basement, crawlspace, or enclosure) is: ☐ feet ☐ meters ☐ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is: ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (C2.b in applicable Building Diagram) of the building is: ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is: ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is: ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown The local official must certify this information in Section G.

84

SECTION F – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without BFE) or Zone AO must sign here. *The statements in Sections A, B, and E are correct to the best of my knowledge*

☐ Check here if attachments and describe in the Comments area.

Property Owner or Owner's Authorized Representative Name: _____

Address: _____

City: _____ State: ____ ZIP Code: _____

Signature: _____ Date: _____

Telephone: _____ Ext.: ____ Email: _____

Comments:

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (10/22) Page 4 of 19

85

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: _____

City: _____ State: ____ ZIP Code: _____

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION G – COMMUNITY INFORMATION (RECOMMENDED FOR COMMUNITY OFFICIAL COMPLETION)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Section A, B, C, E, G, or H of this Elevation Certificate. Complete the applicable item(s) and sign below when:

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by state law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2.a. ☐ A local official completed Section E for a building located in Zone A (without a BFE), Zone AO, or Zone AR/AO, or when item E5 is completed for a building located in Zone AO.

G2.b. ☐ A local official completed Section H for insurance purposes.

G3. ☐ In the Comments area of Section G, the local official describes specific corrections to the information in Sections A, B, E and H.

G4. ☐ The following information (Items G5–G11) is provided for community floodplain management purposes.

G5. Permit Number: _____ G6. Date Permit Issued: _____

G7. Date Certificate of Compliance/Occupancy Issued: _____

G8. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G9.a. Elevation of as-built lowest floor (including basement) of the building: _____ ☐ feet ☐ meters Datum: _____

G9.b. Elevation of bottom of as-built lowest horizontal structural member: _____ ☐ feet ☐ meters Datum: _____

G10.a. BFE (or depth in Zone AO) of flooding at the building site: _____ ☐ feet ☐ meters Datum: _____

G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member: _____ ☐ feet ☐ meters Datum: _____

86

member: _____ ☐ feet ☐ meters Datum: _____

G10.a. BFE (or depth in Zone AO) of flooding at the building site: _____ ☐ feet ☐ meters Datum: _____

G10.b. Community's minimum elevation (or depth in Zone AO) requirement for the lowest floor or lowest horizontal structural member: _____ ☐ feet ☐ meters Datum: _____

G11. Variance issued? ☐ Yes ☐ No If yes, attach documentation and describe in the Comments area.

The local official who provides information in Section G must sign here. *I have completed the information in Section G and certify that it is correct to the best of my knowledge. If applicable, I have also provided specific corrections in the Comments area of this section.*

Local Official's Name: _____ Title: _____

NFIP Community Name: _____

Telephone: _____ Ext.: ____ Email: _____

Address: _____

City: _____ State: ____ ZIP Code: _____

Signature: _____ Date: _____

Comments (including type of equipment and location, per C2.e; description of any attachments; and corrections to specific information in Sections A, B, D, E, or H):

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (10/22) Page 5 of 19

87

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: _____

City: _____ State: ____ ZIP Code: _____

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

SECTION H – BUILDING'S FIRST FLOOR HEIGHT INFORMATION FOR ALL ZONES (SURVEY NOT REQUIRED) (FOR INSURANCE PURPOSES ONLY)

The property owner, owner's authorized representative, or local floodplain management official may complete Section H for all flood zones to determine the building's first floor height for insurance purposes. Sections A, B, and I must also be completed. Enter heights to the nearest tenth of a foot (nearest tenth of a meter in Puerto Rico). ***Reference the Foundation Type Diagrams (at the end of Section H Instructions) and the appropriate Building Diagrams (at the end of Section I Instructions) to complete this section.***

H1. Provide the height of the top of the floor (as indicated in Foundation Type Diagrams) above the Lowest Adjacent Grade (LAG):

a) **For Building Diagrams 1A, 1B, 3, and 5–9.** Top of bottom floor (include above-grade floors only for buildings with subgrade crawlspaces or enclosure floors) is: _____ ☐ feet ☐ meters ☐ above the LAG

b) **For Building Diagrams 2A, 2B, 4, and 6–9.** Top of next higher floor (i.e., the floor above basement, crawlspace, or enclosure floor) is: _____ ☐ feet ☐ meters ☐ above the LAG

H2. Is **all** Machinery and Equipment servicing the building (as listed in Item H2 instructions) elevated to or above the floor indicated by the H2 arrow (shown in the Foundation Type Diagrams at end of Section H instructions) for the appropriate Building Diagram?
☐ Yes ☐ No

88

SECTION I – PROPERTY OWNER (OR OWNER'S AUTHORIZED REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and H must sign here. *The statements in Sections A, B, and H are correct to the best of my knowledge.* **Note:** If the local floodplain management official completed Section H, they should indicate in Item G2.b and sign Section G.

☐ Check here if attachments are provided (including required photos) and describe each attachment in the Comments area.

Property Owner or Owner's Authorized Representative Name: _____

Address: _____

City: _____ State: ____ ZIP Code: _____

Signature: _____ Date: _____

Telephone: _____ Ext.: ____ Email: _____

Comments:

FEMA Form FF-206-FY-22-152 (formerly 086-0-33) (10/22) Page 6 of 19

89

ELEVATION CERTIFICATE

IMPORTANT: MUST FOLLOW THE INSTRUCTIONS ON PAGES 9-19

BUILDING PHOTOGRAPHS

See Instructions for Item A8.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: _____

City: _____ State: ____ ZIP Code: _____

FOR INSURANCE COMPANY USE

Policy Number: _____

Company NAIC Number: _____

Instructions: Insert below at least two and when possible four photographs showing each side of the building (for example, may only be able to take front and back pictures of townhouses/rowhouses). Identify all photographs with the date taken and "Front View," "Rear View," "Right Side View," or "Left Side View." Photographs must show the foundation. When flood openings are present, include at least one close-up photograph of representative flood openings or vents, as indicated in Sections A8 and A9.

Photo One

Photo One Caption:

Clear Photo One

90

91

DEPARTMENT OF HOMELAND SECURITY - FEDERAL EMERGENCY MANAGEMENT AGENCY APPLICATION FORM FOR SINGLE RESIDENTIAL LOT OR STRUCTURE AMENDMENTS TO NATIONAL FLOOD INSURANCE PROGRAM MAPS	*O.M.B. NO. 1660-0015* *Expires February 28, 2014*

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this data collection is estimated to average 2.4 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting this form. This collection of information is required to obtain or retain benefits. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20598-3005, Paperwork Reduction Project (1660-0015) **NOTE: Do not send your completed form to this address.**

This form should be used to request that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) remove a single structure or legally recorded parcel of land or portion thereof, described by metes and bounds, certified by a registered professional engineer or licensed land surveyor, from a designated Special Flood Hazard Area (SFHA), an area that would be inundated by the flood having a 1%-chance of being equaled or exceeded in any given year (base flood), via Letter of Map Amendment (LOMA). It shall not be used for requests submitted by developers, for requests involving multiple structures or lots, for property in alluvial fan areas, for property located within the regulatory floodway, or requests involving the placement of fill. (NOTE: Use MT-1 forms for such requests). **Fill** is defined as material from any source (including the subject property) placed that raises the grade to or above the Base Flood Elevation (BFE). The common construction practice of removing unsuitable existing material (topsoil) and backfilling with select structural material is not considered the placement of fill if the practice does not alter the existing (natural grade) elevation, which is at or above the BFE. Also, fill that is placed before the date of the first National Flood Insurance Program (NFIP) map showing the area in an SFHA is considered natural grade.

LOMA:	**A letter from DHS-FEMA stating that an existing structure or parcel of land that has not been elevated by fill would not be inundated by the base flood.**

92

A – This section may be completed by the property owner or by the property owner's agent. In order to process your request, all information on this form must be completed ***in its entirety***, unless stated as optional. **Incomplete submissions will result in processing delays.**

1. Has fill been placed on your property to raise ground that was previously below the BFE?

   ☐ No ☐ Yes – If Yes, **STOP!! – You must complete the MT-1 application forms; visit http://www.fema.gov/plan/prevent/fhm/dl_mt-1.shtm or call the FEMA Map Information eXchange toll free: (877-FEMA MAP) (877-336-2627)**

2. Legal description of Property (Lot, Block, Subdivision or abbreviated description from the Deed) ***and*** street address of the Property (required):

3. Are you requesting that a flood zone determination be completed for (check one):

   ☐ A structure on your property? What is the date of construction? _____ (MM/YYYY)

   ☐ A portion of your legally recorded property? (A certified metes and bounds description and map of the area to be removed, certified by a registered professional engineer or licensed land surveyor, are **required**. For the preferred format of metes and bounds descriptions, please refer to the MT-EZ Instructions.)

   ☐ Your entire legally recorded property?

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

93

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Applicant's Name (required):	**E-mail address (optional) (☐ By checking here you may receive correspondence electronically at the email address provided):**
Mailing Address (include Company name if applicable) (required):	**Daytime Telephone No. (required):** **Fax No. (optional):**
Signature of Applicant (required)	**Date (required)**

End of Section A

DHS - FEMA Form 086-0-22, FEB 11 MT-EZ Form Page 1 of 3

94

B – <u>This section *must* be completed by a registered professional engineer or licensed land surveyor</u>. Incomplete submissions will result in processing delays.

NOTE: If the request is to have a flood zone determination completed for the structure, and an Elevation Certificate has been completed for this property, it may be submitted in lieu of Section B. If the request is to have a flood zone determination completed for the entire legally recorded property, or a portion thereof, the lowest elevation on the lot or described portion must be provided in Section B.

Applicable Regulations

The regulations pertaining to LOMAs are presented in the National Flood Insurance Program (NFIP) regulations under Title 44, Chapter I, Parts 70 and 72, Code of Federal Regulations. The purpose of Part 70 is to provide an administrative procedure whereby DHS-FEMA will review information submitted by an owner or lessee of property who believes that his or her property has been inadvertently included in a designated SFHA. The necessity of Part 70 is due in part to the technical difficulty of accurately delineating the SFHA boundary on an NFIP map. Part 70 procedures shall not apply if the topography has been altered to raise the original ground to or above the BFE since the effective date of the first NFIP map [e.g., a Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM)] showing the property to be within the SFHA.

Basis of Determination

DHS-FEMA's determination as to whether a structure or legally recorded parcel of land, or portion thereof, described by metes and bounds, may be removed from the SFHA will be based upon a comparison of the Base (1%-annual-chance) Flood Elevation (BFE) with certain elevation information. The elevation information required is dependent upon what is to be removed from the SFHA. For Zones A and AO, please refer to Page 7 of the MT-EZ Form Instructions for information regarding BFE development in those areas and supporting data requirements.

Determination Requested For: (check one)	**Elevation Information Required: (complete Item 5)**
☐ Structure located on natural grade (LOMA)	Lowest Adjacent Grade to the structure (the elevation of the lowest ground touching the structure including attached patios, stairs, deck supports or garages)
☐ Legally recorded parcel of land, or portion thereof (LOMA)	Elevation of the lowest ground on the parcel or within the portion of land to be removed from the SFHA

95

1. PROPERTY INFORMATION

Property Description (Lot and Block Number, Tax Parcel Number, or Abbreviated Description from the Deed, etc.):

2. STRUCTURE INFORMATION

Street Address (including Apt. Unit, Suite, and/or Bldg. No.):

What is the type of construction? (check one) ☐ crawl space ☐ slab on grade ☐ basement/enclosure ☐ other (explain):

3. GEOGRAPHIC COORDINATE DATA

Please provide the Latitude and Longitude of the most upstream edge of the ***structure*** (in decimal degrees to nearest fifth decimal place)

Indicate Datum: ☐ WGS84 ☐ NAD83 ☐ NAD27 Lat. ____ . ____ Long. ____ . ____

Please provide the Latitude and Longitude of the most upstream edge of the ***property*** (in decimal degrees to nearest fifth decimal place)

Indicate Datum: ☐ WGS84 ☐ NAD83 ☐ NAD27 Lat. ____ . ____ Long. ____ . ____

4. FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

NFIP Community Number:	Map Panel Number:	Base Flood Elevation (BFE):	Source of BFE:

96

5. ELEVATION INFORMATION (SURVEY REQUIRED)

- Lowest Adjacent Grade (LAG) to the structure (to the nearest 0.1 foot or meter) ____.____ ft. (m)
- Elevation of the lowest grade on the property; or within metes and bounds area (to the nearest 0.1 foot or meter) ____.____ ft. (m)
- Indicate the datum (if different from NGVD 29 or NAVD 88 attach datum conversion) ☐ NGVD 29 ☐ NAVD 88 ☐ Other (add attachment)
- Has FEMA identified this area as subject to land subsidence or uplift? ☐ No ☐ Yes (provide date of current releveling): ____

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name:	License No.:	Expiration Date:	Seal (optional)
Company Name:	Telephone No.:	Fax No.:	
Email:			
Signature:		Date:	

DHS - FEMA Form 086-0-22, FEB 11 MT-EZ Form Page 2 of 3

97

In addition to this form (MT-EZ), please complete the checklist below. **ALL** requests must include one copy of the following:

- ☐ Copy of the effective FIRM panel on which the structure and/or property location has been accurately plotted
- ☐ Copy of the Subdivision Plat Map **(with recordation data and stamp of the Recorder's Office)**
  OR
- ☐ Copy of the Property Deed **(with recordation data and stamp of the Recorder's Office)**, ***accompanied by*** a tax assessor's map or other certified map showing the surveyed location of the property relative to local streets and watercourses. The map should include at least one street intersection that is shown on the FIRM panel.
- ☐ Please include a map scale and North arrow on all maps submitted.

Please do *not* submit original documents. Please retain a copy of all submitted documents for your records.

DHS-FEMA encourages the submission of all required data in a digital format (e.g. scanned documents and images on Compact Disc [CD]). Digital submissions help to further DHS-FEMA's Digital Vision and also may facilitate the processing of your request.

Incomplete submissions will result in processing delays. For additional information regarding this form, including where to obtain the supporting documents listed above, please refer to the MT-EZ Form Instructions located at http://www.fema.gov/plan/prevent/fhm/dl_mt-ez.shtm.

Mail your request to:

LOMC CLEARINGHOUSE
847 SOUTH PICKETT STREET
ALEXANDRIA, VA 22304-4605
Attn.: LOMA Manager

98

1. NFIP Community Number: ____ Property Name or Address: ____
2. Are the elevations listed below based on ☐ ***existing*** or ☐ ***proposed*** conditions? (Check one)
3. For the existing or proposed structures listed below, what are the types of construction? (check all that apply)
   ☐ crawl space ☐ slab on grade ☐ basement/enclosure ☐ other (explain) ____
4. Has DHS - FEMA identified this area as subject to land subsidence or uplift? (see instructions) ☐ Yes ☐ No
   If yes, what is the date of the current re-leveling? ____ / ____ (month/year)
5. What is the elevation datum? ☐ NGVD 29 ☐ NAVD 88 ☐ Other (explain) ____
   If any of the elevations listed below were computed using a datum different than the datum used for the effective Flood Insurance Rate Map (FIRM) (e.g., NGVD 29 or NAVD 88), what was the conversion factor? ____
   Local Elevation +/- ft. = FIRM Datum
6. Please provide the Latitude and Longitude of the most upstream edge of the ***structure*** (in decimal degrees to the nearest fifth decimal place):
   Indicate Datum: ☐ WGS84 ☐ NAD83 ☐ NAD27 Lat. . Long. .
   Please provide the Latitude and Longitude of the most upstream edge of the ***property*** (in decimal degrees to the nearest fifth decimal place):
   Indicate Datum: ☐ WGS84 ☐ NAD83 ☐ NAD27 Lat. . Long. .

Address	Lot Number	Block Number	Lowest Lot Elevation*	Lowest Adjacent Grade To Structure	Base Flood Elevation	BFE Source

99

MT-2 REVISION REQUEST SUBMITTAL CHECKLIST

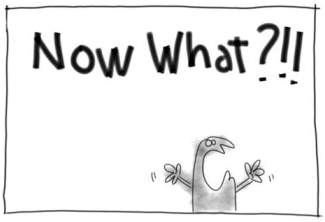
PART A: GENERAL REQUIREMENTS

ELEMENTS	Yes	N/A
NARRATIVE: Please provide a written description of the purpose of the request, the scope of the proposed/as-built project, and the methodology used to analyze the project effects.		
MT-2 APPLICATION FORMS: Please provide completed forms applicable to your request. Ensure that MT-2 Form 1 was signed by the requester, certifying engineer, and each community affected by the revision.		
HYDROLOGIC ANALYSIS: If applicable, please provide a FEMA-acceptable hydrologic analysis in digital format, a drainage area map, and associated backup information (e.g., calculations used to determine lag time, CN, and loss values, as well as land use and soil maps). FEMA-acceptable models can be accessed at https://www.fema.gov/flood-maps/products-tools/numerical-models/hydrologic.		
HYDRAULIC ANALYSIS: Please provide a FEMA-acceptable hydraulic analysis in digital format. Information on FEMA-acceptable models can be accessed at on their website.		
CERTIFIED TOPOGRAPHIC WORK MAP: Please provide a certified topographic work map that meets the mapping requirements outlined in MT-2 Form 2. If available, please provide spatially referenced Geographic Information System (GIS) data. If GIS data are not available, you may submit digital Computer-Aided Design (CAD) data.		

100

ANNOTATED FIRM: Please submit a revised Flood Insurance Rate Map (FIRM), at the scale of the effective FIRM, which shows the revised boundary delineation of the base (1-percent-annual-chance) floodplain, 0.2-percent-annual-chance floodplain, and regulatory floodway and how it ties into the boundary delineation shown on the effective FIRM at the downstream and upstream ends of the revised reach.		
REVIEW FEE PAYMENT: Please include the appropriate review fee payment. The current fee schedule is available on the FEMA website at https://www.fema.gov/flood-maps/change-your-flood-zone/status/flood-map-related-fees.		
MEET 65.10 REQUIREMENT: If you intend to show that a berm/levee/floodwall reduces the flood hazard, please submit all the NFIP data requirements outlined in Title 44, Chapter 1, Section 65.10 of the Code of Federal Regulations (44 CFR §65.10).		
OPERATION AND MAINTENANCE PLAN: If the request involves a berm, levee, floodwall, dam, and/or detention basin project, please submit an officially adopted operation and maintenance plan.		
PROPOSED/AS-BUILT PLANS: Please submit proposed/as-built plans, certified by a registered Professional Engineer, for all project elements for which this applies.		
FLOODWAY NOTICE: If the revision results in changing or establishing regulatory floodway boundaries, please provide a floodway public notice or a statement by your community that it has notified all affected property owners, in compliance with the National Flood Insurance Program (NFIP) regulations at 44 CFR §65.7(b)(1).		
PROPERTY OWNER NOTIFICATION: If the revision results in any widening/shifting/establishing of a base floodplain and/or any increasing/establishing of Base Flood Elevations (BFEs), please provide copies of the individual legal notices sent to all property owners affected by increased flood hazards.		

101



102

Submitting the Package to DHS-FEMA

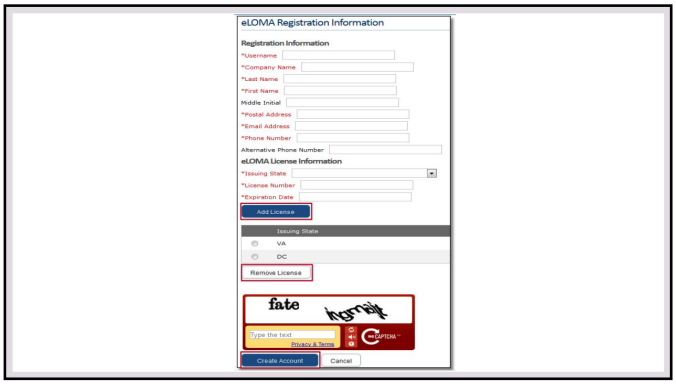
In addition to the completed MT-EZ form, all requests must include one copy of the subdivision plat map (with recordation data and stamp of the Recorder's Office) or a copy of the property deed (with recordation data and stamp of the Recorder's Office), accompanied by a tax assessor's map or other suitable map showing the surveyed location of the property with respect to local streets and watercourses; a copy of the effective FIRM panel; and a map scale and North arrow for all maps submitted. Please do not submit original documents. Please retain a copy of all submitted documents for your records.

DHS-FEMA encourages electronic submissions through the Online LOMC Tool at https://hazards.fema.gov. This new tool is a convenient way for applicants to upload all information and supporting documentation and check the status of their request online. Users can submit requests through this tool instead of filing the paper form via mail.

However, for requests submitted via mail, DHS-FEMA encourages the submission of all required data in digital format (e.g., scanned documents on a CD). Please submit all application forms and data to support a request for a flood zone determination to the address listed below. **Incomplete submissions will result in processing delays.**

LOMC CLEARINGHOUSE
3601 EISENHOWER AVENUE, SUITE 500
ALEXANDRIA, VA 22304-6426

103

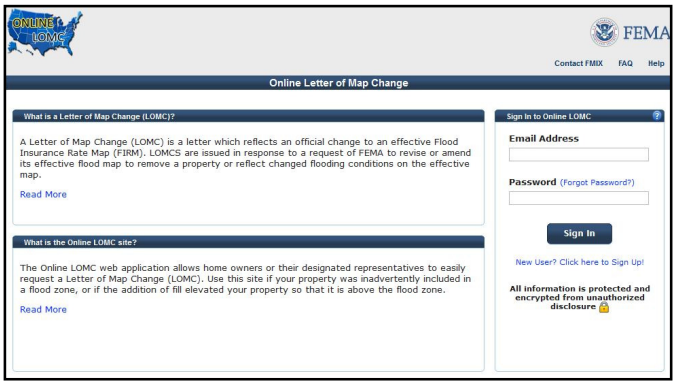


104

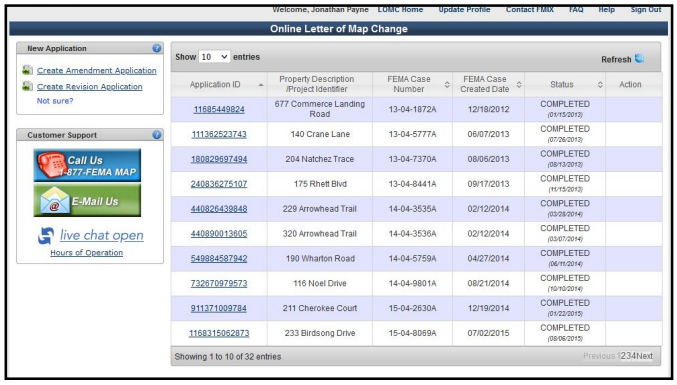
Lot 1, The Estates, Western Shores Subdivision as recorded in Plat Book 1, Page 1, Slide 1 in the office of the Calloway County Clerk, Kentucky

Lot 1, the Estates, Western Shores subdivision as shown on Plat recorded in Book 1, Page 1, Slide 1 in the Office of the Clerk, Calloway County, Kentucky

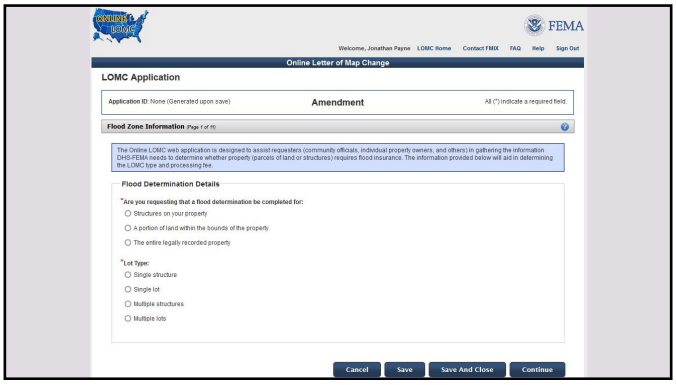
105



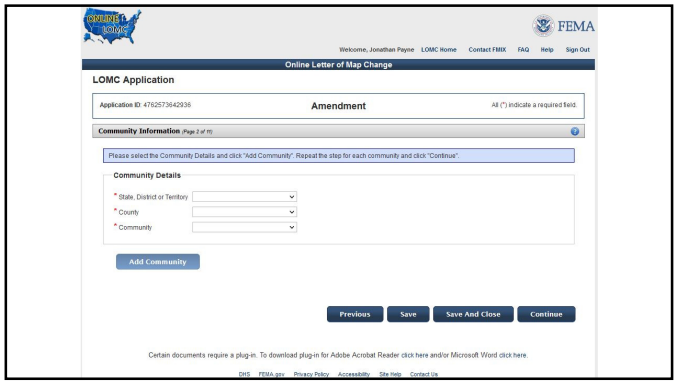
106



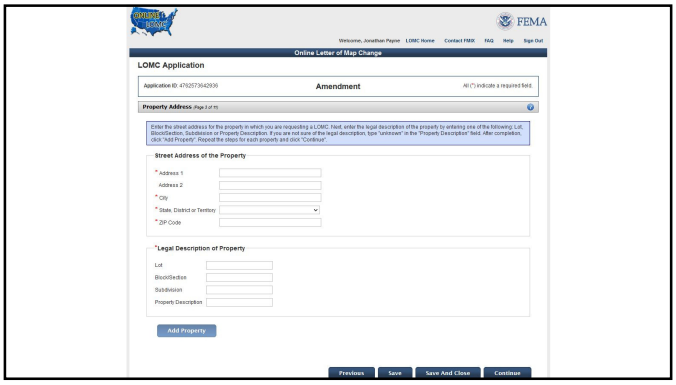
107



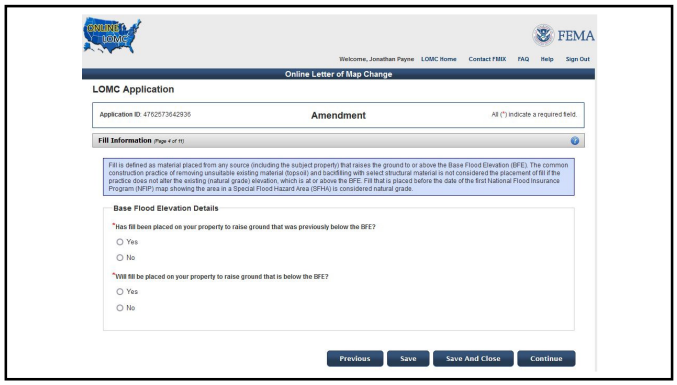
108



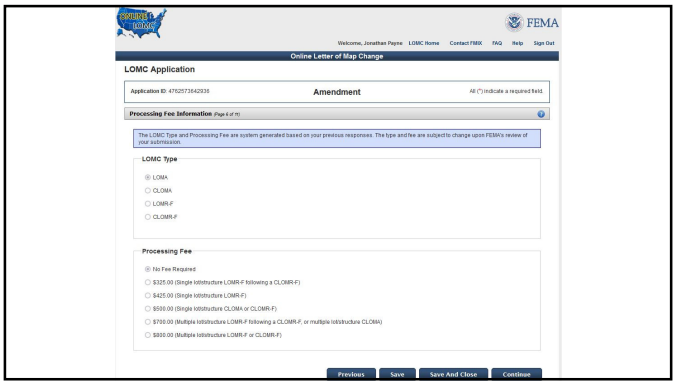
109



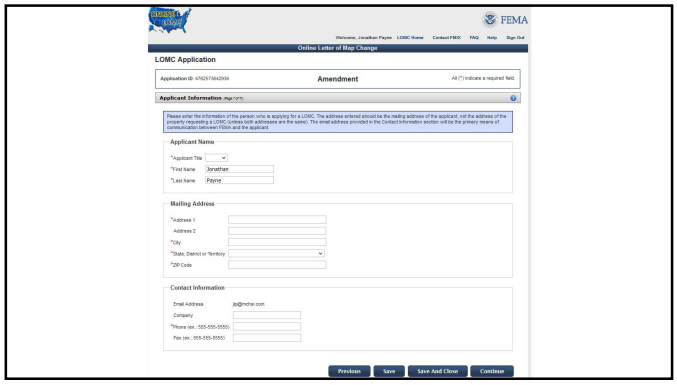
110



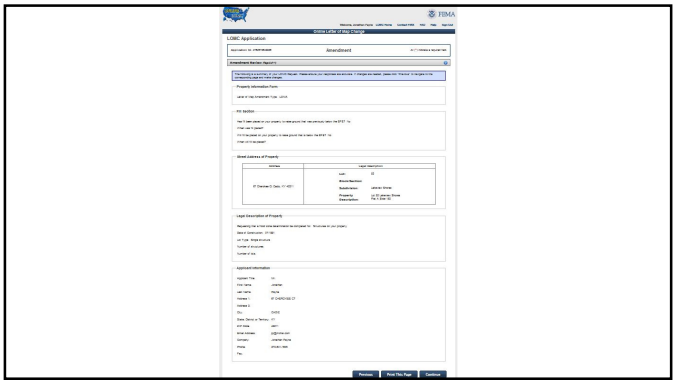
111



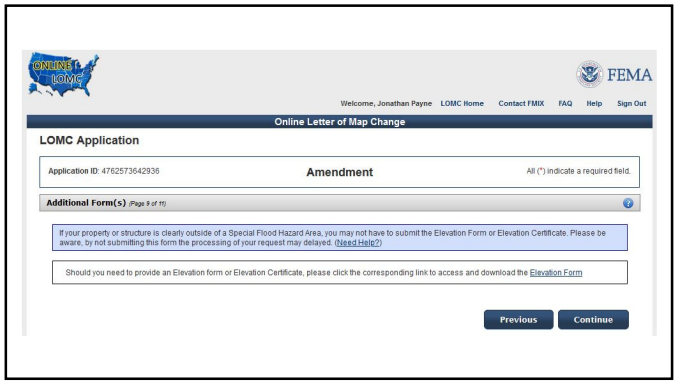
112



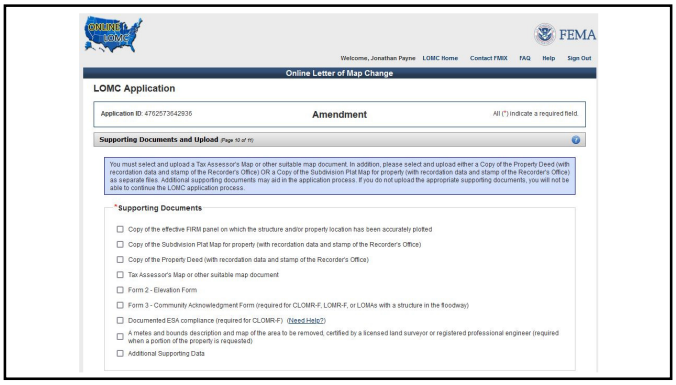
113



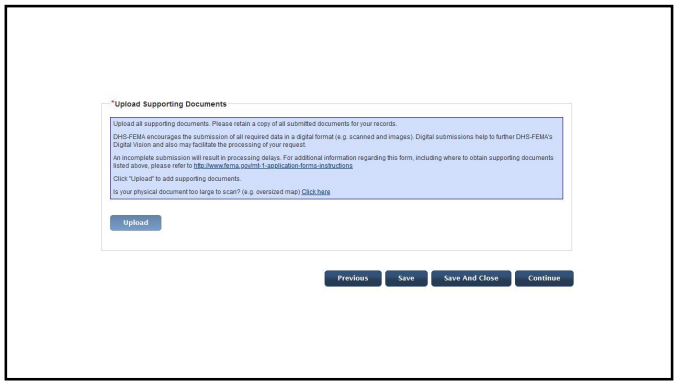
114



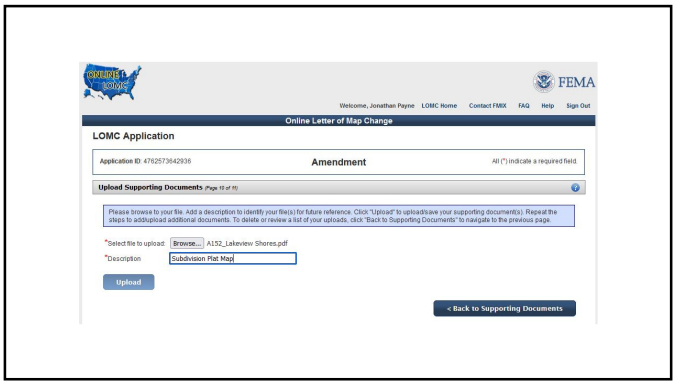
115



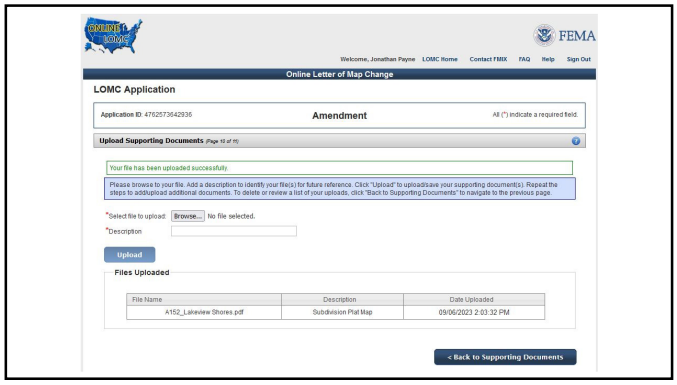
116



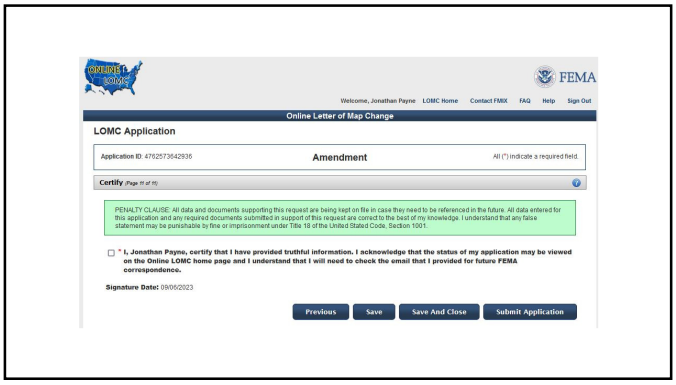
117



118



119



120

121