

Floodplain Management Local Style



Greg Thorpe, Rock Island County,
FPM extraordinaire

Floodplain Management



Local Floodplain Administrator's Manual

2006 Edition

The “Blue Book”



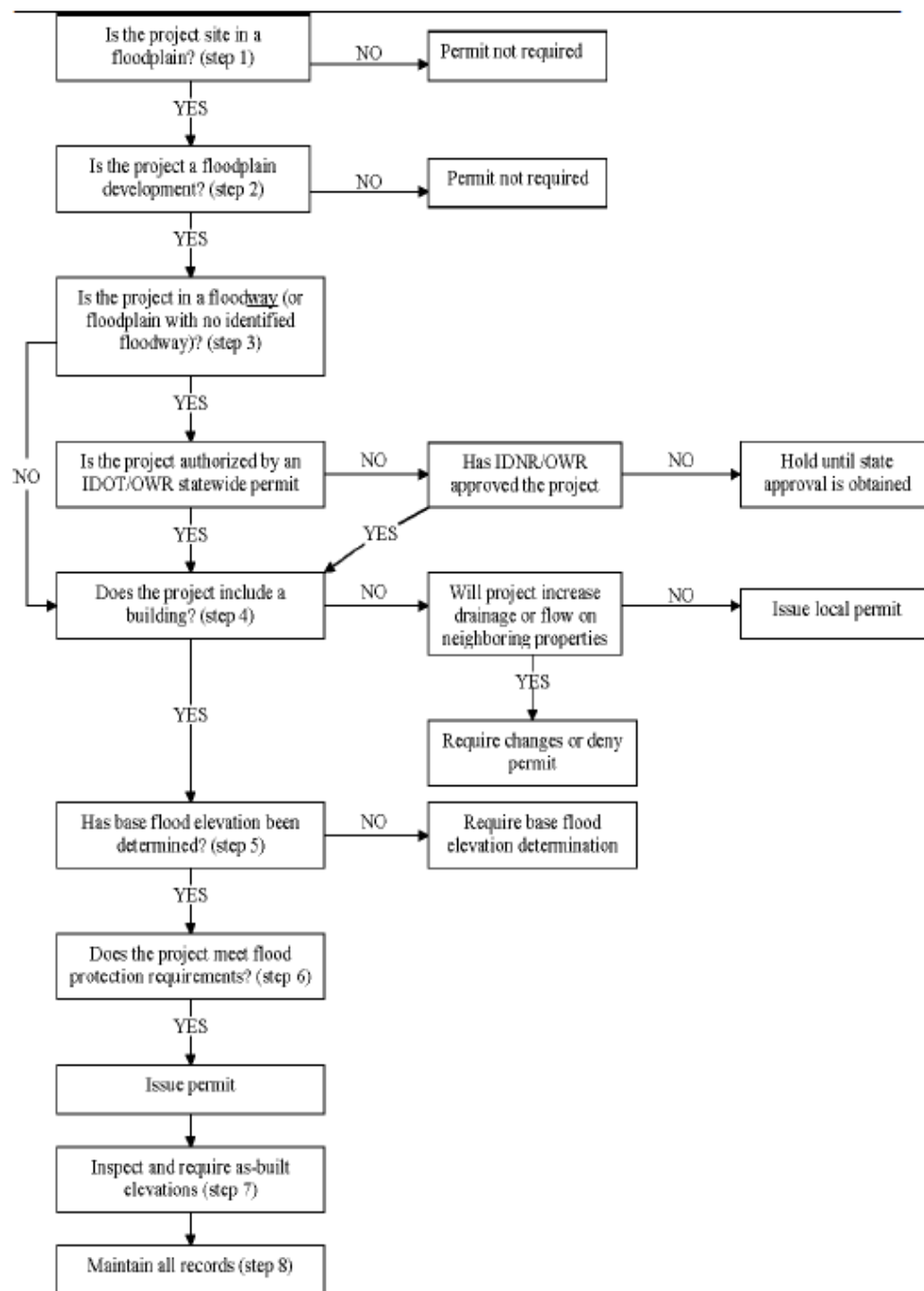
State of Illinois
Illinois Department of Natural Resources

FLOODPLAIN MANAGEMENT

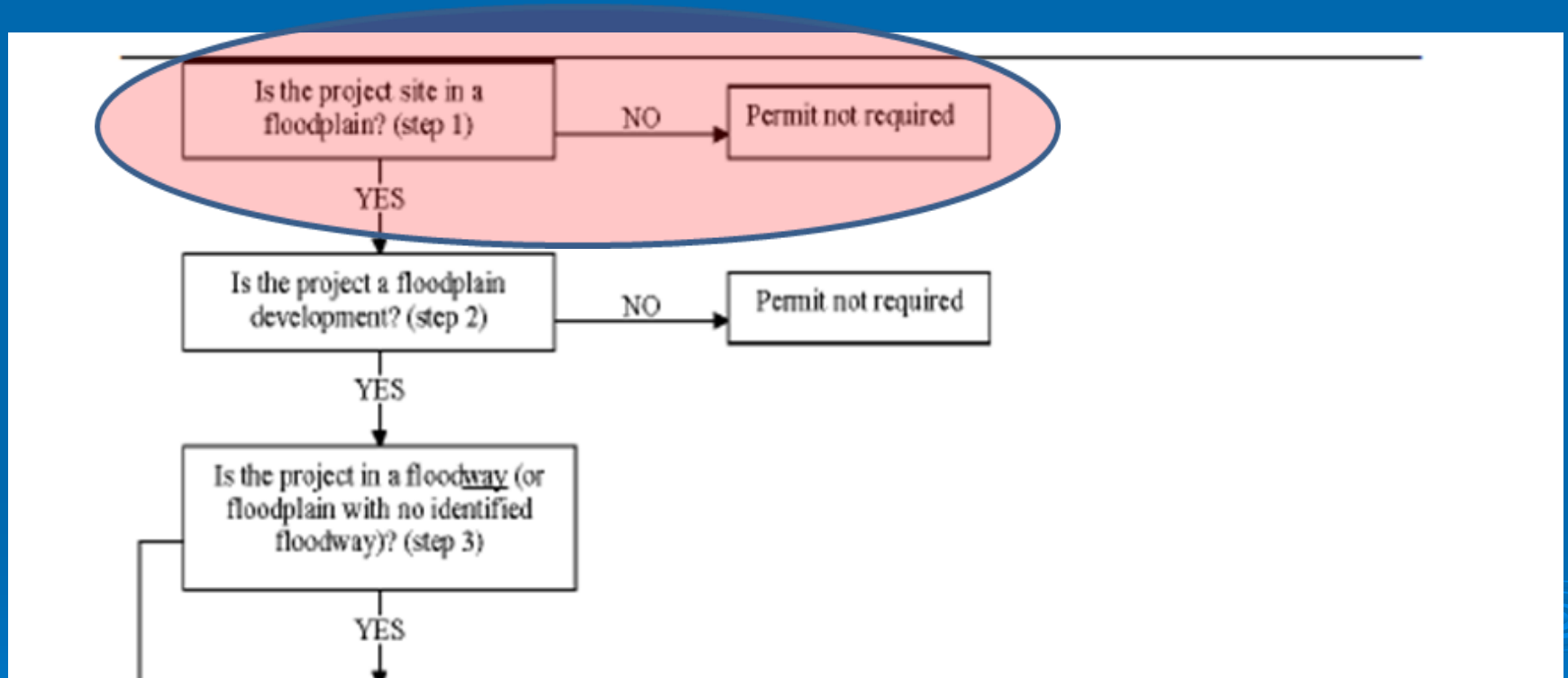
In Northeastern Illinois



The “Green Book”

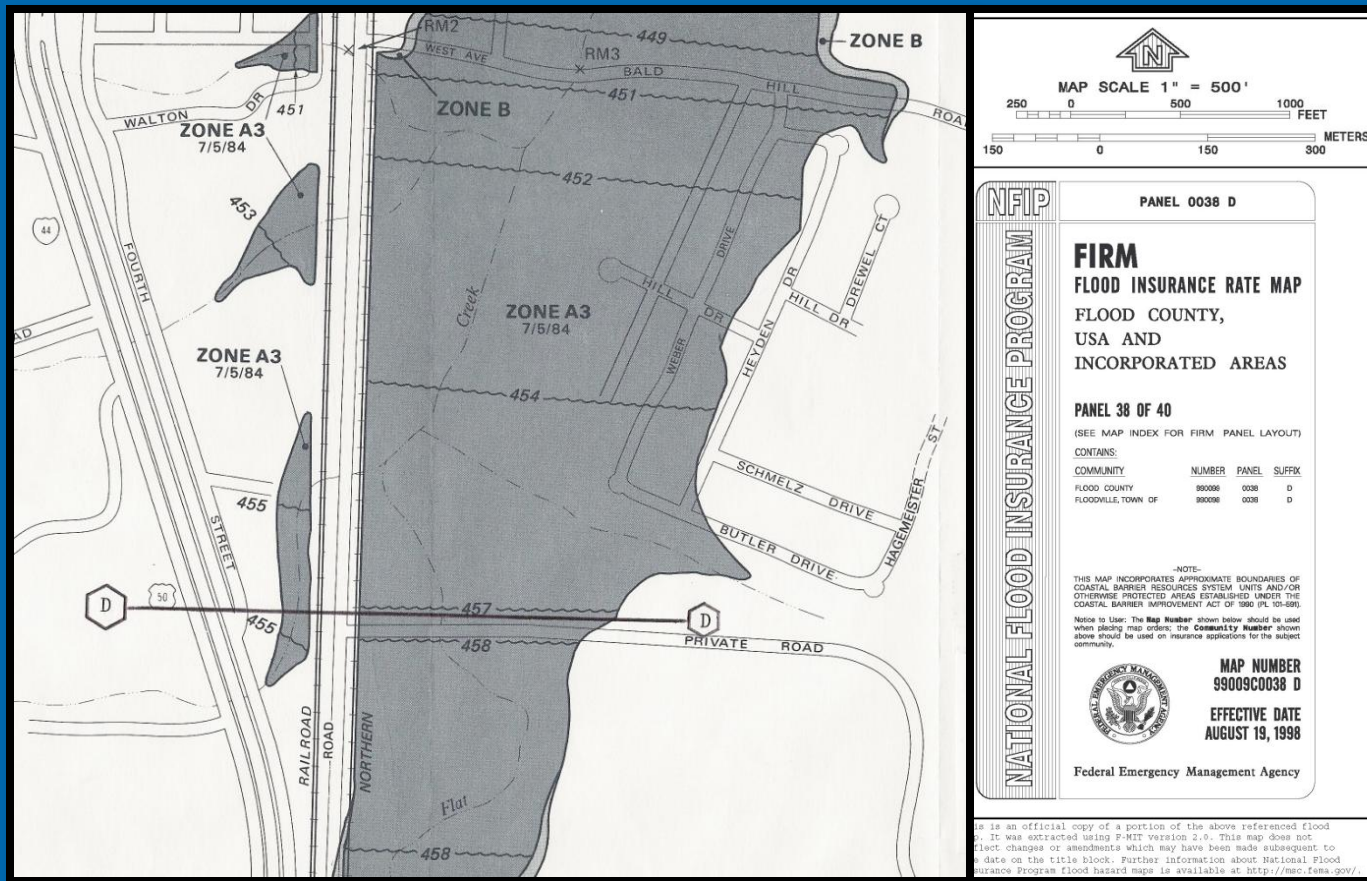


Is it in a FLOODPLAIN?

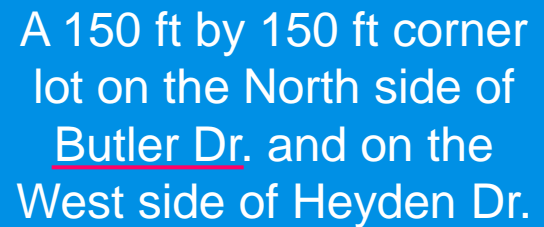


Mapping Example

➤ Select Correct FIRM Panel

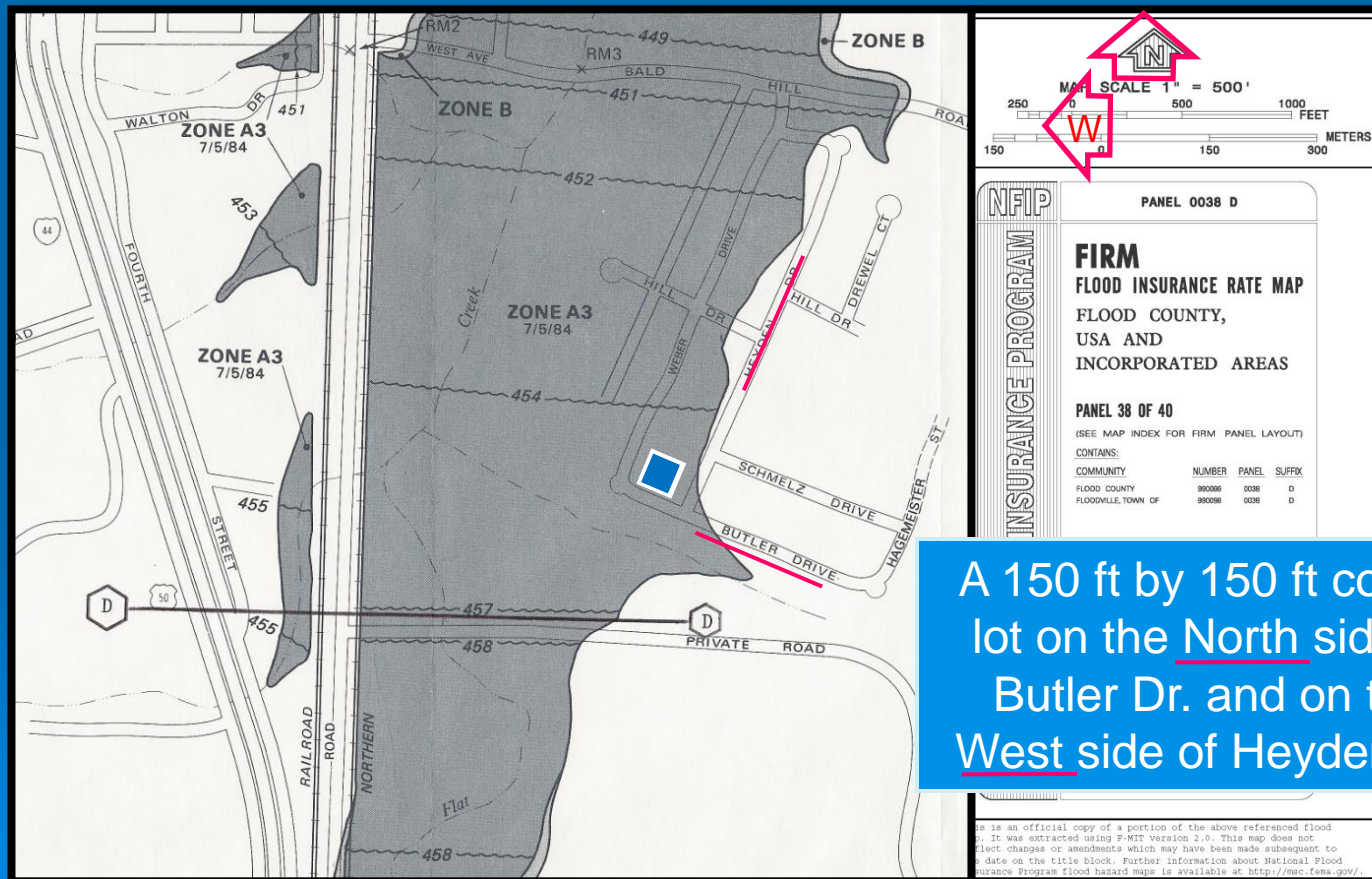


Find General Location



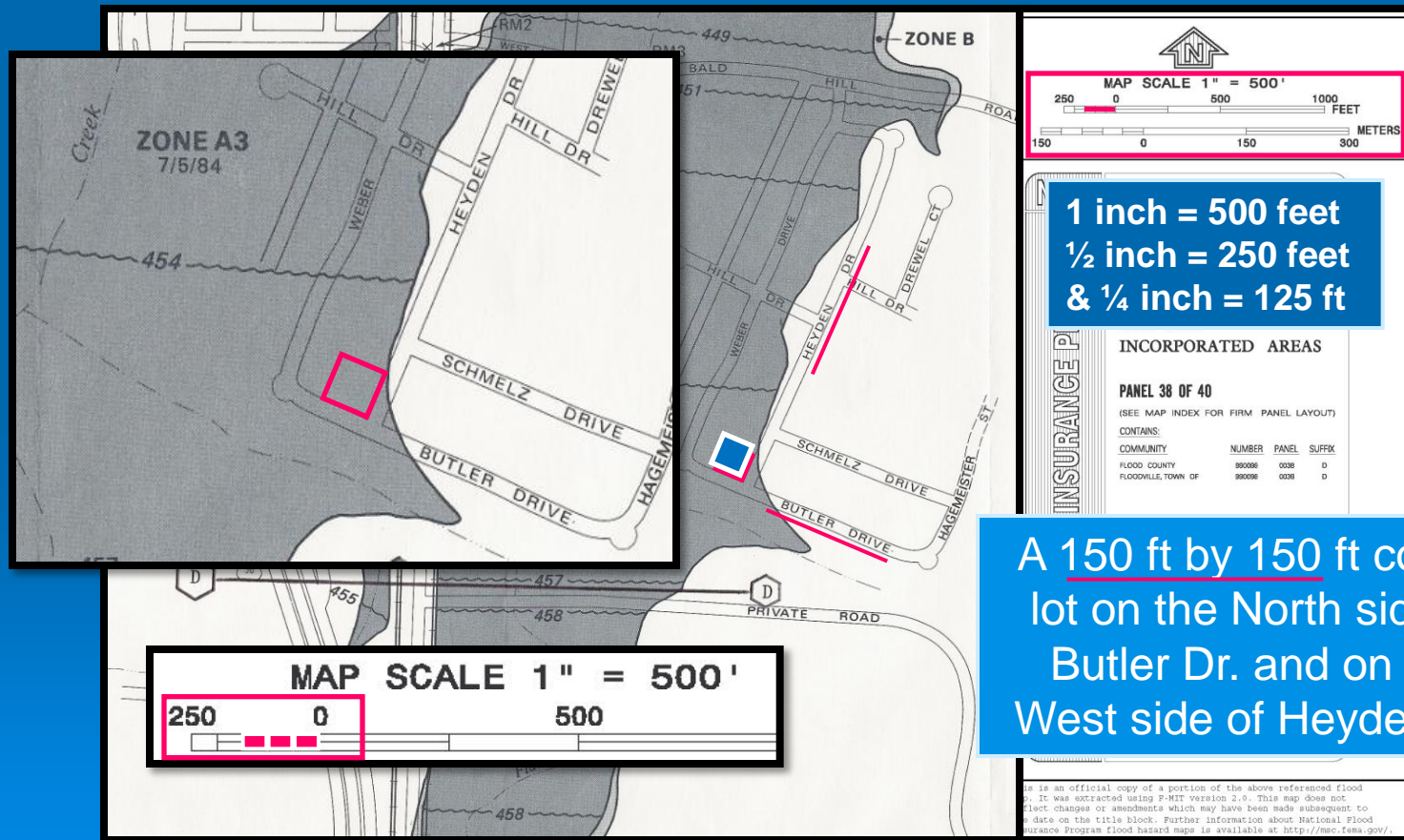
Mapping Example

➤ Identify Specific Location



Mapping Example

➤ Identify Specific Lot

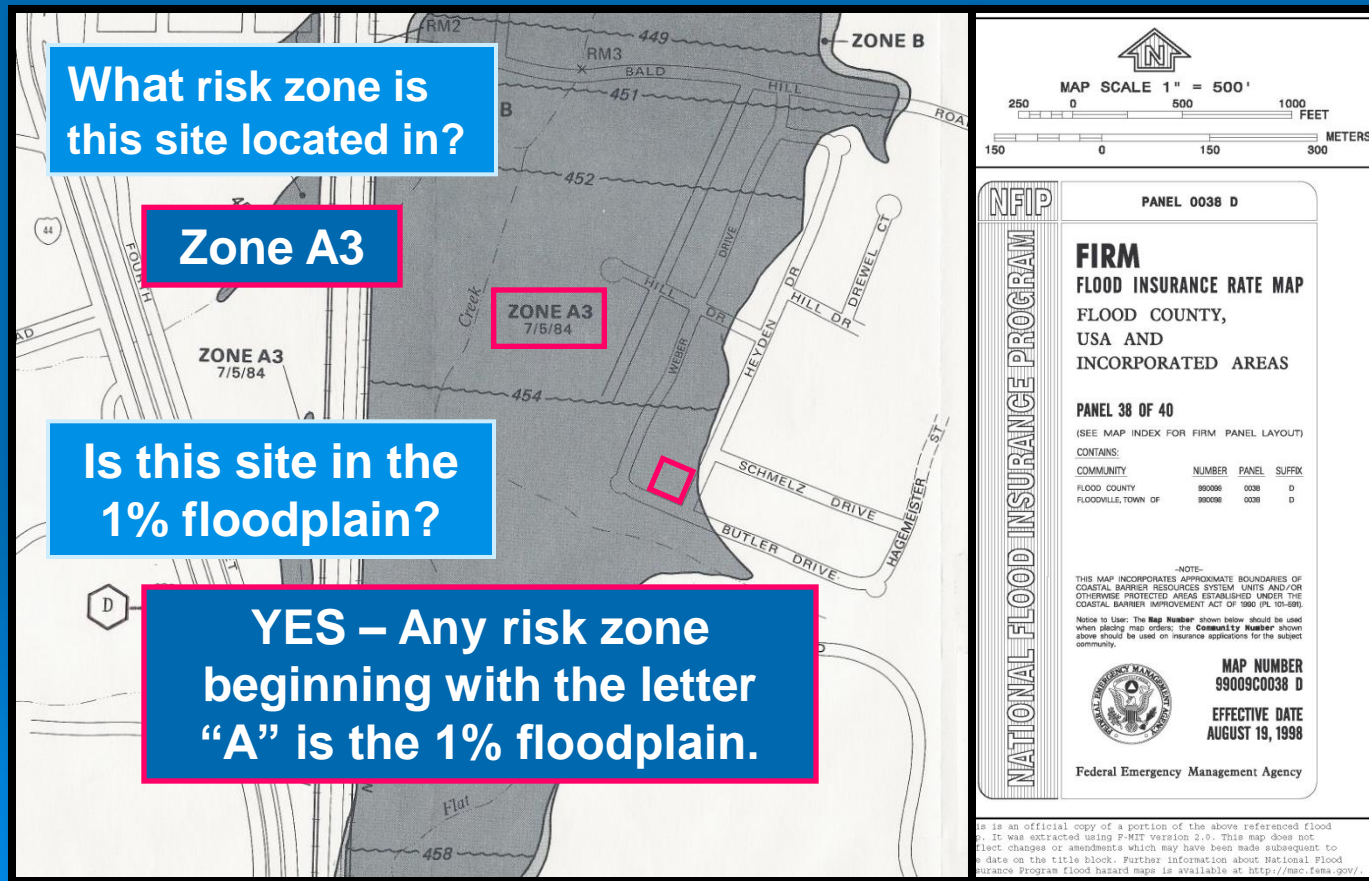


A 150 ft by 150 ft corner lot on the North side of Butler Dr. and on the West side of Heyden Dr.

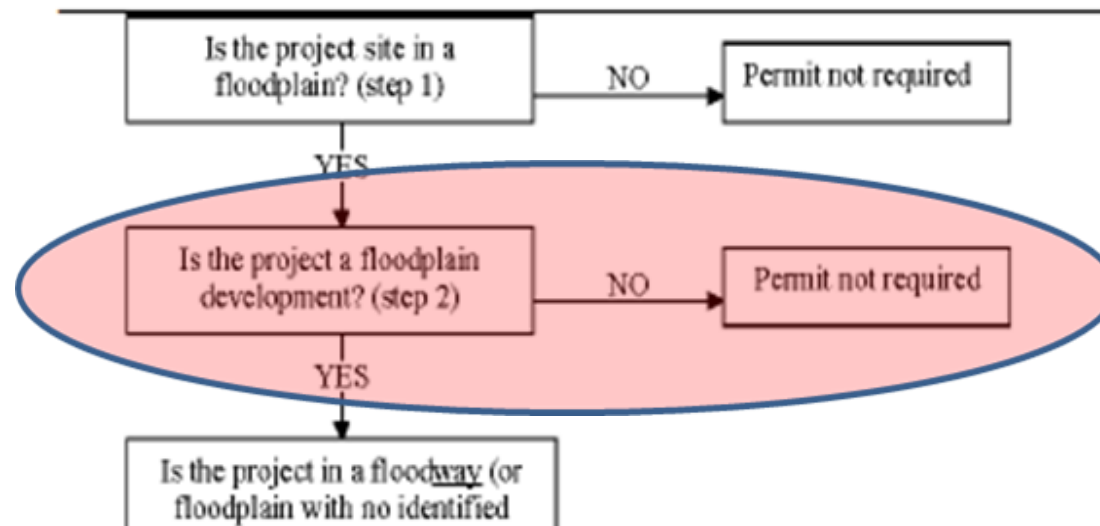
This is an official copy of a portion of the above referenced flood map. It was extracted using P-MIT Version 2.0. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. Further information about National Flood Insurance Program flood hazard maps is available at <http://nmc.fema.gov/>.

Mapping Example

➤ Is the Site in the Floodplain?



Is it DEVELOPMENT?

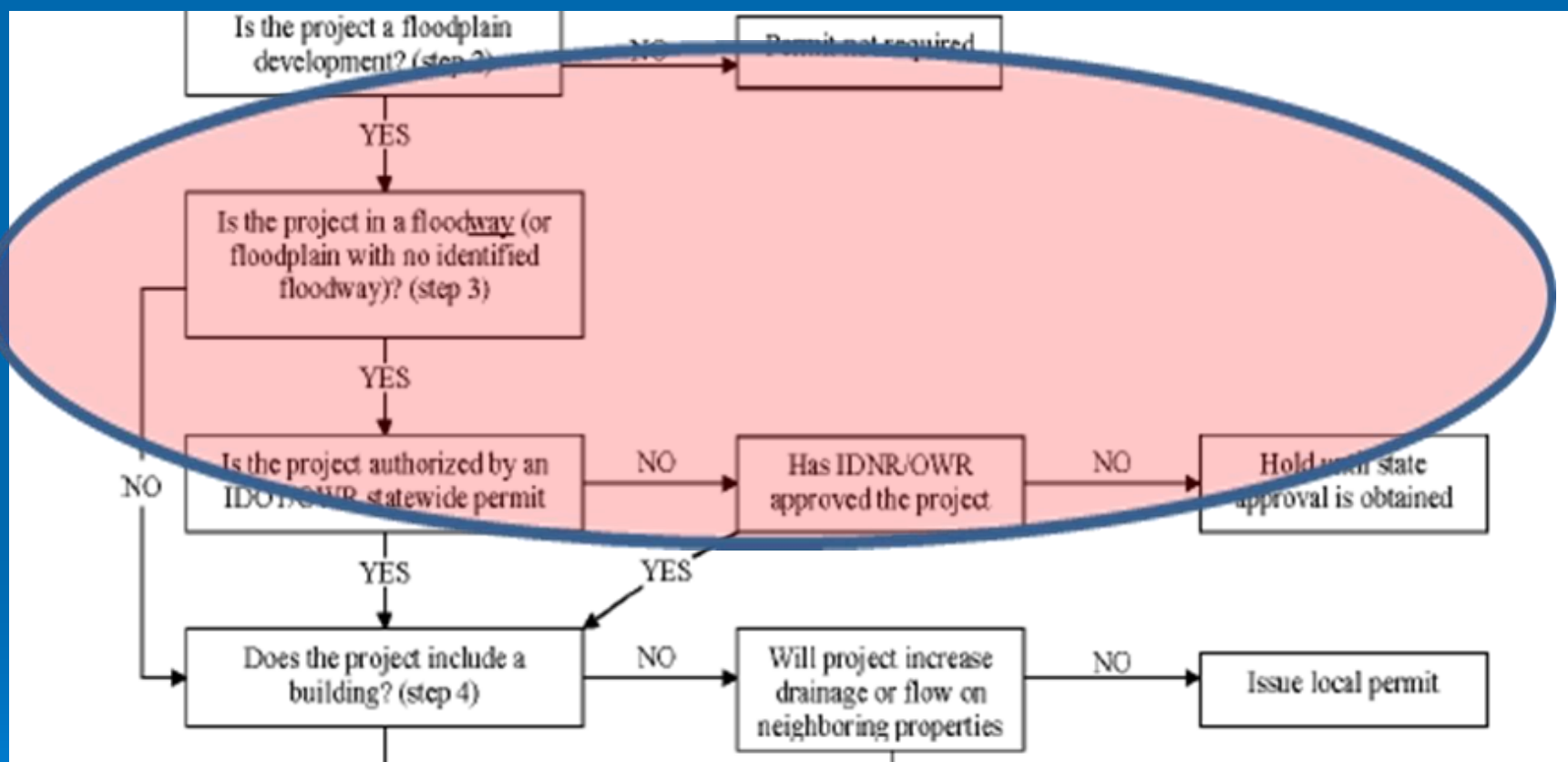


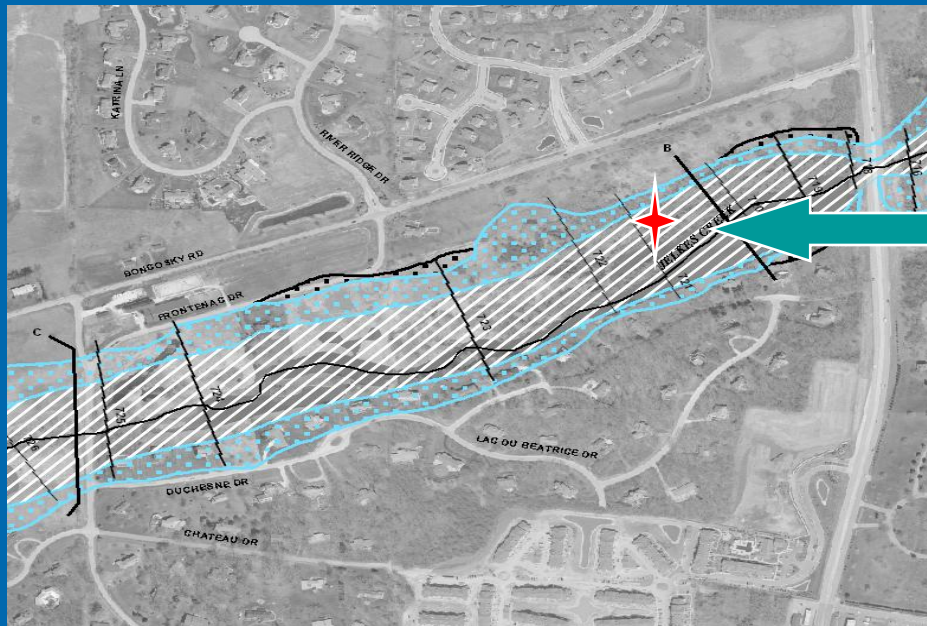
Development is

- Construction of new buildings
- Addition or substantial improvements to existing buildings
- Manufactured (mobile) homes and RVs
- Subdivisions or commercial developments
- Storage of materials
- Fill, grading, excavating
- Fences, culverts, bridges, roads
- And ANYTHING else that changes the floodplain



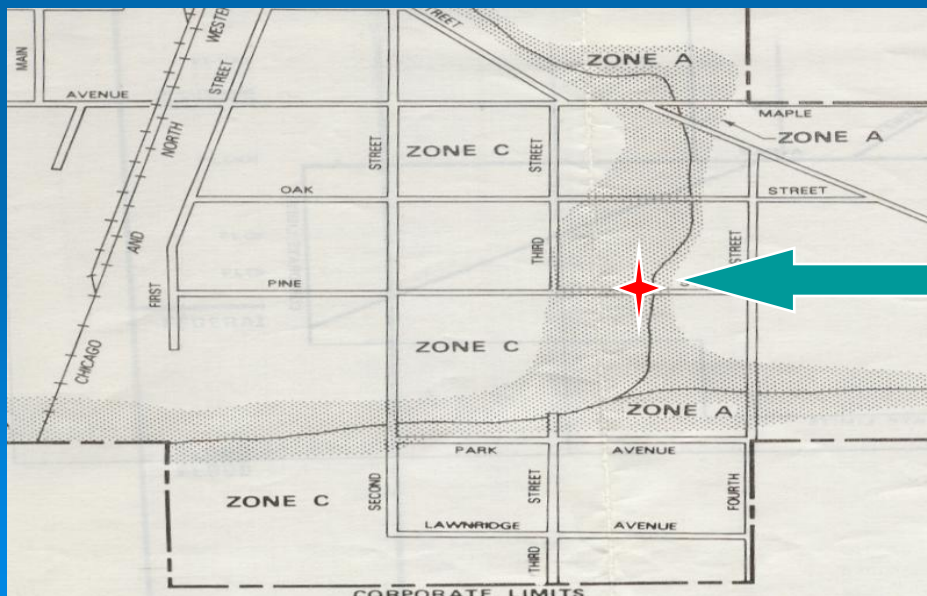
Is it in a FLOODWAY?





State Permit
required in a:
Mapped Floodway

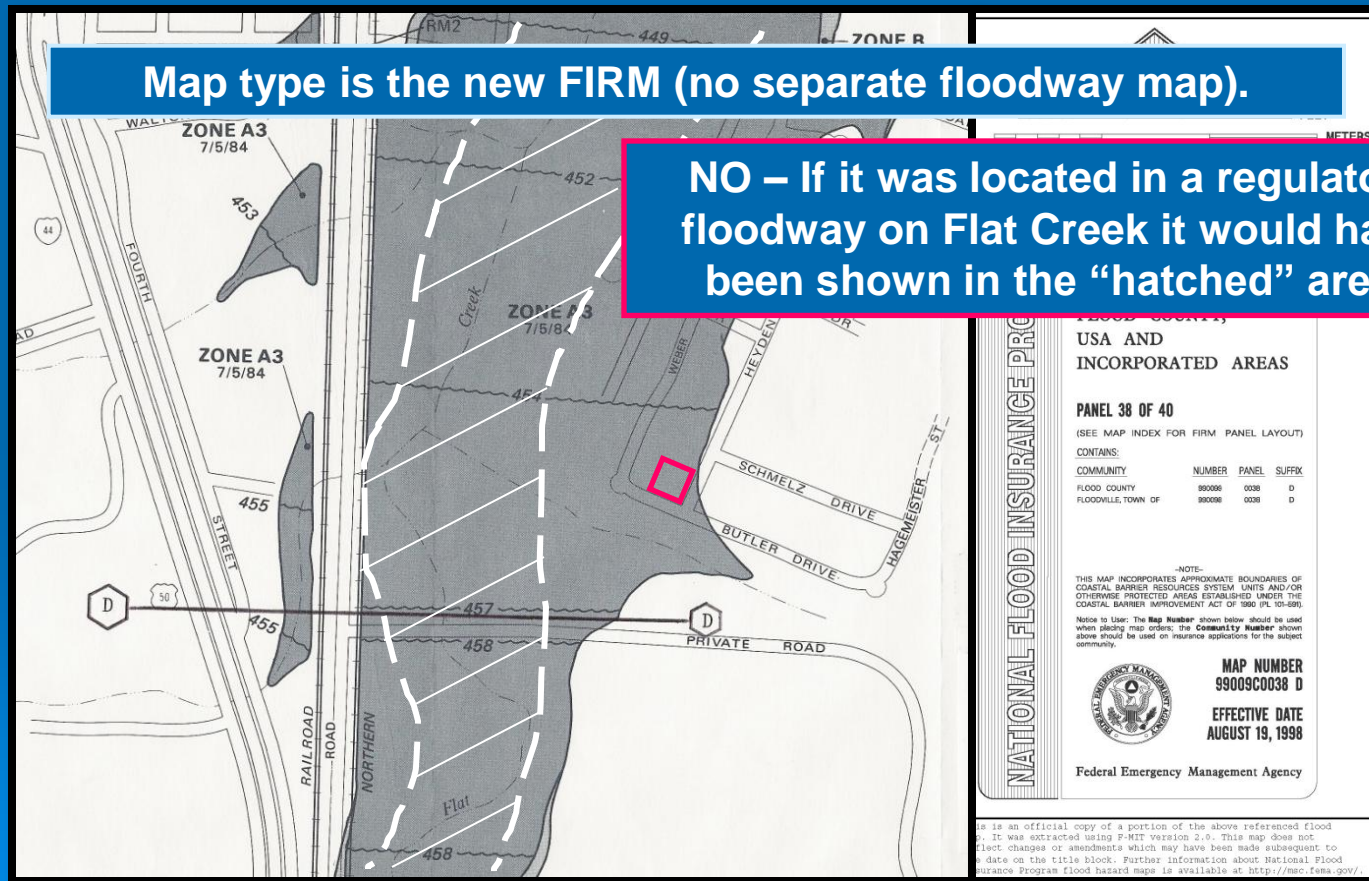
Or



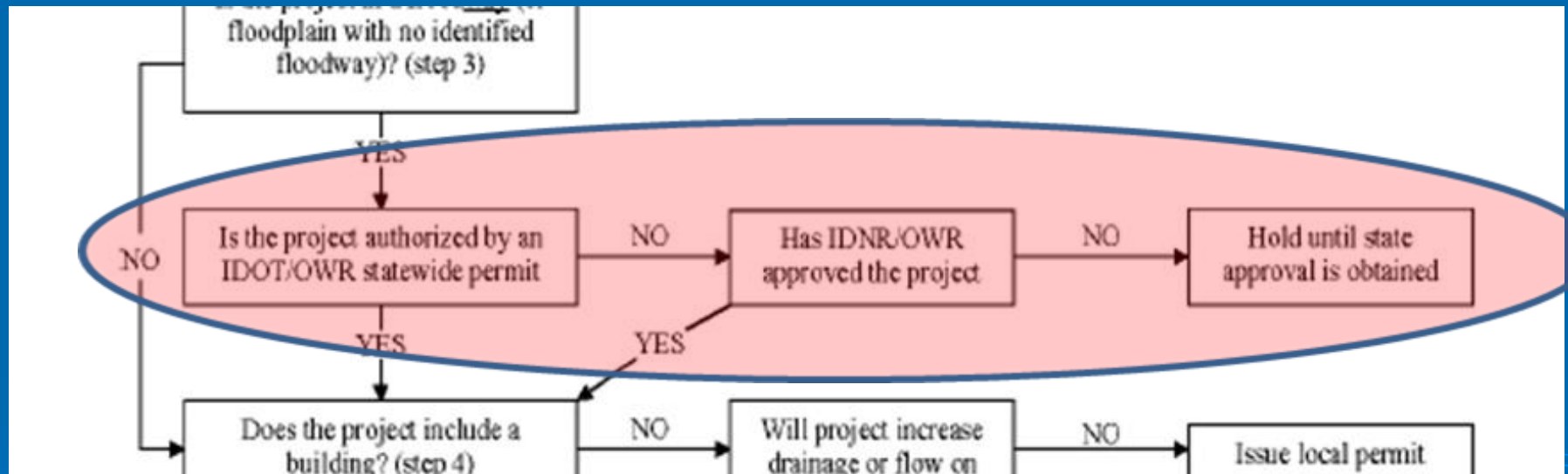
Floodplain with no
identified Floodway

Mapping Example

➤ Is the Site in the Regulatory Floodway?



Does it have a state permit?



IDNR/OWR Permit Programs

Adm. Rules

- ✓ **Construction in Floodways of Rivers, Lakes and Streams: Part 3700 Rules**
 - Regulations for Dam Construction: Part 3702 Rules
 - Regulations of Public Waters: Part 3704 Rules
- ✓ **Floodway Construction in Northeastern Illinois: Part 3708 Rules**
 - Allocation of Water from Lake Michigan: Part 3730 Rules

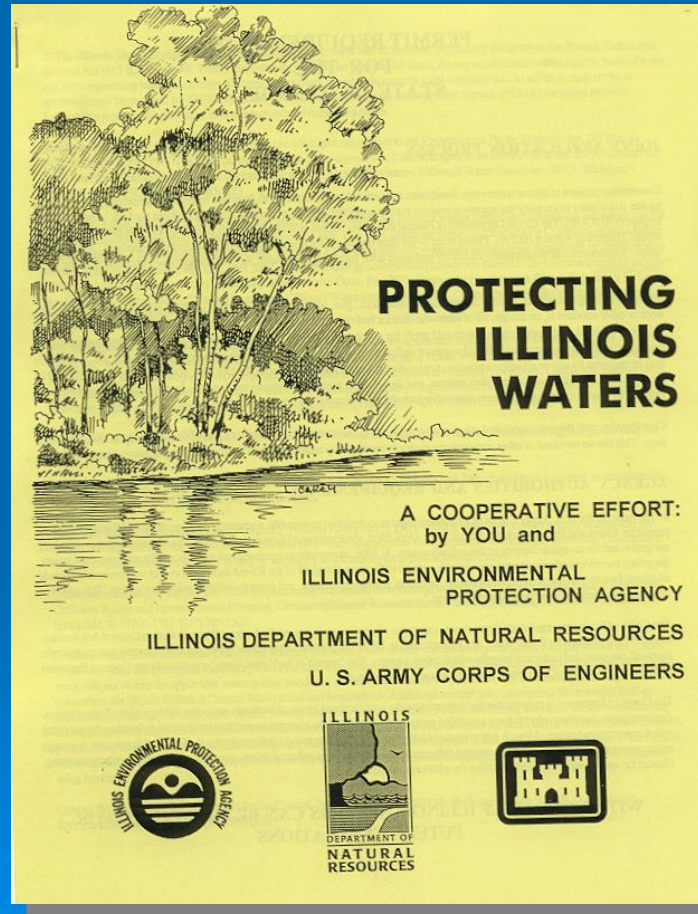
IDNR/OWR Floodway Permit Program (3708 Rules)

- Appropriate Uses
 - Floodway Map Revisions
 - Delegation
 - Municipalities/Counties
 - IDOT Agreement
- 

IDNR/OWR Permit Program Process

Joint Application Form

Complete and Submit Joint Application Form



IDNR/OWR Floodway Permit Program

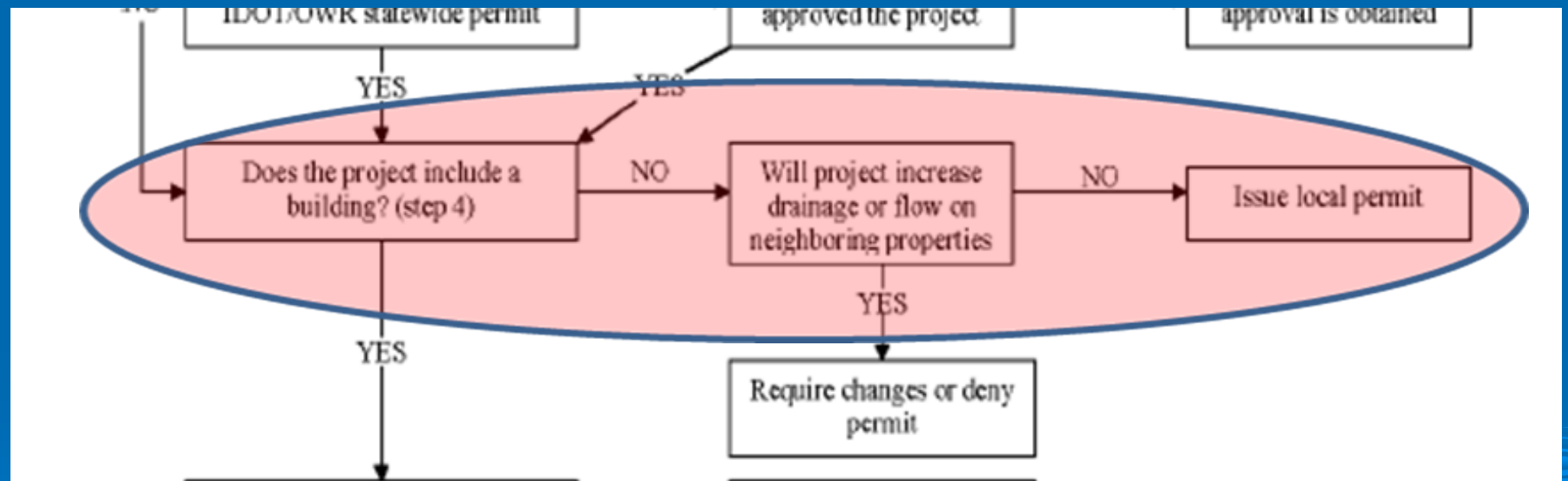
Current Active Statewide Permits

- SWP 2 - Bridge and Culvert Crossings of Streams in Rural Areas
- SWP 3 - Mooring Facilities Used Exclusively for Barge Fleeting Purposes
- SWP 4 - Aerial Utility Crossings
- SWP 5 - Minor Boat Docks
- SWP 6 - Minor Non-Obstructive Floodway Construction
- SWP 7 - Outfalls
- SWP 8 - Underground Pipeline and Utility Crossings
- SWP 9 - Minor Shoreline, Stream Bank, and Channel Protection activities
- SWP 10 - Accessory Structures and Additions to Existing Residential Structures
- SWP 11 - Minor Maintenance Dredging
- SWP 12 - Bridge and Culvert Replacement Structures
- SWP 13 - Temporary Construction Activities
- SWP 14 - Special Uses of Public Waters

Can be found at

<https://www.dnr.illinois.gov/WaterResources/Pages/PermitsStatewideRegionalGeneral.aspx>

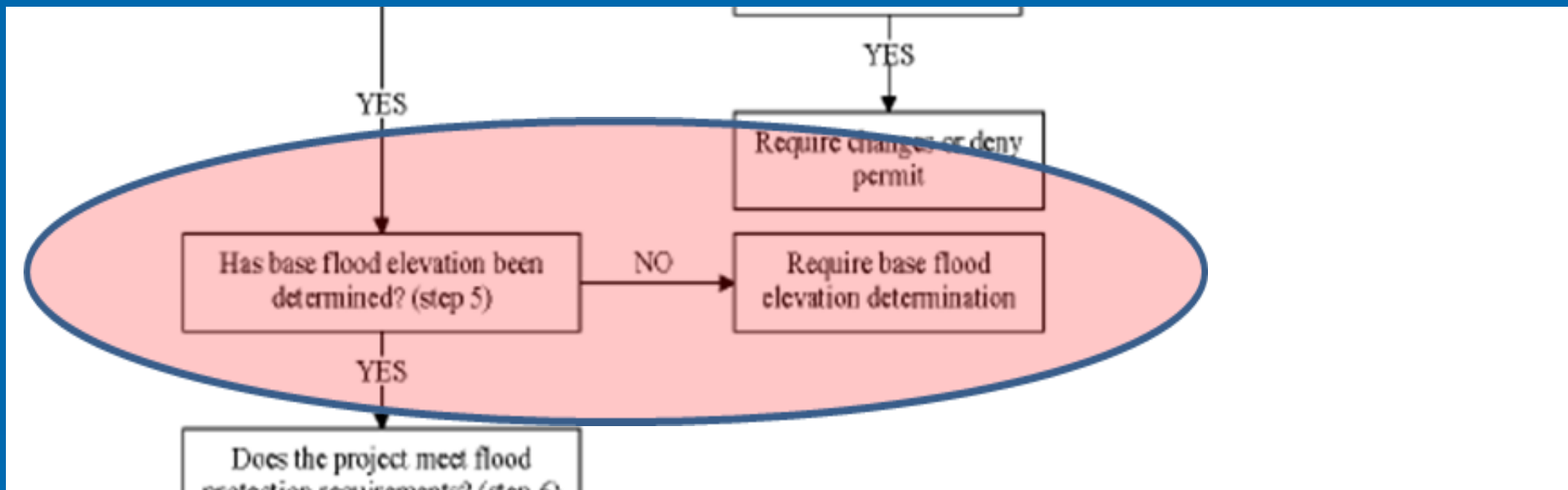
It is a BUILDING?



Building?

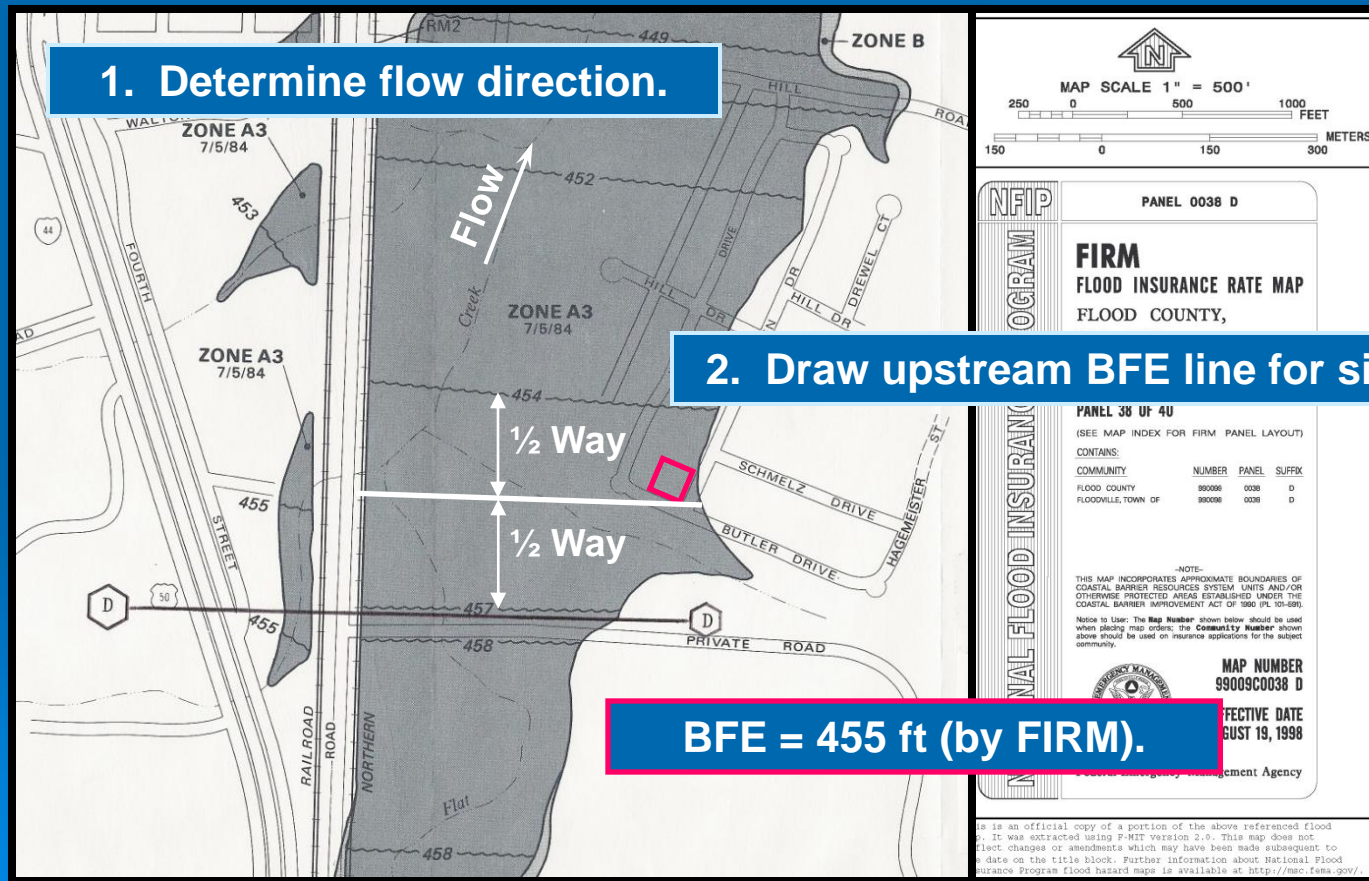


Got BFE?



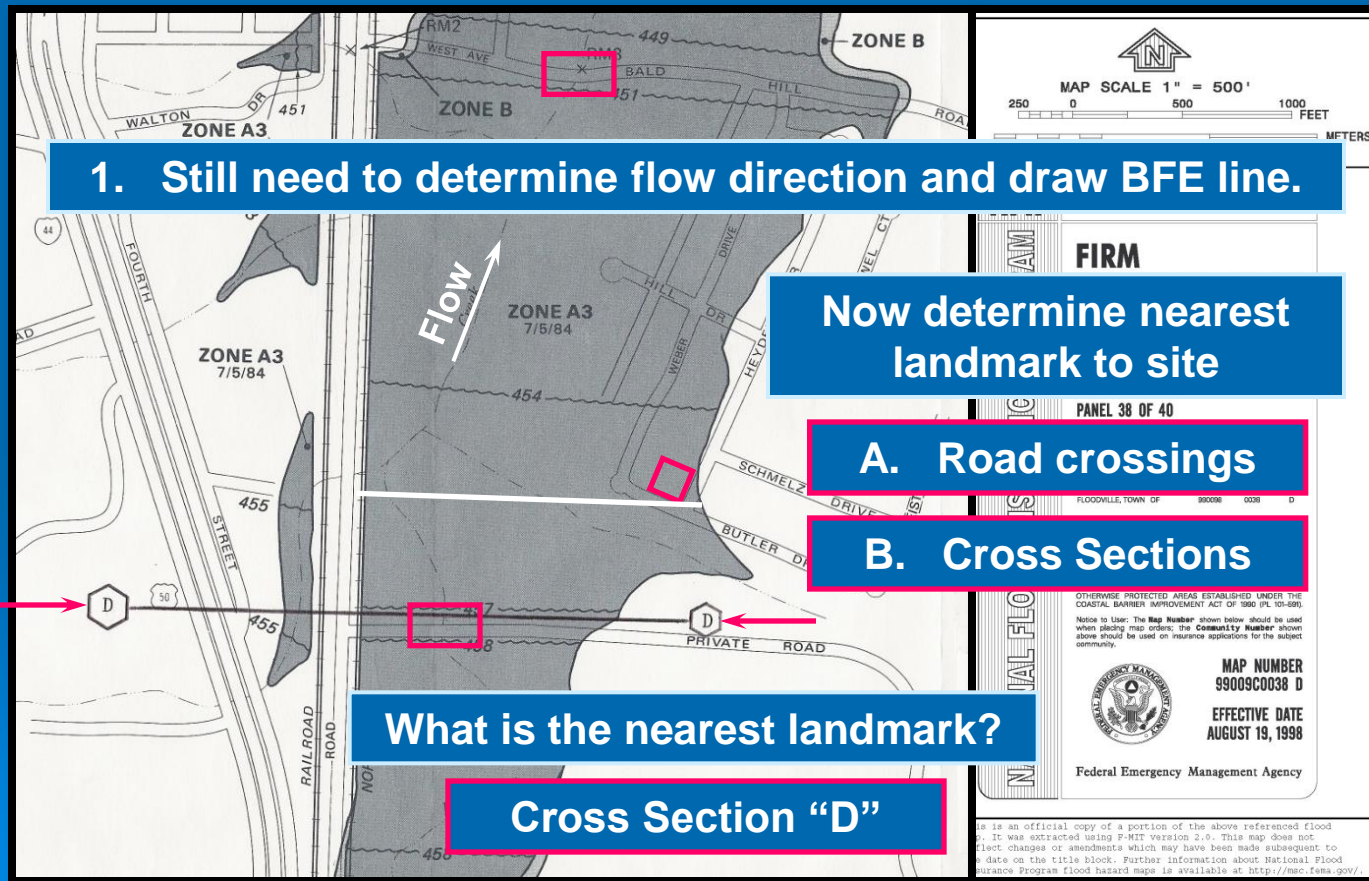
Mapping Example

➤ Determine BFE Using FIRM



Mapping Example

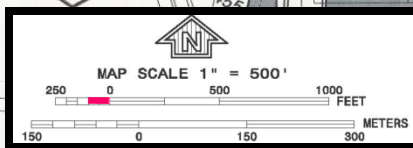
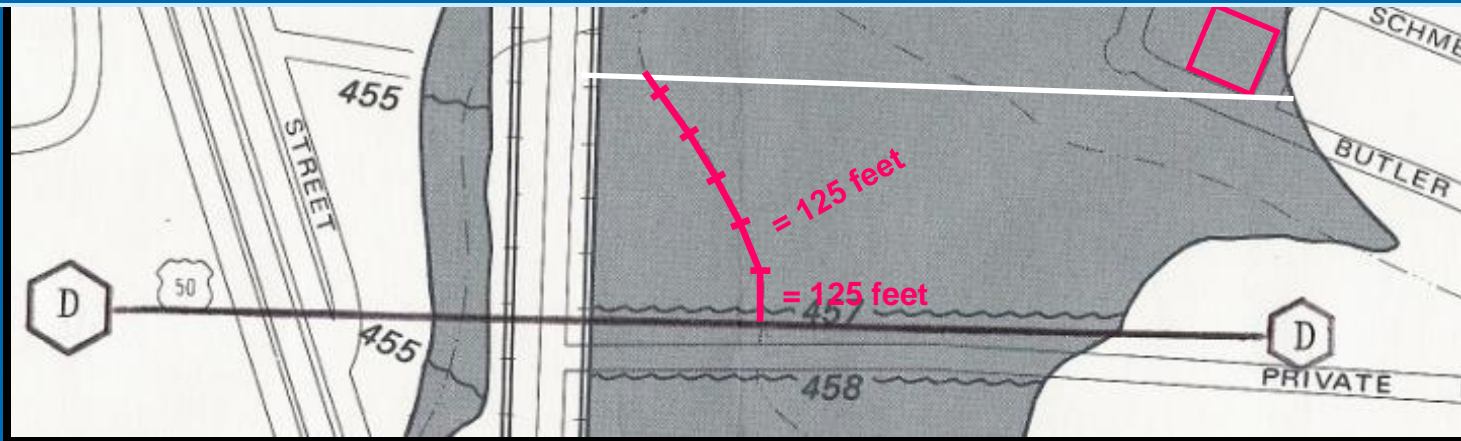
➤ Determine BFE Using FIS Flood Profile



Mapping Example

➤ Determine Distance to closest Landmark

Measure the distance to the nearest landmark along the centerline of the stream.



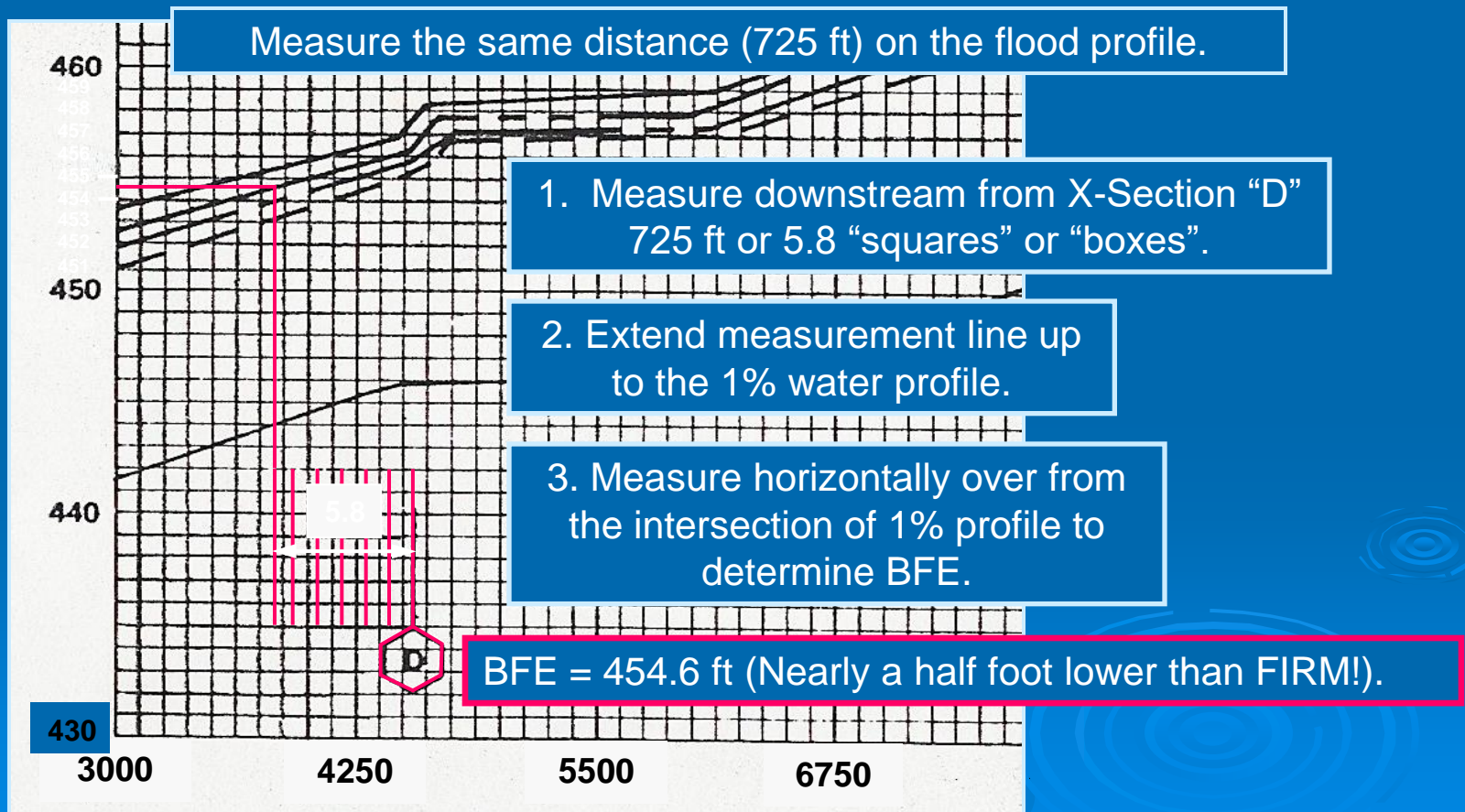
— = 100 feet

Distance between Cross Section "D" and site = $5 \times 125 \text{ ft} + 100 \text{ ft} = 725 \text{ ft} \pm$

COASTAL BARRIER IMPROVEMENT ACT OF 1960 (PL 86-360)
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER 99009C0038 D
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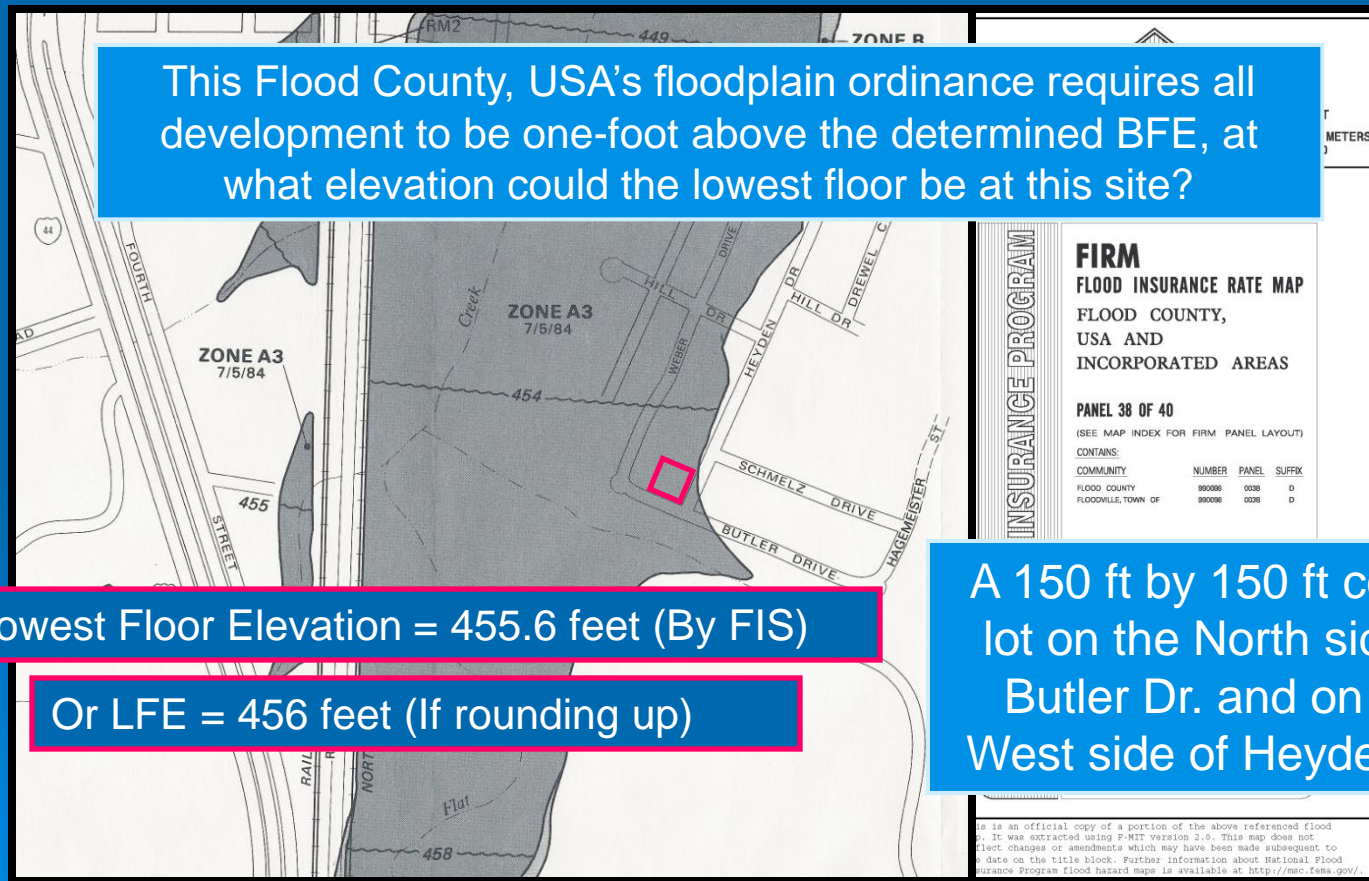
Mapping Example

➤ Determine BFE

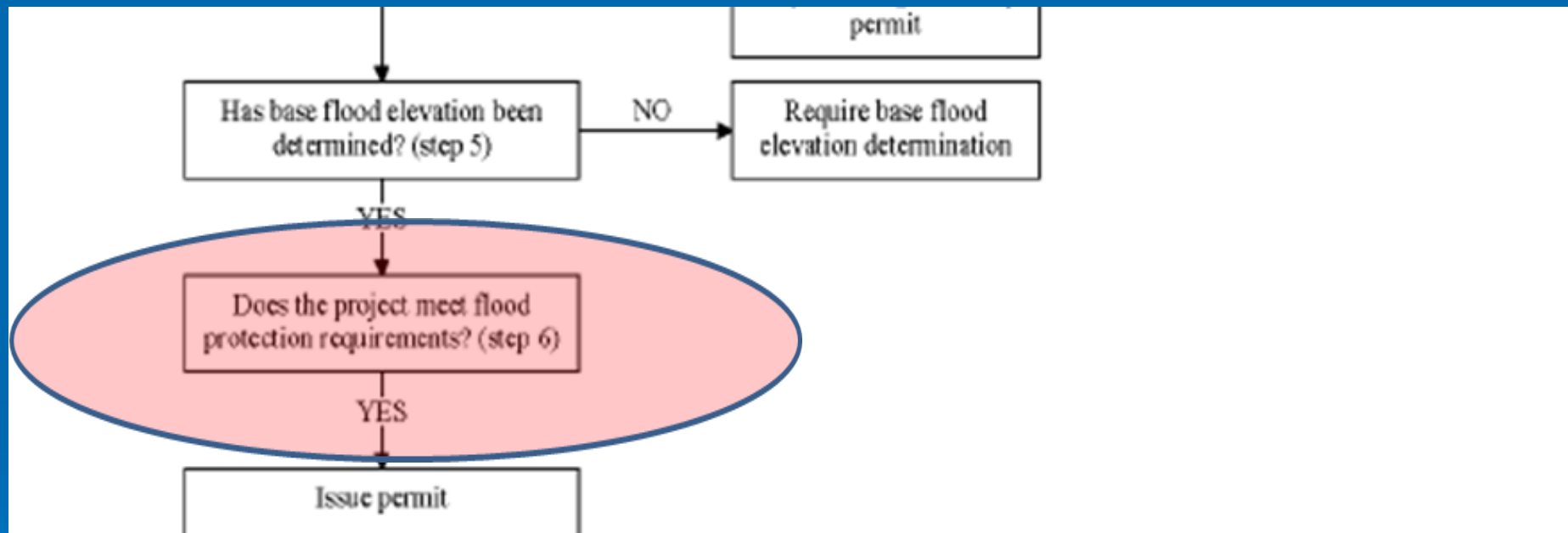


Mapping Example

➤ Additional Freeboard Requirements



Flood Protection Met?



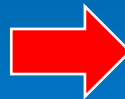
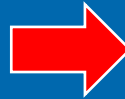
Building Protection is a Priority..

New Buildings in a Floodplain must be

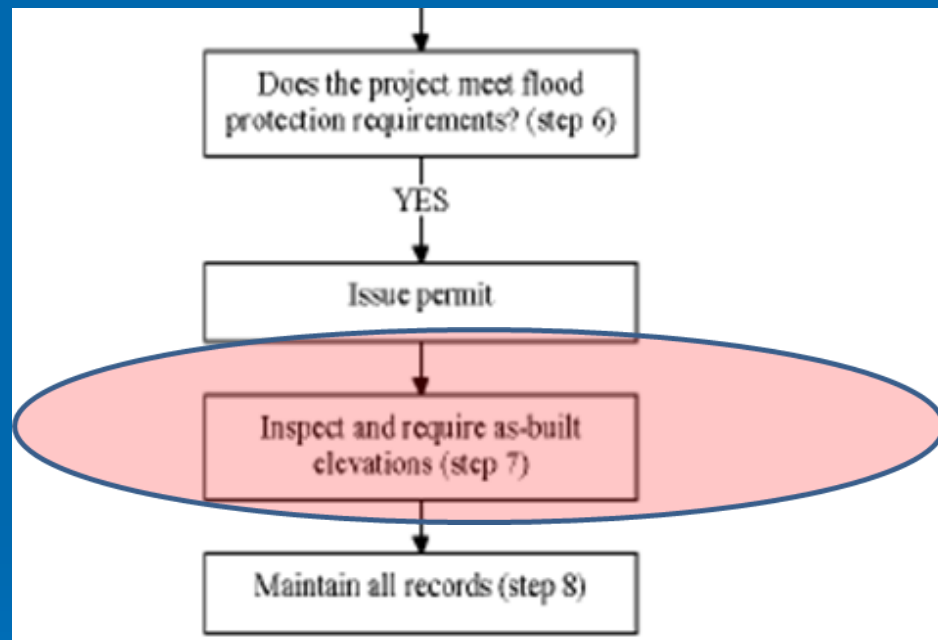
- Elevated on Fill
 - Elevated on flow-thru walls
- Elevated by poles, piers, or columns



Strong Regulations Prevent New Damage



Got Elevations?



The FEMA Elevation Certificate

Federal Register Filing Copy
March 10, 1999

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
ELEVATION CERTIFICATE
AND
INSTRUCTIONS

Federal Register Filing Copy
March 10, 1999

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
ELEVATION CERTIFICATE
Important: Read the instructions on pages 1-5.

SECTION A - PROPERTY OWNER INFORMATION

BUILDING OWNER'S NAME _____
BUILDING STREET ADDRESS (including Apt. Unit, Suite, and/or Box No.) _____
CITY _____ STATE _____ ZIP CODE _____

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

COMMUNITY NAME & COMMUNITY NUMBER _____
FIRM NUMBER _____
FIRM DATE _____
FIRM SOURCE _____
FIRM TYPE _____
FIRM DATE _____
FIRM SOURCE _____
FIRM TYPE _____

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

Building elevations are based on: ☐ Surveyed elevation ☐ Other (Describe: _____)
Building Diagram Number: _____
Complete from C-1 to C-10. If a diagram is used, it must be a diagram of the building for which this certificate is being completed.
Use the space provided or the reverse side of this certificate to document the datum conversion calculation. Use the space provided or the reverse side of this certificate to document the datum conversion calculation.

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

I, _____, _____, _____, or _____, being duly sworn, depose and say that I am a duly licensed surveyor, engineer, or architect, and that I have personally surveyed the building and the surrounding area, and that the information provided on this certificate is true and correct to the best of my knowledge and belief.

SECTION E - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

DATE _____ TIME _____
STATE _____ ZIP CODE _____
FIRM _____
FIRM NUMBER _____
FIRM DATE _____
FIRM SOURCE _____
FIRM TYPE _____

IMPORTANT: In these spaces, copy the corresponding information from Section A.
BUILDING STREET ADDRESS (including Apt. Unit, Suite, and/or Box No.) _____
CITY _____ STATE _____ ZIP CODE _____

SECTION F - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

DATE _____ TIME _____
STATE _____ ZIP CODE _____
FIRM _____
FIRM NUMBER _____
FIRM DATE _____
FIRM SOURCE _____
FIRM TYPE _____

REPLACES ALL PREVIOUS EDITIONS

We will be watching! ☺



Compliance!

100+
community
visits per year.

15+ workshops
per year.

5,000 technical
assistance per
year.

Illinois leads
the nation in
communities on
probation or
suspended
from the
National Flood
Insurance
Program.



I'm here to see your
Floodplain permit files and
Elevation Certificates.

7 communities nationwide kicked out
of NFIP. 5 are in Illinois! We are
serious!

What the....#@*%\$* @!



Outside: Flow thru vents



Inside: Doors, windows, cabinets, restroom, no vents and finished interior.

The feather in our cap...

Illinois is ranked #1 in the nation for the fewest number of flood insurance claims on post-FIRM (newer) structures. (1%).

(Some states have as much as 50% of flood claims taking place on newer buildings)





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Frank.shockey@fema.dhs.gov