



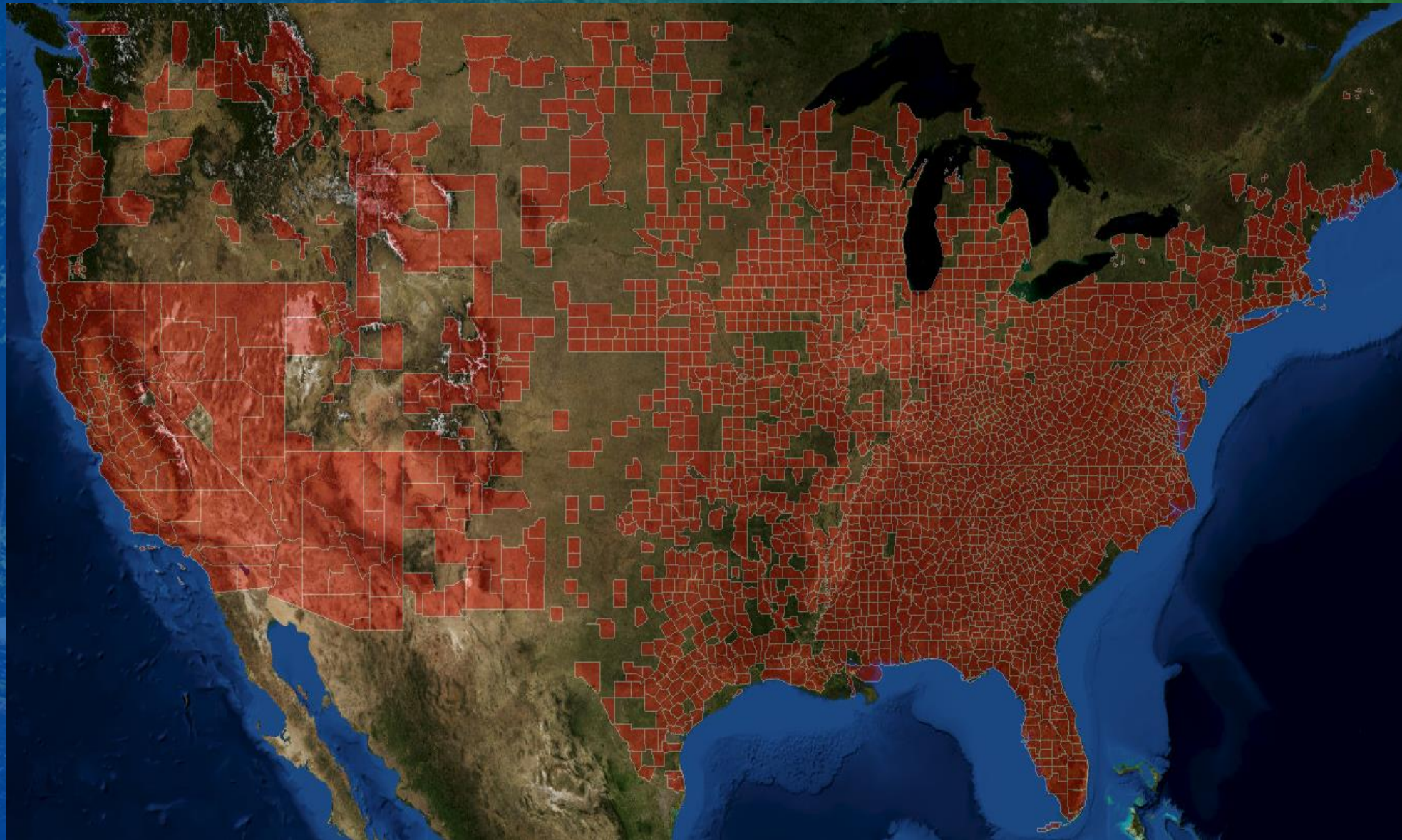
Flood Zones

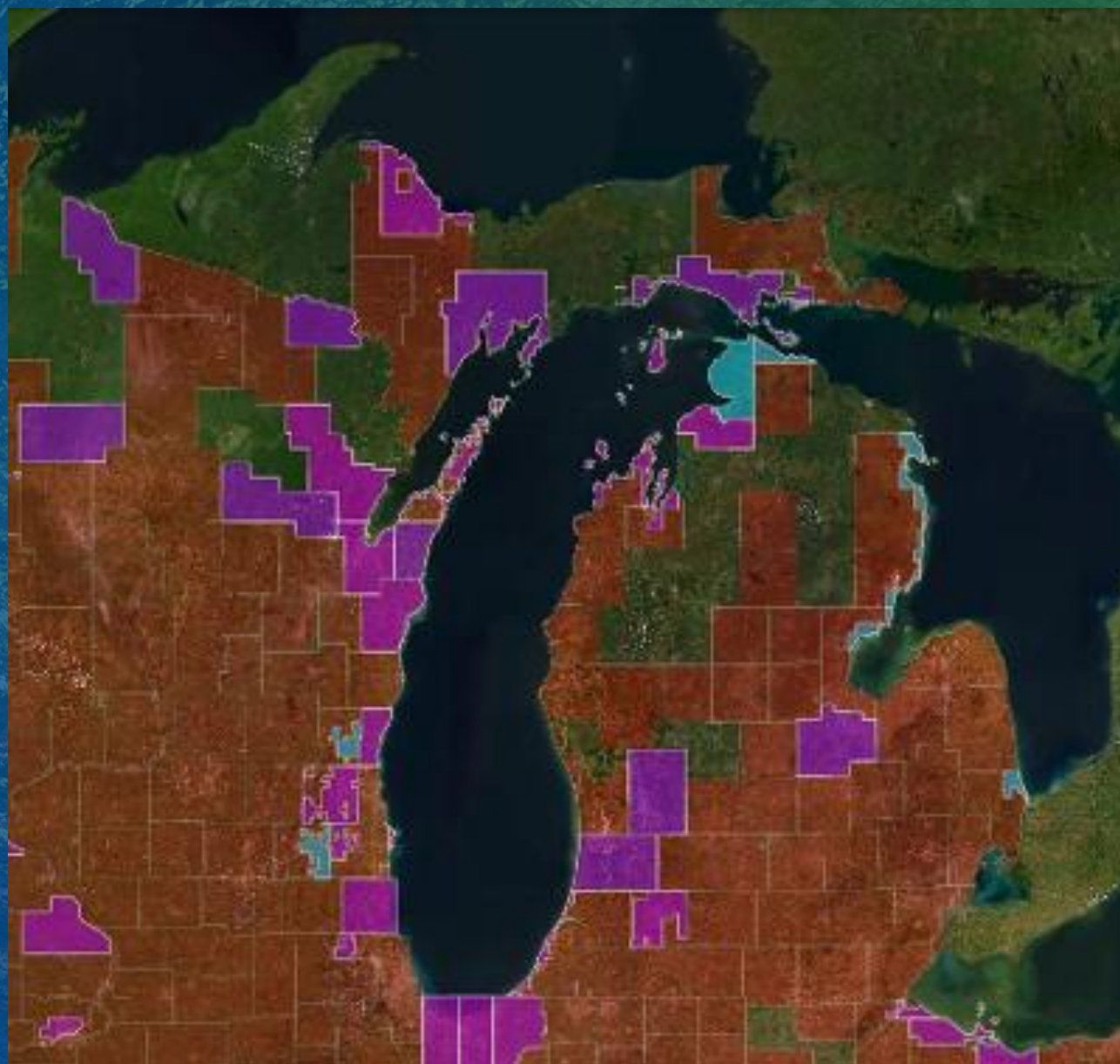
Karol L. Grove

Licensed Professional Surveyor

Certified Floodplain Manager

Flood Maps.....USA





Of the 83 Counties in Michigan

Most will have new maps

Approximately 60
Counties/New Flood Maps



Who will This Impact? Who Needs to Learn?

- Municipal & Building Officials
- Insurance Agents
- Lenders
- Surveyors/Engineers
- Property Owners/Buyers
- Realtors

Navigating FEMA's Map Service Center Website

- Flood Maps
- Flood Insurance Studies
- FIRMette's
- LOMA's

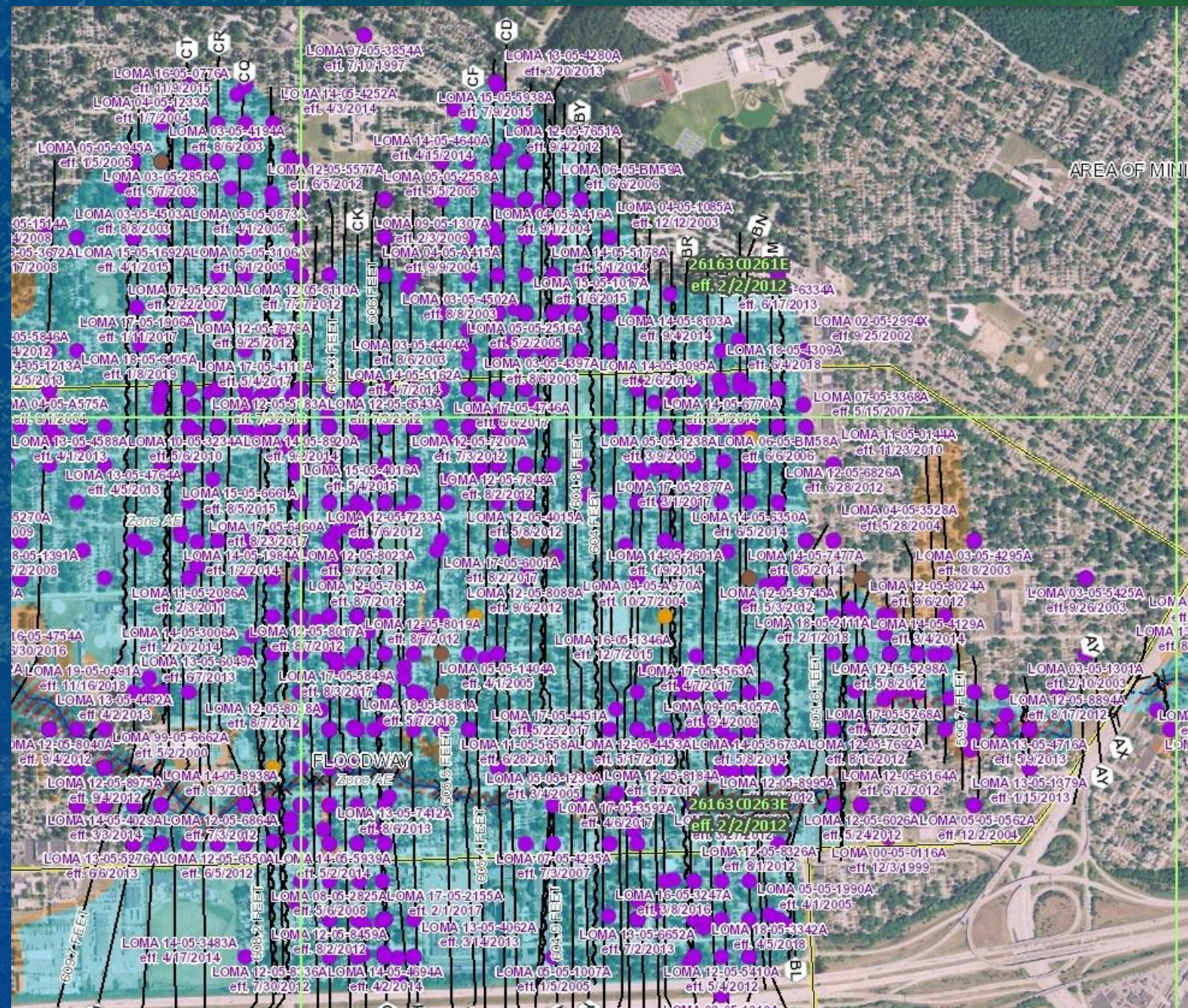
A scenic landscape photograph of a mountain valley. In the foreground, a calm lake reflects the surrounding scenery. The middle ground features a dense forest of evergreen trees and patches of yellow wildflowers. In the background, rugged mountains with snow-capped peaks rise against a clear blue sky.

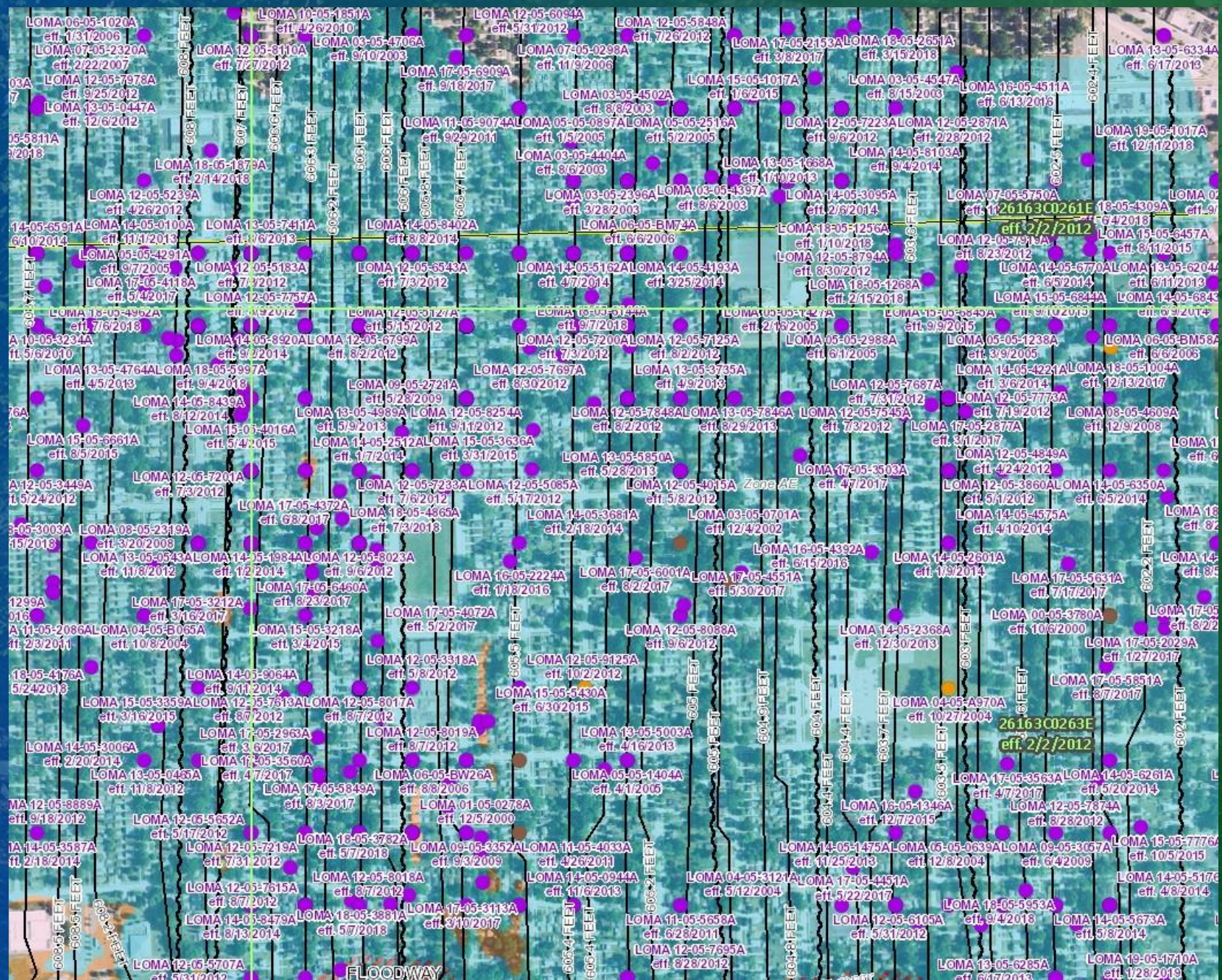
New Flood Maps

How Accurate are They?

How Accurate Are The Maps?

- How are the Base Flood Elevations (BFE) Determined
- Many have very conservative numbers
- What can be done to correct them?
- Who can correct them & how?





FIRMs Are NOT “Set IN Stone”

- Processes Available To Correct or Change A Federal Insurance Rate Map (FIRM)
- Letter of Map Amendment (LOMA)
- Letter of Map Revision Based on Fill (LOMR-F)
- Physical Map Revision

www.mi.gov/floodplainmanagement

A map of Michigan showing its counties. The county of Marquette is highlighted in a darker shade of green, and a red house icon is placed within its borders, indicating the location of L. Hansen. Other counties labeled include Keweenaw, Houghton, Ontonagon, Baraga, Gogebic, Iron, Dickinson, Delta, Menominee, Alger, Schoolcraft, Luce, Chippewa, Mackinac, Emmet, Cheboygan, Presque Isle, Charlevoix, Otsego, Montmorency, and Alcona. Numbers are also present in some counties, possibly representing population or area statistics.

The map displays the following counties and their corresponding congressional districts:

- S. Conradson (Light Blue):** Emmet, Cheboygan, Presque Isle, Charlevoix, Otsego, Montmorency, Alpena, Antrim, Crawford, Oscoda, Alcona, Kalkaska, Benzie, Grand Traverse, Leelanau, Manistee, Wexford, Missaukee, Roscommon, Ogemaw, Iosco, Mason, Lake, Osceola, Clare, Gladwin, Arenac, Huron, Tuscola, Sanilac, Saginaw, Genesee, Lapeer, St. Clair, Macomb, Wayne, Monroe, Lenawee, Hillsdale, Jackson, Washtenaw, Livingston, Ingham, Eaton, Barry, Allegan, Van Buren, Kalamazoo, Calhoun, Branch, St. Joseph, Cass, Berrien.
- J. Brooks (Light Yellow):** Isabella, Midland, Bay.
- J. Patin (Light Orange):** Oceana, Newaygo, Mecosta, Montcalm, Gratiot, Clinton, Shiawassee, Genesee, Lapeer, St. Clair, Macomb, Wayne, Monroe, Lenawee, Hillsdale, Jackson, Washtenaw, Livingston, Ingham, Eaton, Barry, Allegan, Van Buren, Kalamazoo, Calhoun, Branch, St. Joseph, Cass, Berrien.
- J. Bayha (Light Green):** Van Buren, Kalamazoo, Calhoun, Branch, St. Joseph, Cass, Berrien.
- D. Cervelli (Light Purple):** Genesee, Lapeer, St. Clair, Macomb, Wayne, Monroe, Lenawee, Hillsdale, Jackson, Washtenaw, Livingston, Ingham, Eaton, Barry, Allegan, Van Buren, Kalamazoo, Calhoun, Branch, St. Joseph, Cass, Berrien.
- P. Durack (Light Pink):** Genesee, Lapeer, St. Clair, Macomb, Wayne, Monroe, Lenawee, Hillsdale, Jackson, Washtenaw, Livingston, Ingham, Eaton, Barry, Allegan, Van Buren, Kalamazoo, Calhoun, Branch, St. Joseph, Cass, Berrien.

Floodplain Staff Contacts

Do you have a general environmental question or concern? Call EGLE's Environmental Assistance Center at 1-800-662-9278.

Unsure what district you are in? Check the [District Office Map](#) or the [Floodplain District Staff Map](#).

Floodplain Management/National Flood Insurance Program (NFIP) Staff

Staff	Phone	Email	Work Area	District(s)
Matt Occhipinti	616-204-1708	occhipintim@michigan.gov	NFIP State Coordinator	Statewide
Mario Fusco	517-256-4458	fuscom@michigan.gov	Hydrologic Studies Floodplain	Statewide
Jim Watling	517-599-9002	watlingj@michigan.gov	Public Transportation Floodplain	Statewide
Joy Brooks	989-280-1632	brooksj@michigan.gov	Floodplain / NFIP	Saginaw Bay
Donna Cervelli	517-243-6951	cervellid@michigan.gov	Floodplain / NFIP	Lansing & Jackson
Susan Conradson	231-429-2658	conradsons2@michigan.gov	Floodplain / NFIP	Cadillac & Gaylord
Patrick Durack	586-256-7273	durackp@michigan.gov	Floodplain / NFIP	SE Michigan
Linda Hansen	906-483-3896	hansenl6@michigan.gov	Floodplain / NFIP	Upper Peninsula
Jake Patin	616-204-7176	patinj1@michigan.gov	Floodplain / NFIP	Grand Rapids
John Bayha	269-568-2680	bayhaj@michigan.gov	Floodplain / NFIP	Kalamazoo


2 of The Most Important Things To Learn Today

ADD A FOOTER

When Looking At A Flood Map

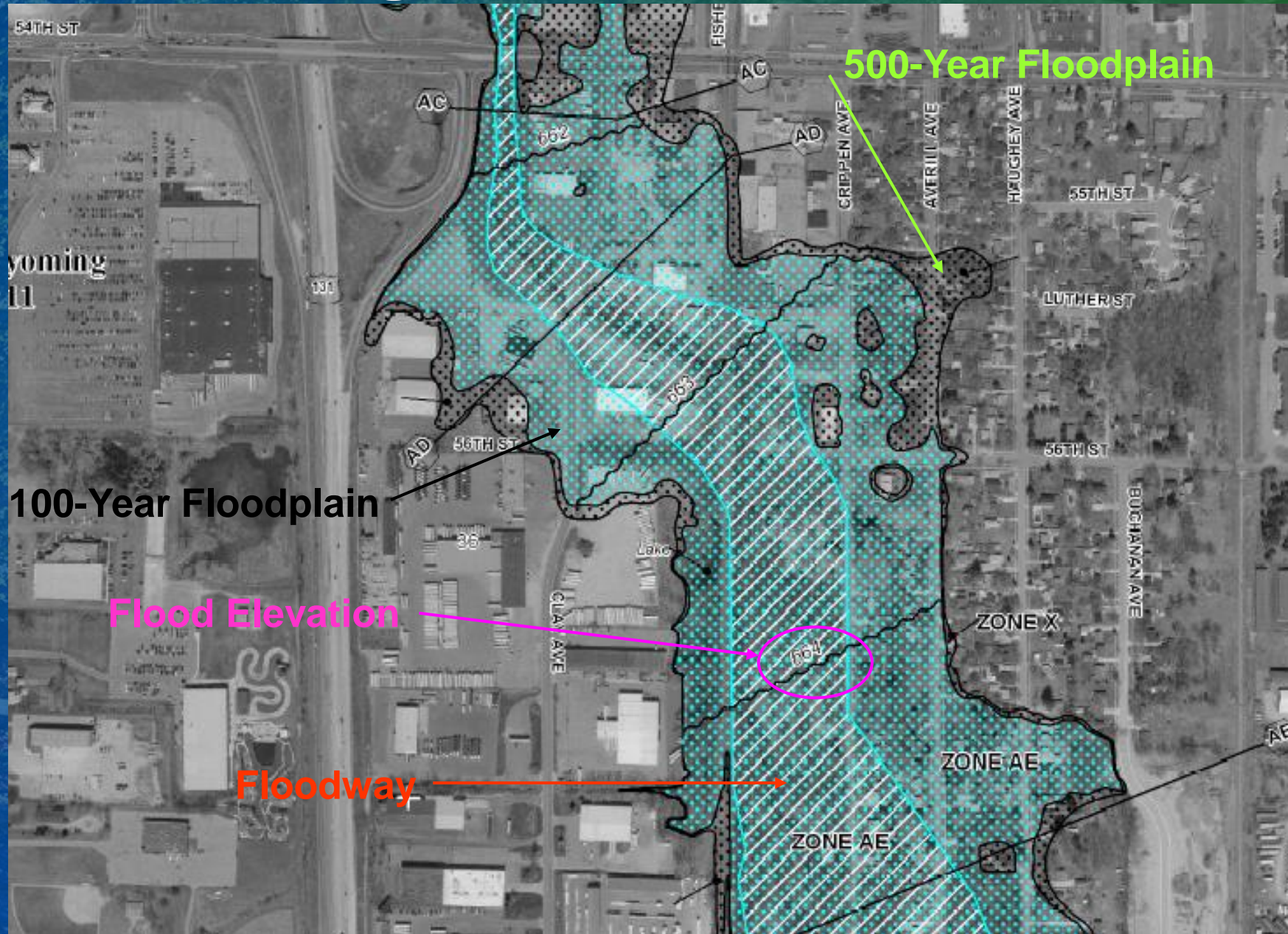
1. The FIRM Shows The Approximate Location of The 100 Year Floodplain (Rounded To The Nearest Foot)
2. The Ultimate Determination of Whether or Not A Site Within The 100 Year Floodplain is ELEVATION.

If it is NOT completely obvious it's above the BFE, then require a survey!



Elevation is Important!
Elevation is Key!

Digital FIRMs “DFIRMs”

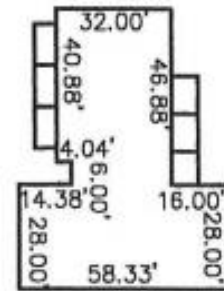
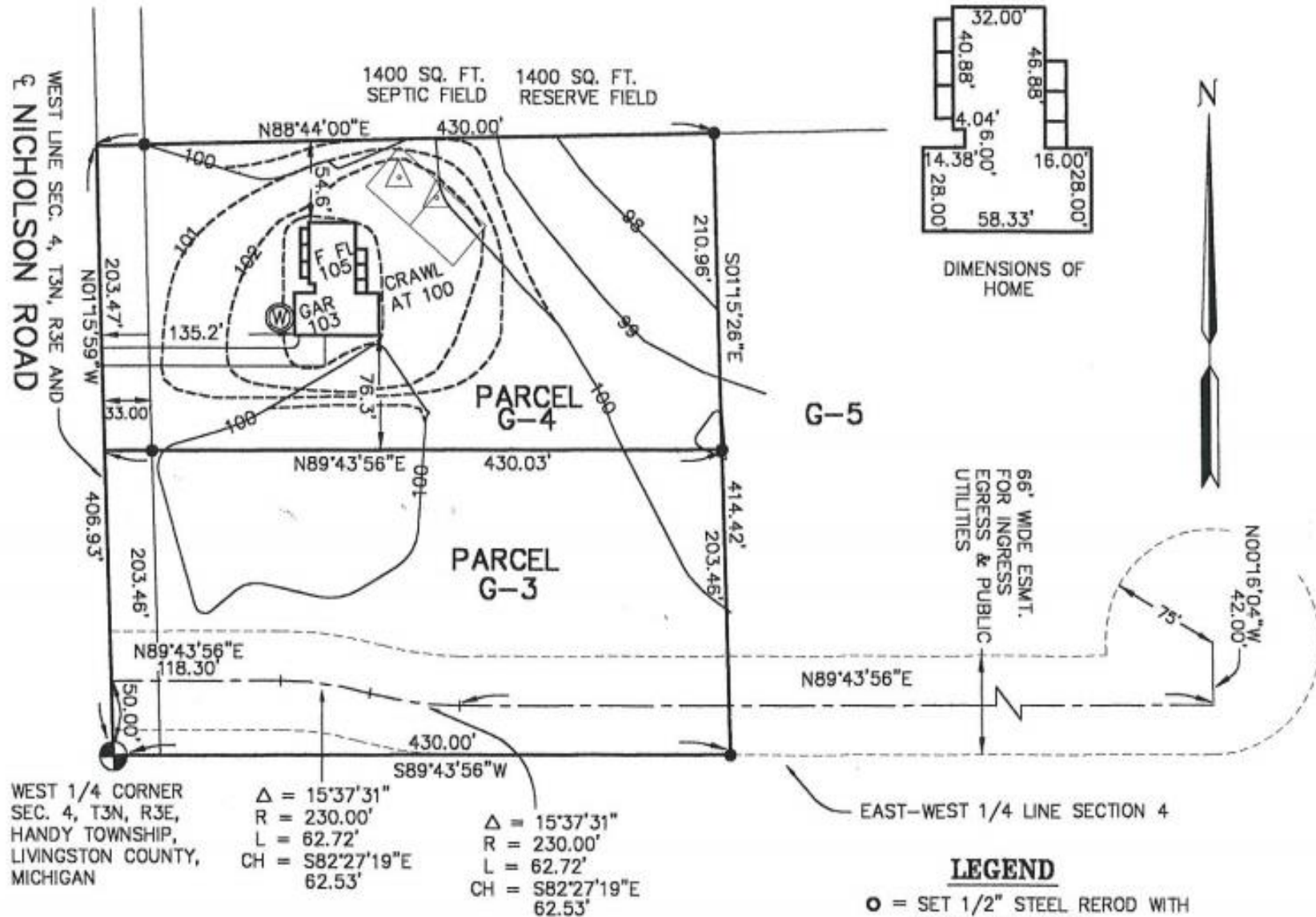


Why?

ADD A FOOTER

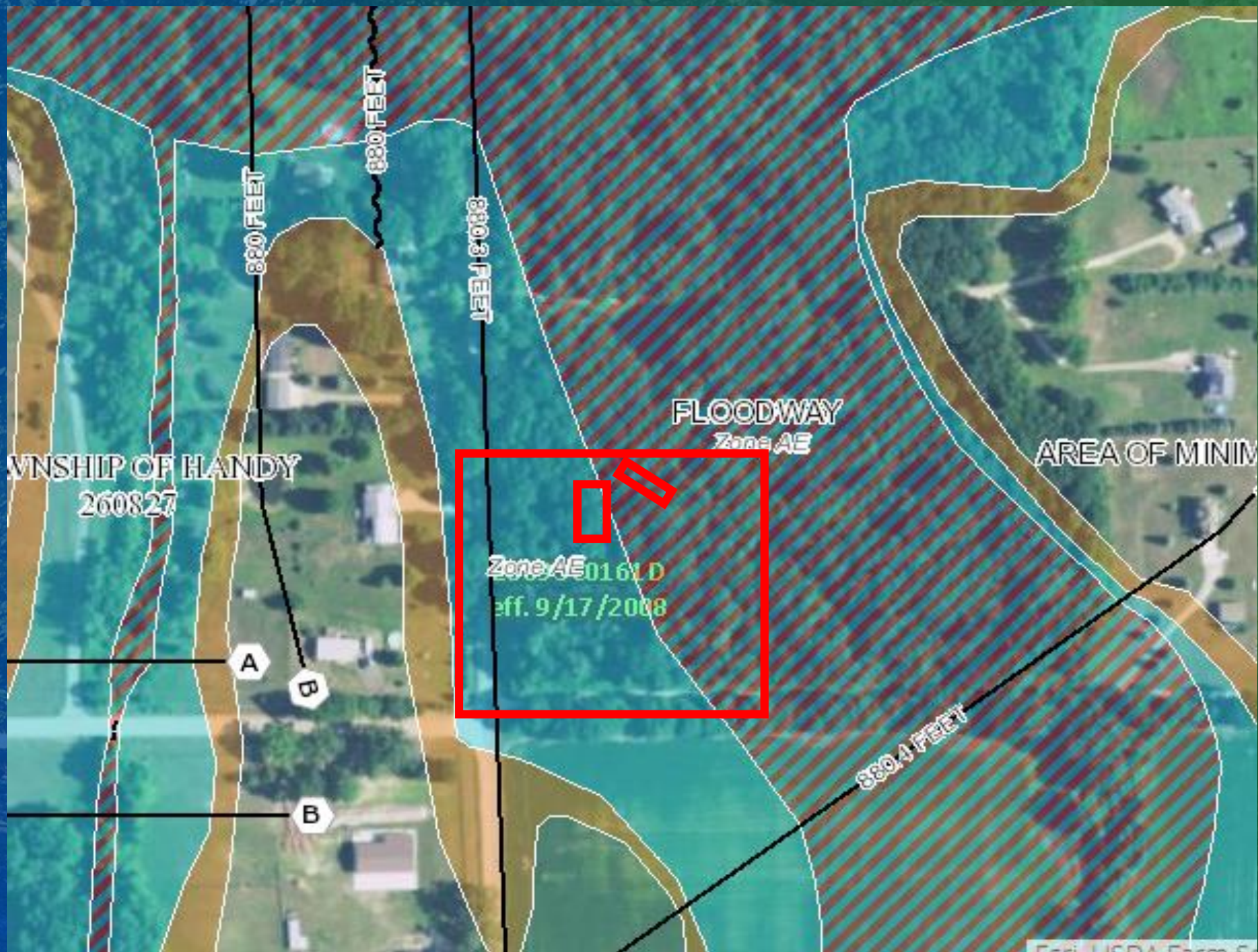


SITE PLAN



DIMENSIONS OF HOME





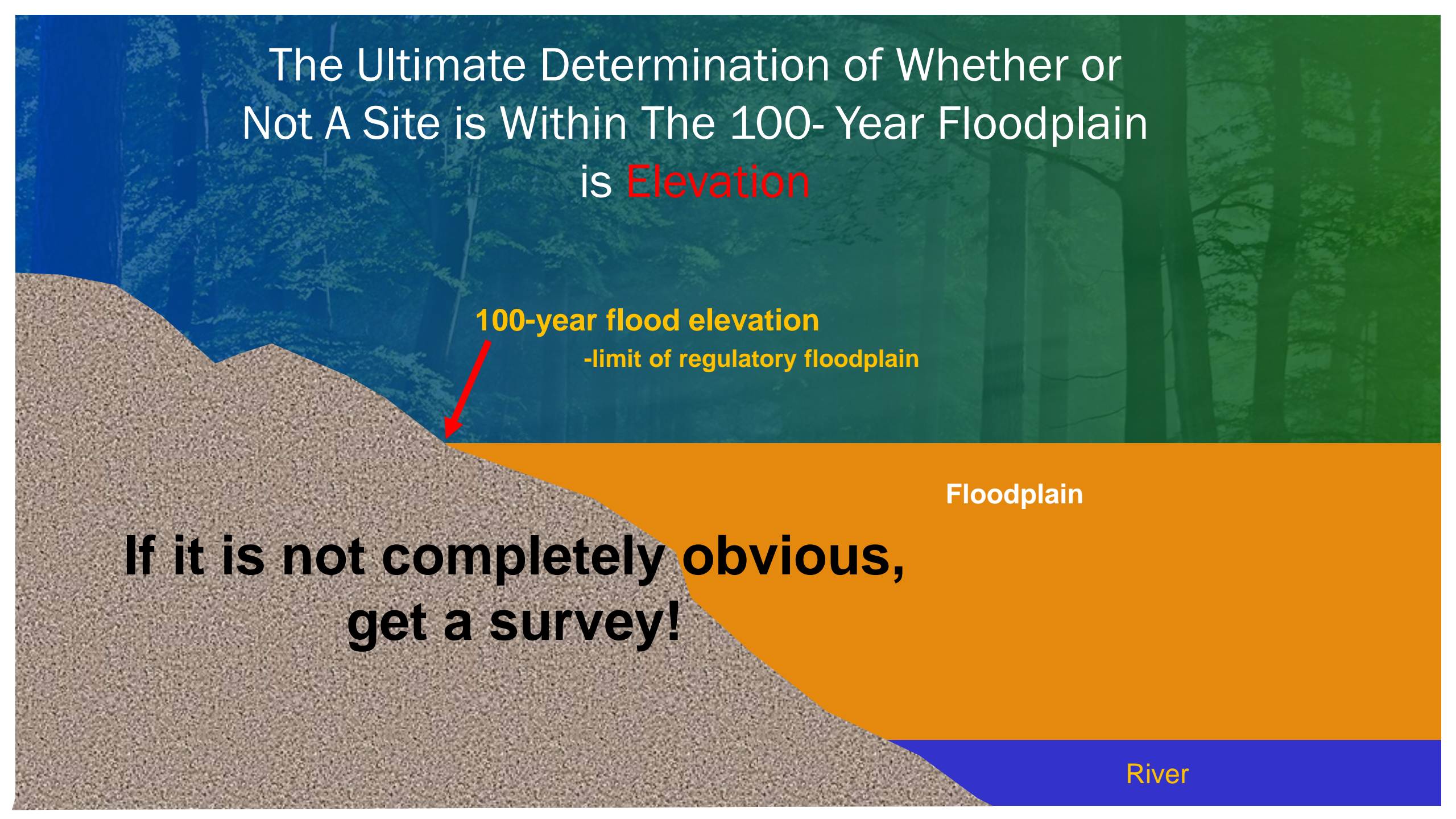
The Ultimate Determination of Whether or Not A Site is Within The 100- Year Floodplain is **Elevation**

100-year flood elevation
-limit of regulatory floodplain

Floodplain

**If it is not completely obvious,
get a survey!**

River



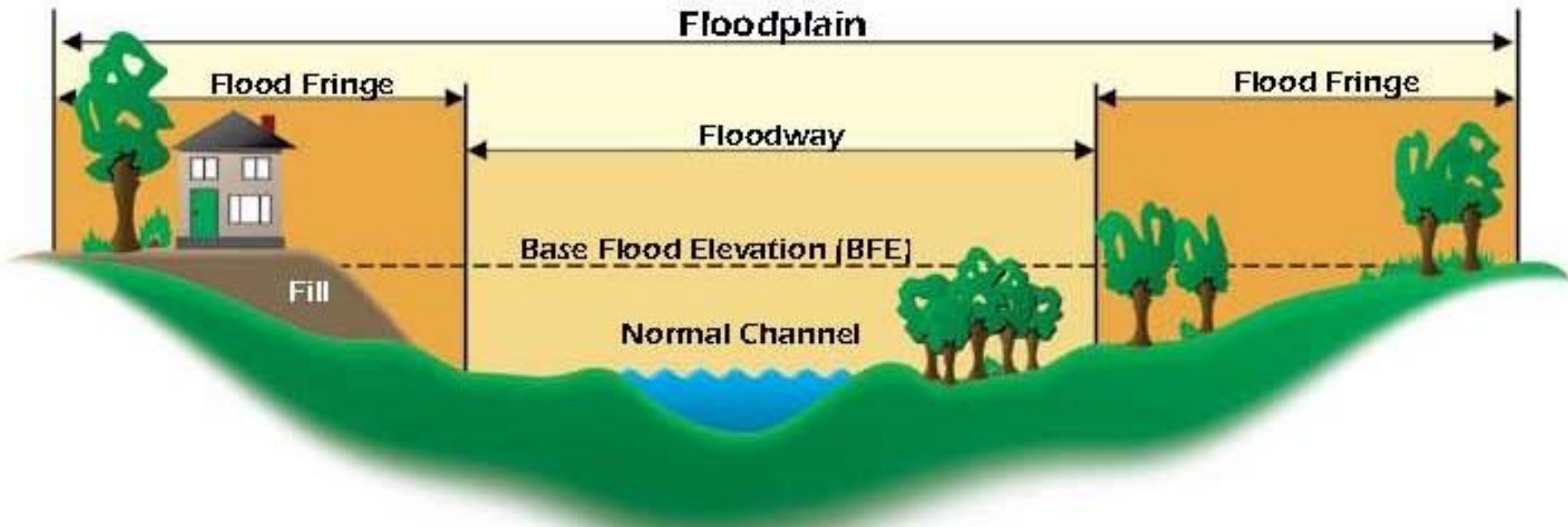
A DEQ Floodplain Permit is Required Under Part 31 for..

- Any Occupation
- Construction
- Filling or Grade Changes BELOW
- The Flood-Elevation of A River or Stream

Part 3 | Minor Projects

Fill, Grade Changes or Occupation of The Floodway Fringe

Characteristics of a Floodplain

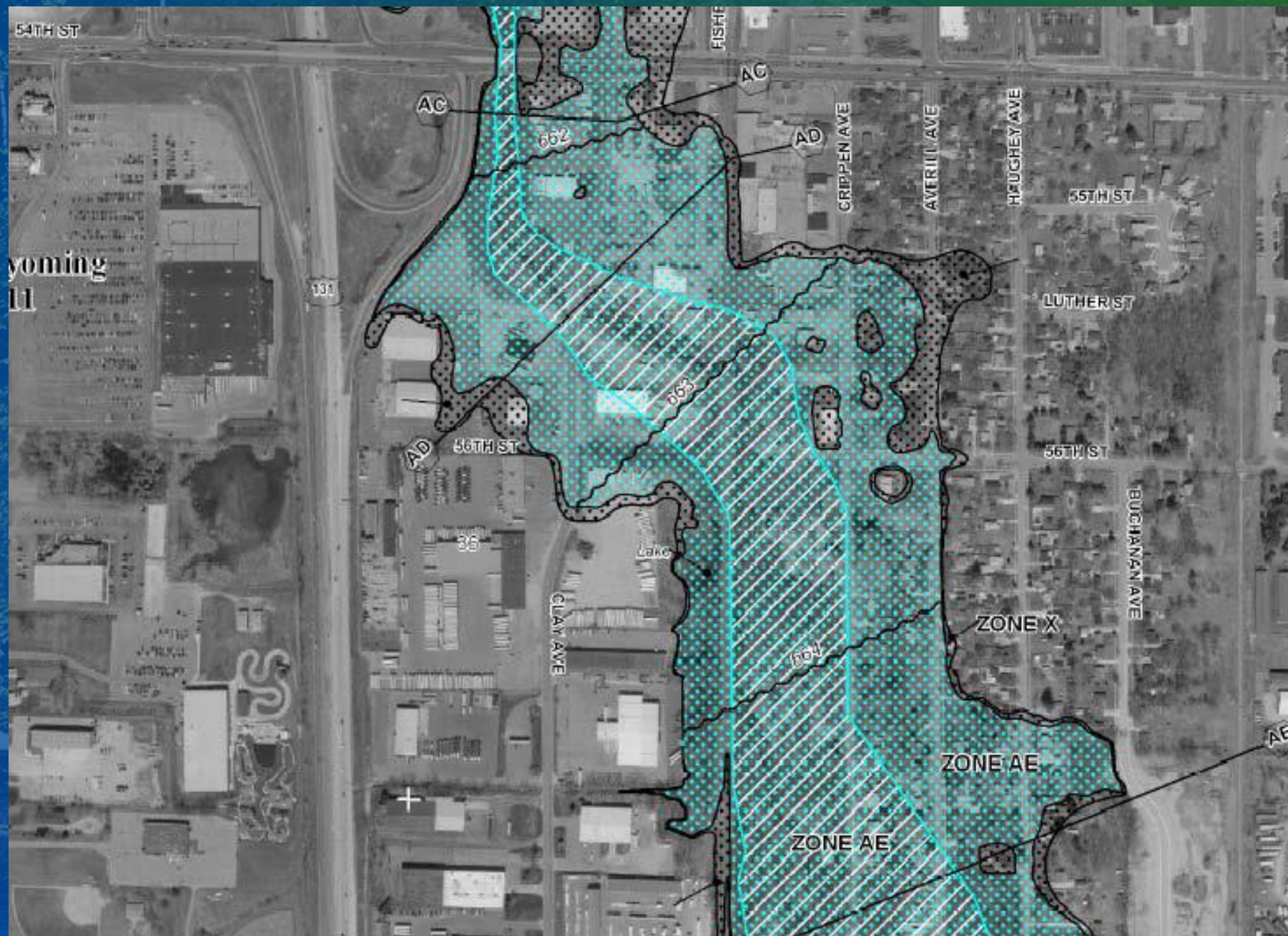


Topics (Part I)

- Flood Zones
- Flood Maps/FIRMette's
- Flood Insurance Studies
- Elevation Certificates
- Community Acknowledgement Forms

Topics (Part 2)

- LOMA's
- Elevation Certificates
- BW-12
- Compliant Buildings
- Flood Vents



What You Will Need To Know:

- Flood Maps/FIRMettes
- Flood Insurance Studies
- Community Acknowledgement Forms
- Elevation Certificates
- LOMA's & eLOMA's
- Compliance vs Non-compliance
- New Constructions in Flood Zones
- Additions to Existing Construction

What is A Flood Zone?

- 100 Year or 1%
- Zone AE, A1-A30 or A

Different Zone Classifications

(Common to Michigan)

Zone AE or AI-A30

Elevation is known

Zone A

Unstudied area, Elevation unknown

Zone C or X

Less than 1% risk

What Is A Floodplain?

Floodplain

- That area of land adjoining a river, lake or stream that will be inundated by a 1%-chance (100-year) flood.

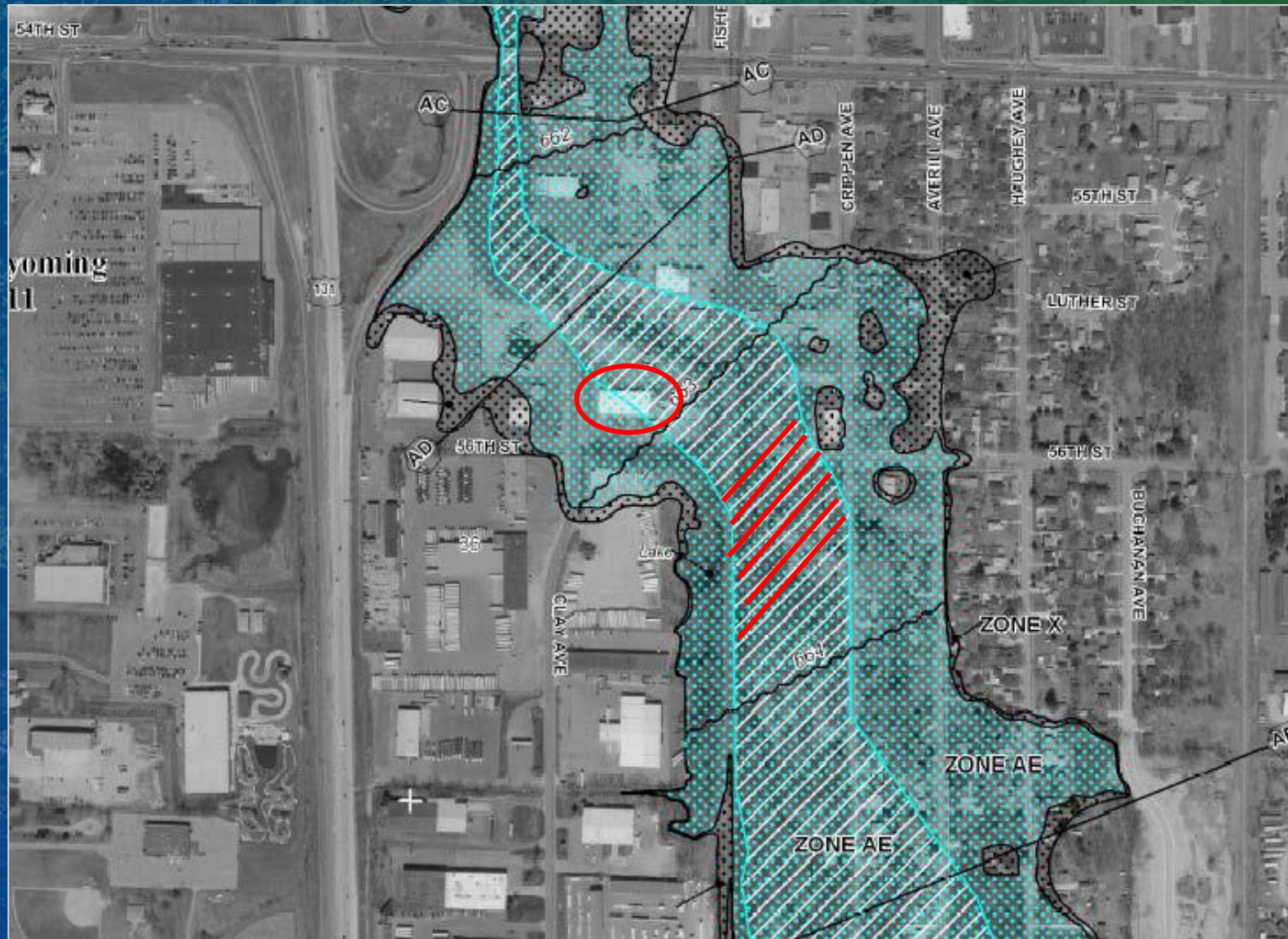
1% Chance Flood

- A flood which has a one percent chance of occurring any given year.
- Misleading term-“100-year flood”
- Over the life of a 30-year mortgage
26% chance of occurring

Floodway

- Area of moving water
- High hazard area
- Needed to carry flood waters
- “Highway for the water”

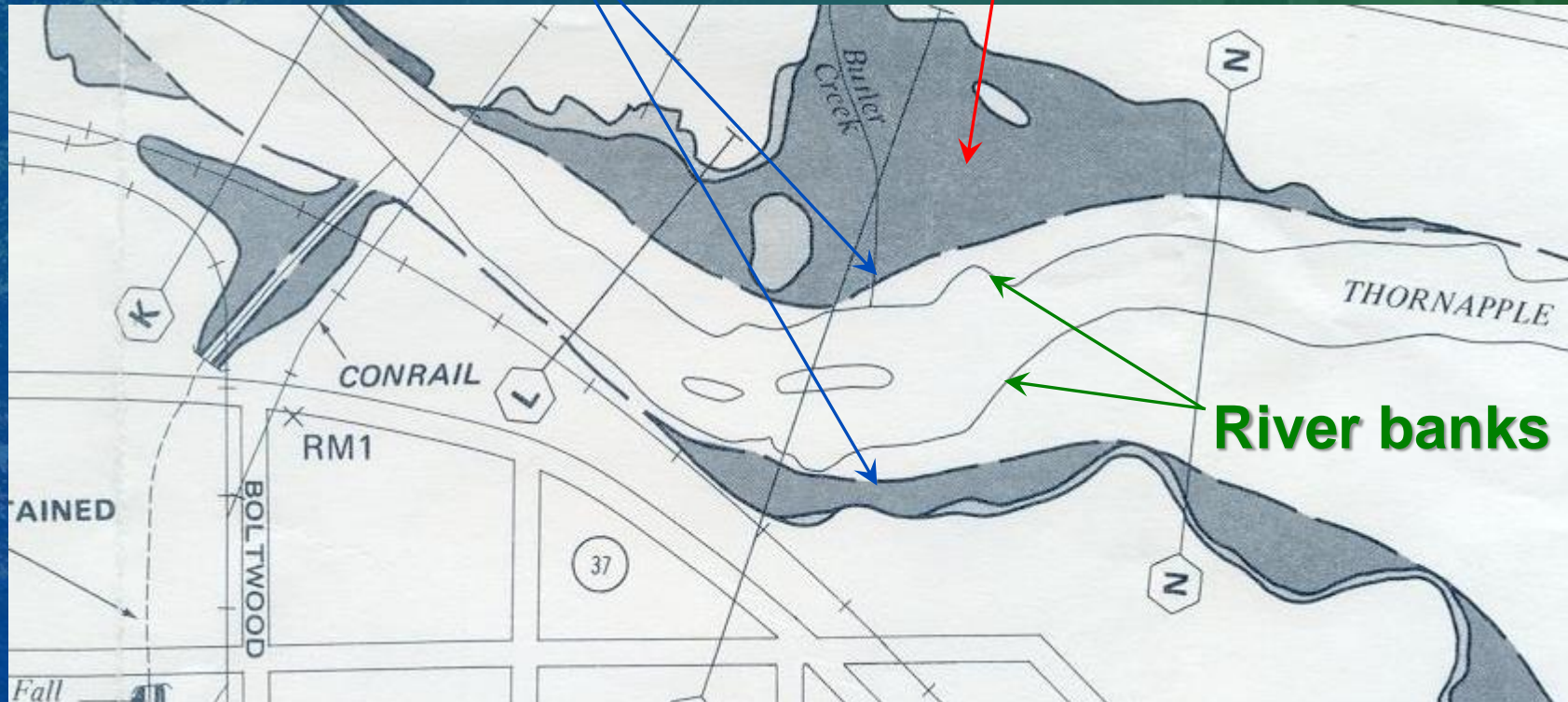
New Maps / Flood Zones / Floodways

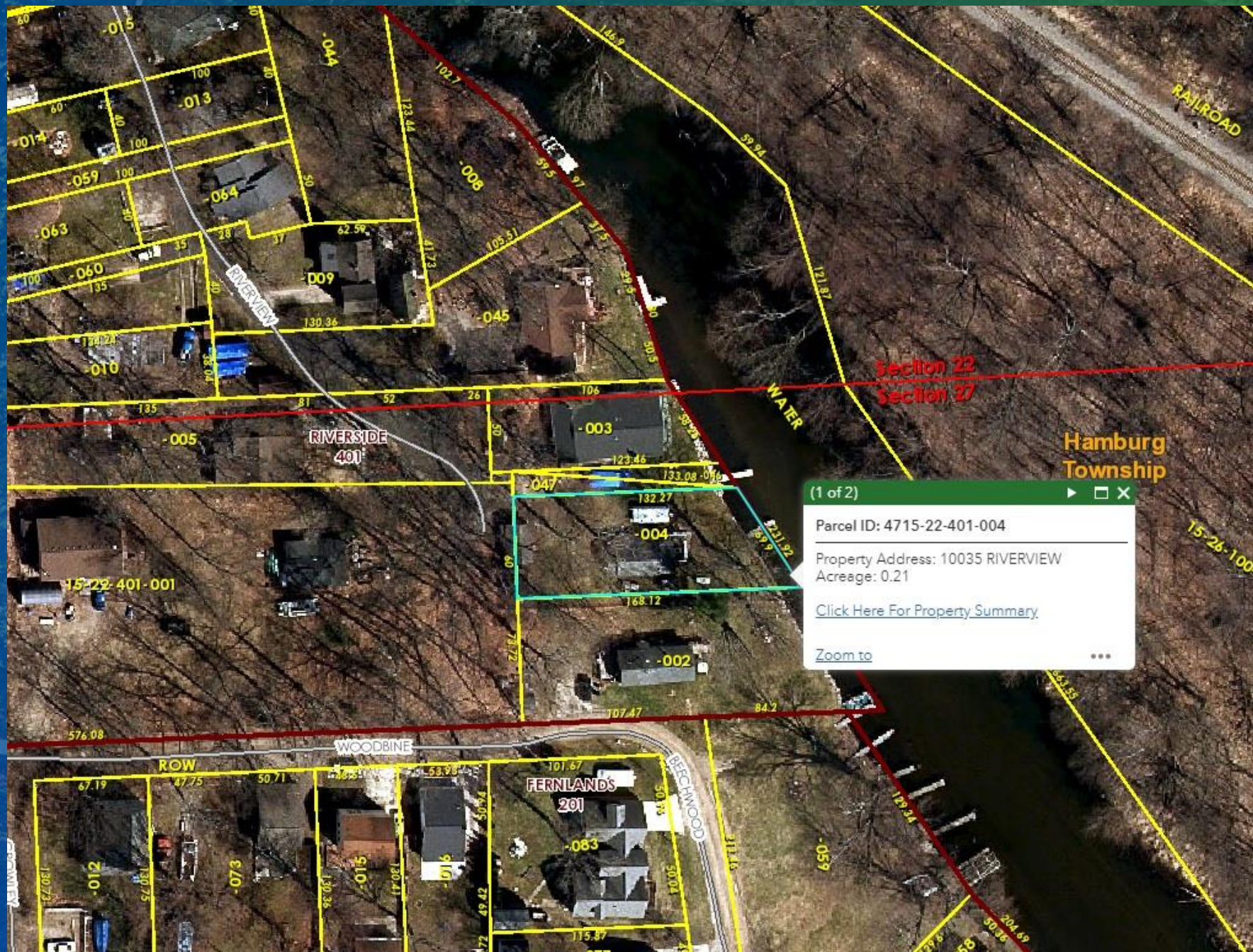


Floodway Map

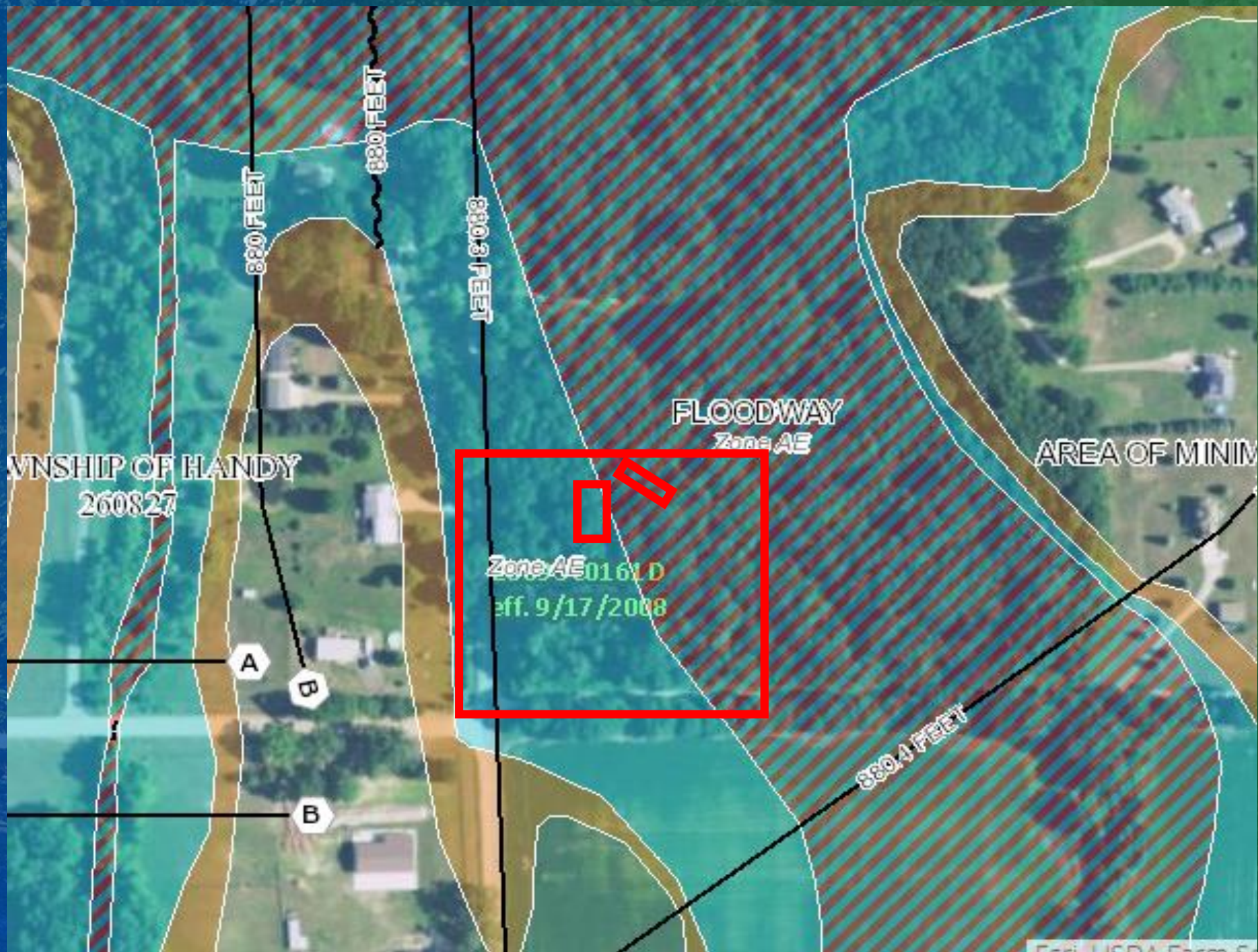
Approximate 100-year floodplain

Floodway Boundaries









Let's Talk FLOODWAY...



History.....FLOOD MAPS

- 1968 National Flood Insurance Act
- 1977 Michigan (1st FIRM)
- 1973 Flood Disaster Protection Act
- 1986 FEMA Community Probation Procedures
- 1994 National Flood Insurance Reform Act
- 2004 Flood Insurance Reform Act
- 2005 Katrina
- 2006 Beginning of New Flood Maps
- 2012 Biggert Waters Act (2014 Affordability Act)**

What is the Base Flood Elevation (BFE) & how do you determine it?

FIRM Map Panel?

Not Preferred

Flood Insurance Study?

- Profile Sheet
- Floodway Data Chart
- Stillwater Chart

Community Determined?

Other?

Elevation Certificates in a Zone A

What is an acceptable BFE?

Letter from DEQ?

Nearby LOMA?

Platted Subdivision?

Letter from Community Official?

History....FLOOD MAPS

FIRMs Are Not “Set In Stone”

**Processes Available To Correct Or Change
A Federal Insurance Rate Map (FIRM):**

Letter of Map Amendment (LOMA)

Letter of Map Revision based on fill (LOMR-F)

Physical Map Revision



People are losing their homes due to the high cost of flood premiums!

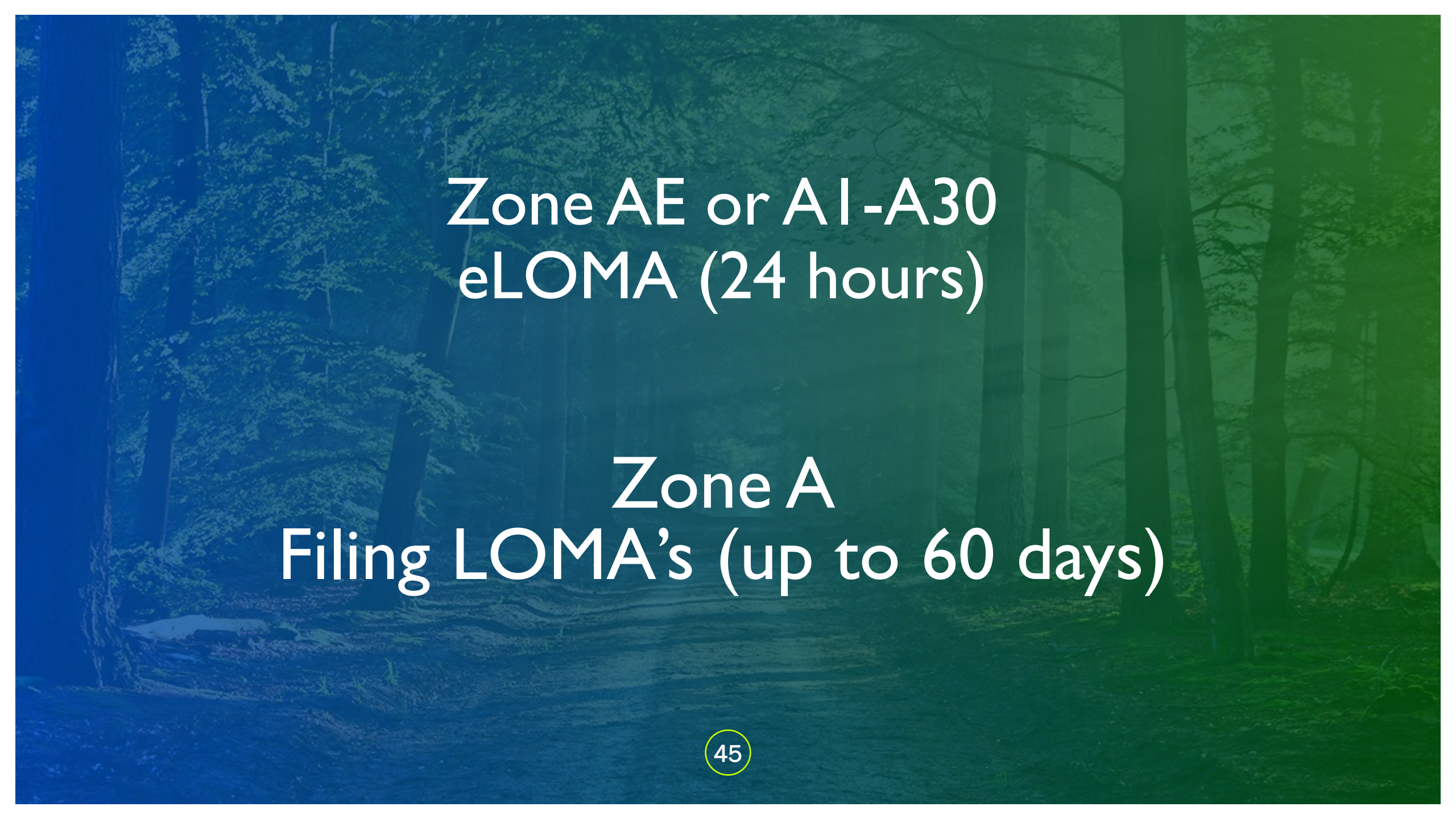


What Does LOMA Stand For?

LETTER OF MAP AMENDMENT

What is A LOMA
& What Does it Accomplish?





Zone AE or AI-A30
eLOMA (24 hours)

Zone A
Filing LOMA's (up to 60 days)



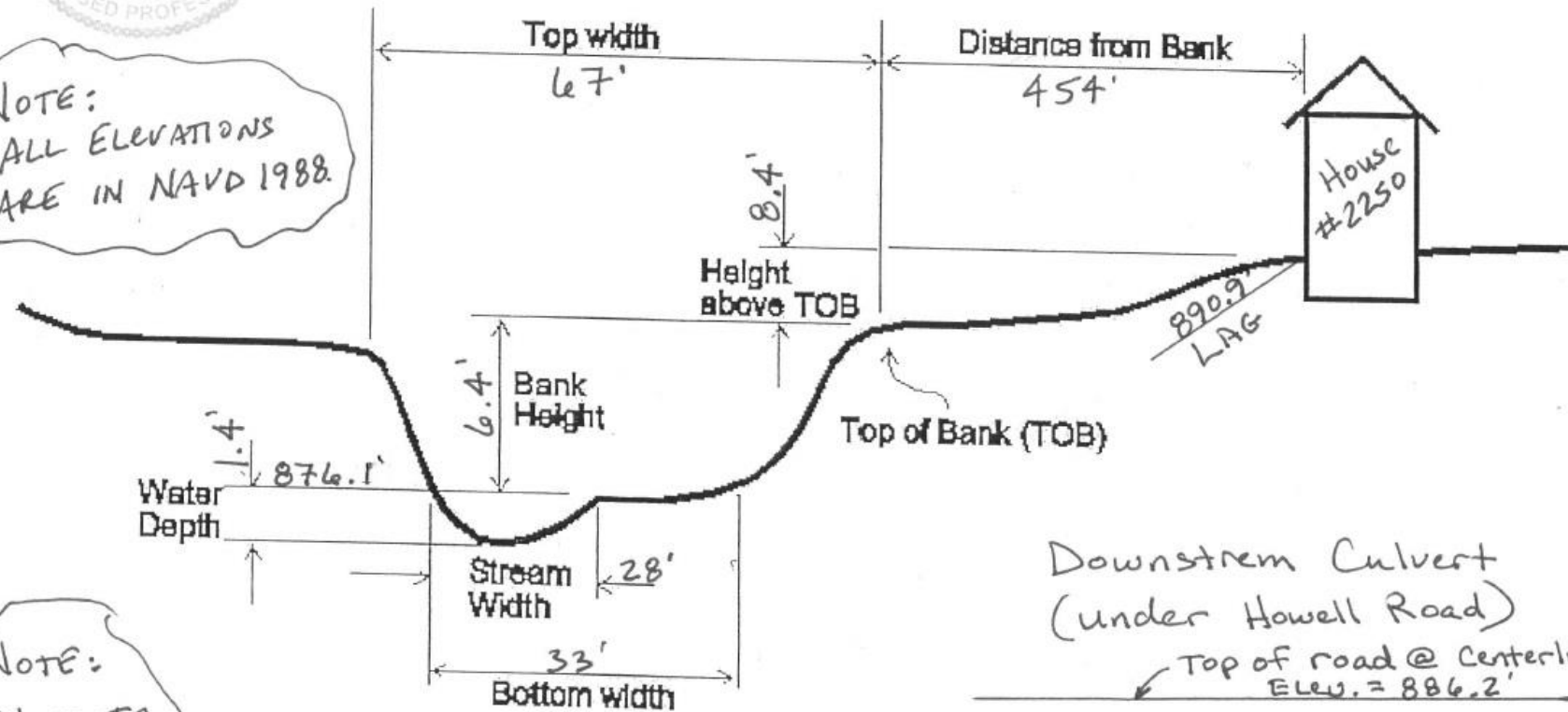
Zone A

Establishing a BFE?



Cross-Section (Nearby Doan Creek) - Flooding Source

NOTE:
ALL ELEVATIONS
ARE IN NAVD 1988.

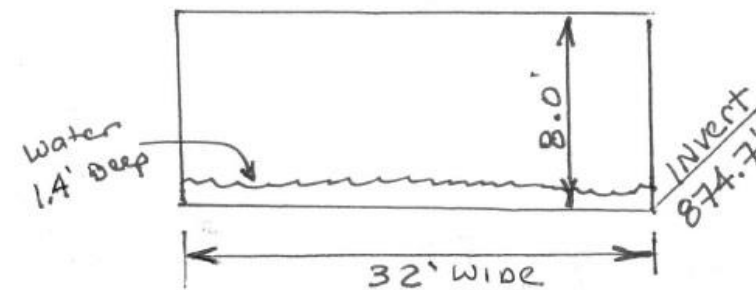


NOTE:
NOT TO
SCALE

Summary:

Lowest Adjacent Grade = 890.9'
Box Culvert Invert = 874.7'
Top of Water Elev. = 876.1'
Ordinary High Water Mark = 876.4'

Downstream Culvert
(under Howell Road)
Top of road @ Centerline
Elev. = 886.2'





STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



May 26, 2011

Ms. Cindy Mackinder
11205 Cook Road
Gaines, Michigan 48436

Dear Ms. Mackinder:

SUBJECT: Floodplain Service Number: 11-25-0003-FP,
Revised March 9, 2011, Letter Due to Address Correction,
11205 Cook Road, Section 20, T6N, R5E
Gaines Township, Genesee County, Jones Creek,
Letter of Map Amendment (LOMA)

Thank you for your November 1, 2010, request for floodplain information at the above site. Gaines Township is a participant in the National Flood Insurance Program (NFIP). In NFIP communities, flood insurance must be purchased as a condition of obtaining a federally insured mortgage in federally identified 100-year Special Flood Hazard Areas (SFHA). The current effective Flood Insurance Rate Map (FIRM) for Gaines Township dated September 25, 2009, indicates that the site is located within the SFHA of Jones Creek (see the attached portion of the FIRM). The first map was published December 18, 1979.

The FIRM for the Gaines Township is used by mortgage lenders to determine if the building is located within the 100-year SFHA. If the building is within the 100-year floodplain shown on the FIRM, the lender must require the purchase of flood insurance as a condition of the loan.

The Federal Emergency Management Agency (FEMA) uses the most accurate flood hazard information available in developing the FIRMs. However, because of the limitations of the source maps used to prepare the FIRMs, areas may be inadvertently shown within an SFHA on a FIRM even though the property is at or above the elevation of the 100-year (1-percent annual chance) flood. This elevation is commonly referred to as the Base Flood Elevation, or BFE. The BFE for Jones Creek is estimated to rise 8 feet above the low water level at this location.

The process for individual home owners who feel their property has been inadvertently placed into the floodplain on a FIRM is the Letter of Map Amendment (LOMA), which is a process designed to officially adjust the map to reflect flood risk for individual structures or lots. The LOMA process is a way to possibly remove the mandatory flood insurance purchase requirements by lenders. Outlined below are the LOMA process steps.

- 1) Hire a registered land surveyor to survey the lowest adjacent grade to the house and the lowest floor including basement. The surveyor should fill out an elevation certificate, which is available on-line at www.fema.gov/business/nfip/elvinst.shtml.

- b) If the structure was built after the date of the first published map and no fill was placed, then the lowest adjacent grade needs to be above the 100 year floodplain. The property owner also needs to get a letter from the local building official indicating that no fill was placed before the structure was constructed.
- 3) If the structure is found to be outside the floodplain then the property owner should initiate the LOMA process by filling out the MT_EZ form. This form is available on-line at: www.fema.gov/plan/prevent/fhm/firm_form.shtml. Once the form is completed, it should be submitted to FEMA along with the BFE, elevation certificate, a copy of the current effective FIRM panel with the property location plotted, and either a copy of the subdivision plat map or property deed. If all the appropriate information is sent in, the FEMA will usually respond in 4-6 weeks.
- 4) The property owner should take the FEMA response, if positive, to the lender and ask that the flood insurance purchase requirements be waived.

The LOMA officially amends the FIRM and removes the federally required flood insurance purchase requirement. However, lenders still have the option of requiring the purchase of flood insurance to protect their investment. The property owner may want to contact the lender prior to initiating the LOMA process to see if they will accept a LOMA. If the lender will not accept a LOMA and waive the flood insurance purchase requirements then the option is to switch mortgage lenders.

If the lender accepts the LOMA and does not require the purchase of flood insurance, the current year's flood insurance premium can be refunded (provided no claims have been paid). If the flood insurance waiver from the lender is taken to the insurance agent, the agent will be able to process a refund. You are advised to keep a copy of the LOMA to avoid flood insurance purchase requirements should the house be refinanced or sold sometime in the future.

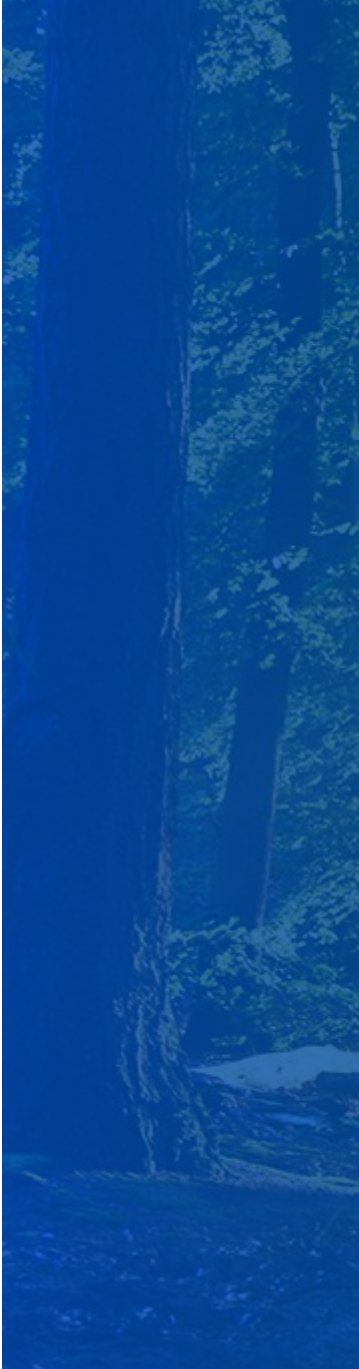
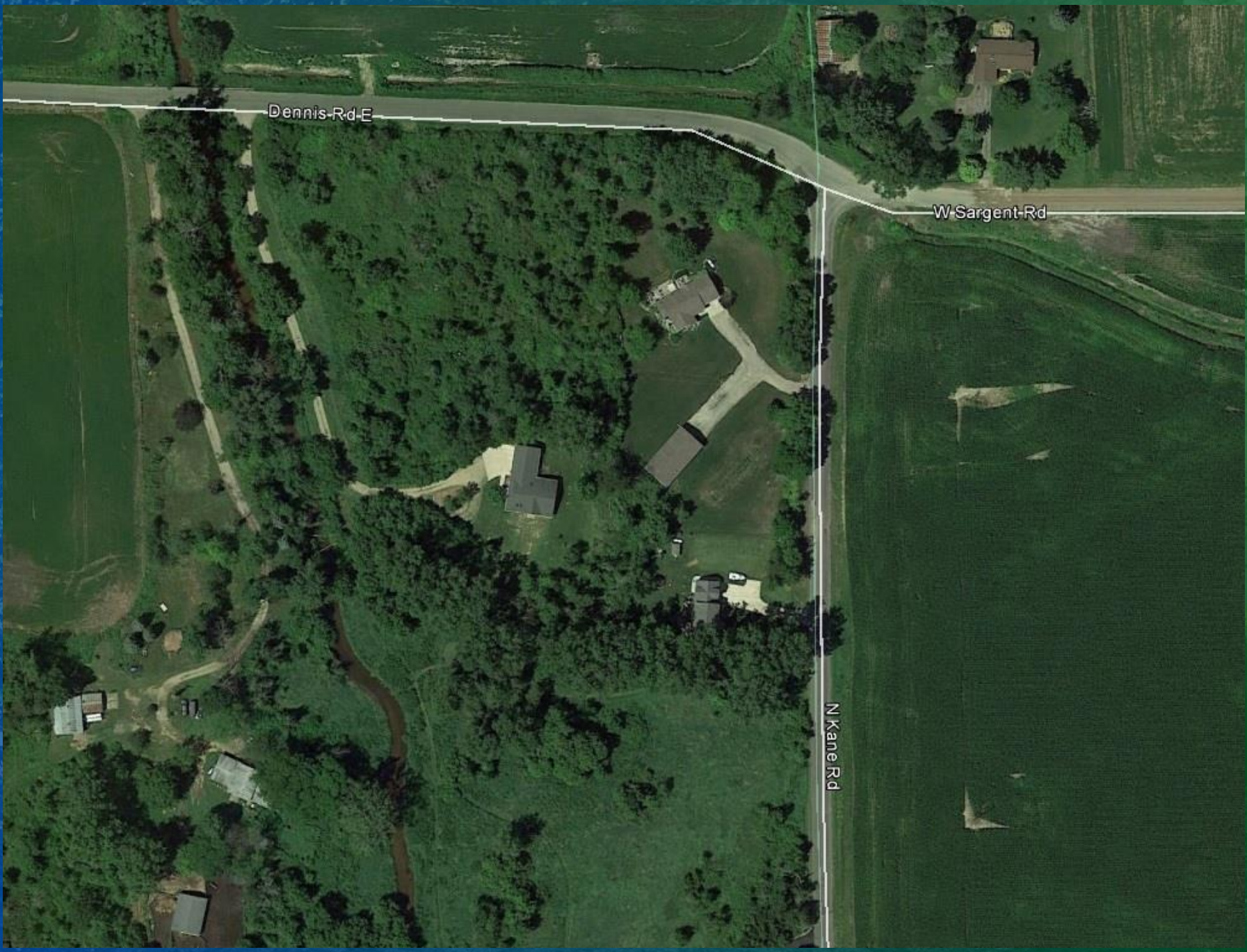
It is important to note that the issuance of a LOMA does not mean the risk of flooding has been eliminated. In fact, approximately 30 percent of all flood insurance claims occur in areas designated as moderate or minimal flood risk. For more information about the effects of flooding and flood insurance, visit www.floodsmart.gov.

If you have any questions on the LOMA process, please contact the FEMA at their toll-free number, 1-877-336-2627. If you have any other questions, or if you need further assistance, please contact me.

Sincerely,


Donna Cervelli
District Floodplain Engineer
Water Resources Division
517-335-6266

cc: Gaines Township Clerk
Mr. Karol Gerner, Alpine Land Surveying, Inc., alpineurv@aol.com





Previous Non-Removal



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP AMENDMENT DETERMINATION DOCUMENT (NON-REMOVAL)


COMMUNITY AND MAP PANEL INFORMATION		LEGAL PROPERTY DESCRIPTION
COMMUNITY	TOWNSHIP OF LEROY, INGHAM COUNTY, MICHIGAN	A parcel of land, as described in the Covenant Deed, recorded as Document No. 2009-015153, in Book 3340, Page 1016, in the Office of the County Register of Deeds, Ingham County, Michigan
	COMMUNITY NO.: 260906	
AFFECTED MAP PANEL	NUMBER: 26065C0325D	
	DATE: 8/16/2011	
FLOODING SOURCE: WEST BRANCH RED CEDAR (WEST BRANCH DRAIN)		APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 42.613, -84.147 SOURCE OF LAT & LONG: ARCGIS 10 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)
--	--	--	5452 East Dennis Road	Structure	A	893.3 feet	888.8 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

Nearby Loma

Page 1 of 2	Date: July 26, 2012		Case No.: 12-05-7039A		LOMA			
		Federal Emergency Management Agency Washington, D.C. 20472						
LETTER OF MAP AMENDMENT DETERMINATION DOCUMENT (REMOVAL)								
COMMUNITY AND MAP PANEL INFORMATION				LEGAL PROPERTY DESCRIPTION				
COMMUNITY	TOWNSHIP OF LEROY, INGHAM COUNTY, MICHIGAN			A parcel of land, as described in the Warranty Deed - Individual - Statutory Form, recorded as Document No. 2003-083964, in Liber 3064, Page 923, in the Office of the County Register of Deeds, Ingham County, Michigan				
	COMMUNITY NO.: 260906							
AFFECTED MAP PANEL	NUMBER: 26065C0325D							
	DATE: 8/16/2011							
FLOODING SOURCE: WEST BRANCH RED CEDAR				APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 42.614, -84.146 SOURCE OF LAT & LONG: ARCGIS 10 DATUM: NAD 83				
DETERMINATION								
LOT	BLOCK/SECTION	SUBDIVISION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NAVD 88)	LOWEST ADJACENT GRADE ELEVATION (NAVD 88)	LOWEST LOT ELEVATION (NAVD 88)
--	--	--	993 North Kane Road	Structure	X (unshaded)	887.9 feet	888.7 feet	--

COMMUNITY ACKNOWLEDGEMENT FORMS

ADD A FOOTER

DEPARTMENT OF HOMELAND SECURITY - FEDERAL EMERGENCY MANAGEMENT AGENCY
COMMUNITY ACKNOWLEDGMENT FORM

*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 1.38 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 submitting the form. This collection 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 this 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 must be completed for requests involving the existing or proposed placement of fill (complete Section A) **OR** to provide acknowledgment of this request to remove a property from the SFHA which was previously located within the regulatory floodway (complete Section B).

This form must be completed and signed by the official responsible for floodplain management in the community. **The six digit NFIP community number and the subject property address must appear in the spaces provided below. Incomplete submissions will result in processing delays.** Please refer to the MT-1 instructions for additional information about this form.

Community Number:

Property Name or Address:

Part A (Fill)

A. REQUESTS INVOLVING THE PLACEMENT OF FILL

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision Based on Fill (LOMR-F) or Conditional LOMR-F request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a Conditional LOMR-F, will be obtained. For Conditional LOMR-F requests, the applicant has or will document Endangered Species Act (ESA) compliance to FEMA prior to issuance of the Conditional LOMR-F determination. For LOMR-F requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA's process. Section 9 of the ESA prohibits anyone from "taking" or harming an endangered species. If an action might harm an endangered species, a permit is required from U.S. Fish and Wildlife Service or National Marine Fisheries Service under Section 10 of the ESA. For actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by DHS-FEMA, all analyses and documentation used to make this determination. For LOMR-F requests, we understand that this request is being forwarded to DHS-FEMA for a possible map revision.

Community Comments:



Community Official's Name and Title: <i>(Please Print or Type)</i>		Telephone No.:
Community Name:	Community Official's Signature: <i>(required)</i>	Date:



Part B (Floodway)

B. PROPERTY LOCATED WITHIN THE REGULATORY FLOODWAY

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this request for a LOMA. We understand that this request is being forwarded to DHS-FEMA to determine if this property has been inadvertently included in the regulatory floodway. We acknowledge that no fill on this property has been or will be placed within the designated regulatory floodway. We find that the completed or proposed project meets or is designed to meet all of the community floodplain management requirements.

Community Comments:



Community Official's Name and Title: <i>(Please Print or Type)</i>		Telephone No.:
		
Community Name:	Community Official's Signature (required):	Date:
		



Once an eLOMA is Complete

NFIP Refund Policy

Procedure to File A LOMR-F

Same Documents As A LOMA EXCEPT:

- Must Pay A Fee

(\$425 for single parcel)

- Can be Much More Complicated...