

FEMA VE Flood Zone

Building and Zoning Overview



**Community
Meeting**

April 8, 2019

Meeting Outline

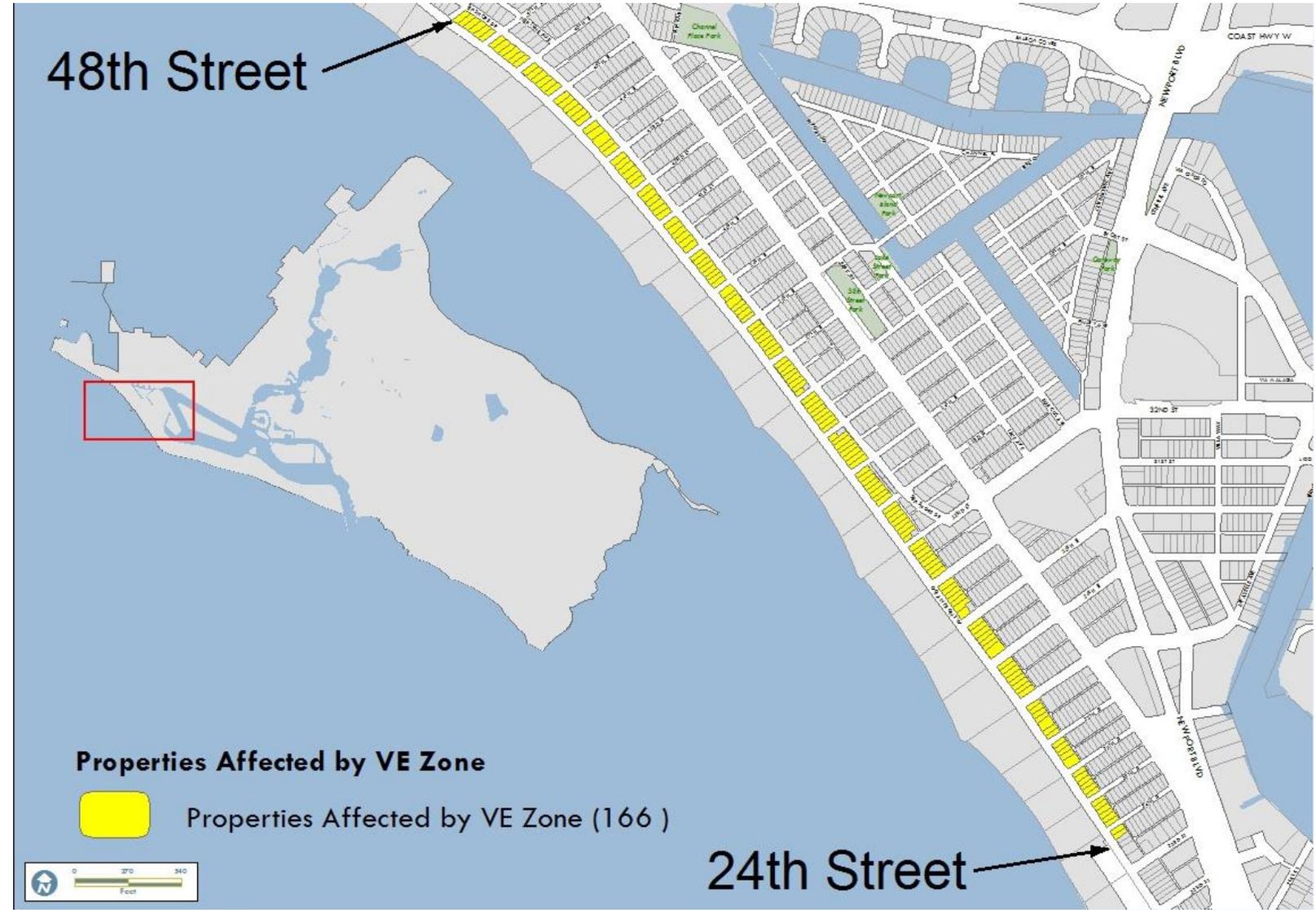
Covered Topics

- Development Standards
 - Building Code
 - Zoning Code
- Potential adaptation plans

Not Covered Topics

- Insurance requirements
 - Insurance rates
 - In depth details of construction requirements
- *(Handouts and contact information available)

VE Food Zone



Filing for Map Revision with FEMA (LOMR)

- Submit new study to FEMA
- Estimated to take two years
- Intent to remove more properties from the Flood Map

Influence of Flood Boundary:

- 1) Ocean Swells
- 2) Storm events
- 3) Orientation
- 4) Beach slope
- 5) Foreshore feature



2016
Initial
Study
by
FEMA



Result of the
City appeal -
reduced flood
boundary



Building Code Overview

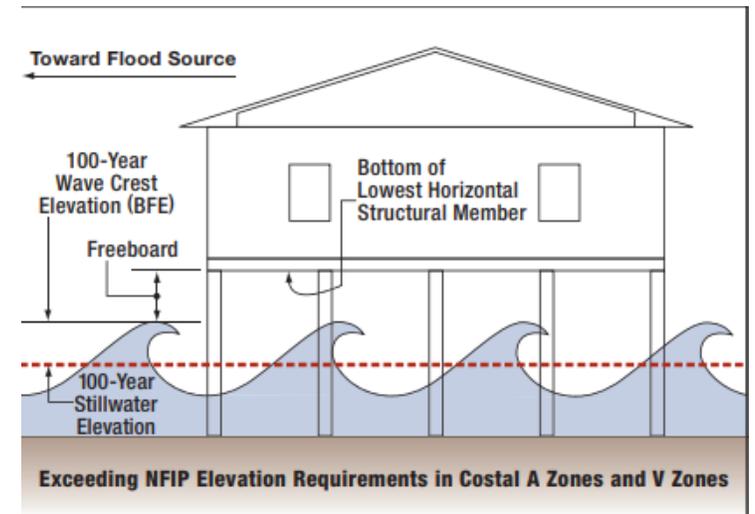


Community Meeting

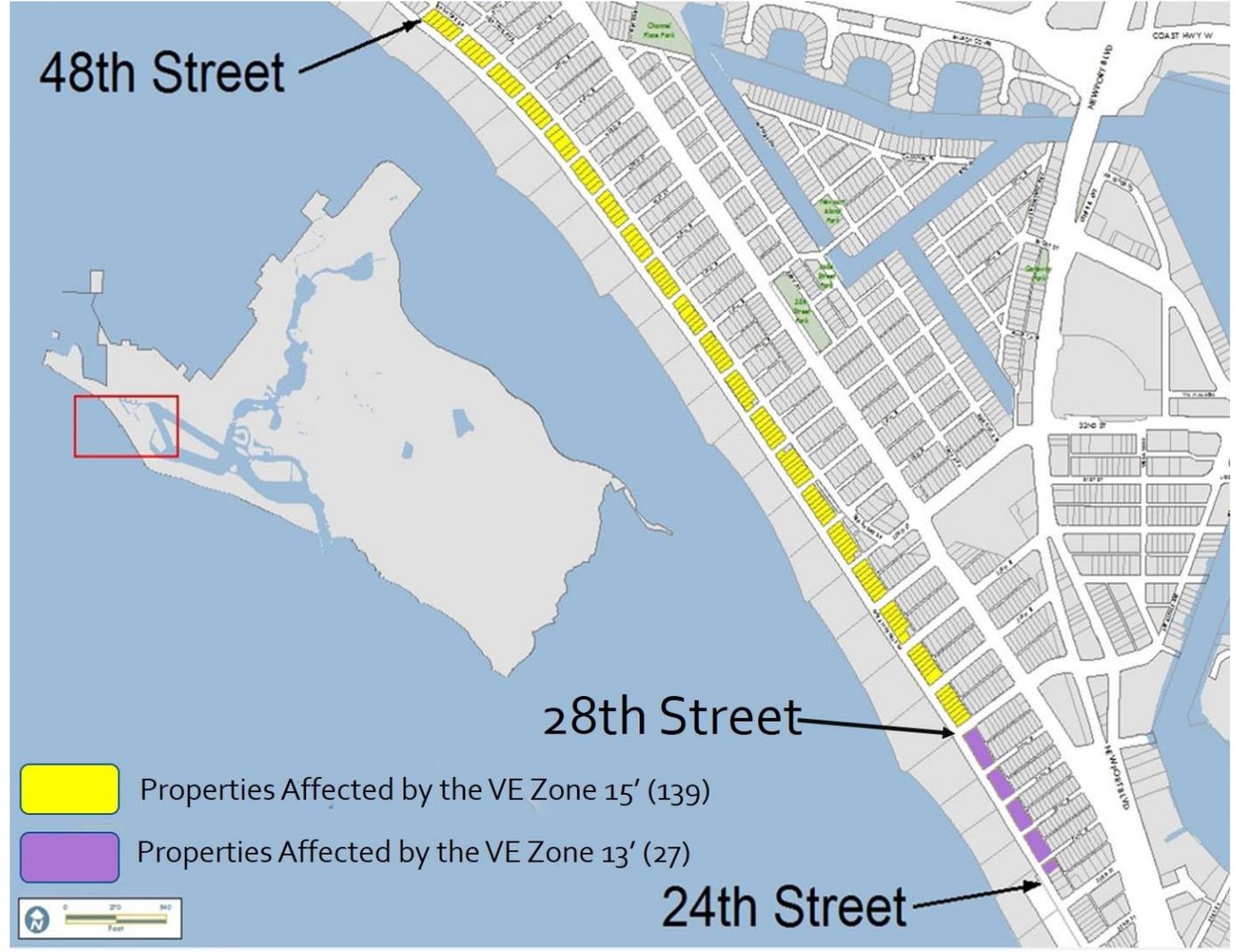
April 8, 2019

Elevated Buildings

- Use of pilings, piers, or columns
- Lowest structural member at or above the Base Flood Elevation (BFE)

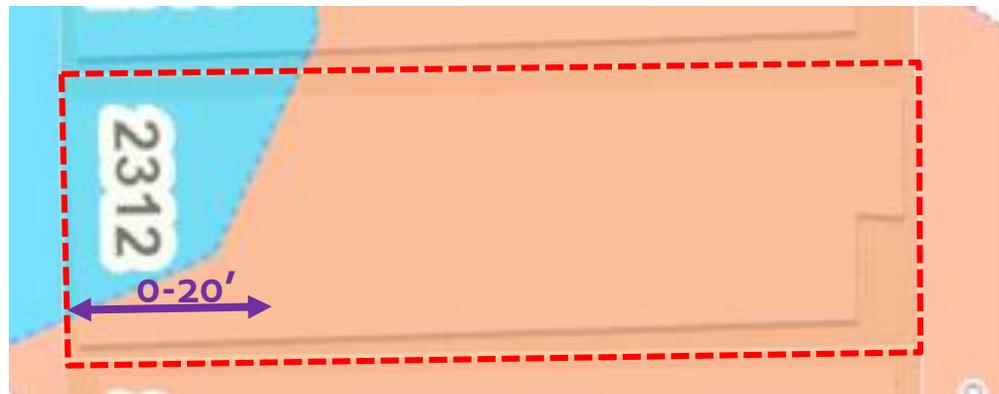
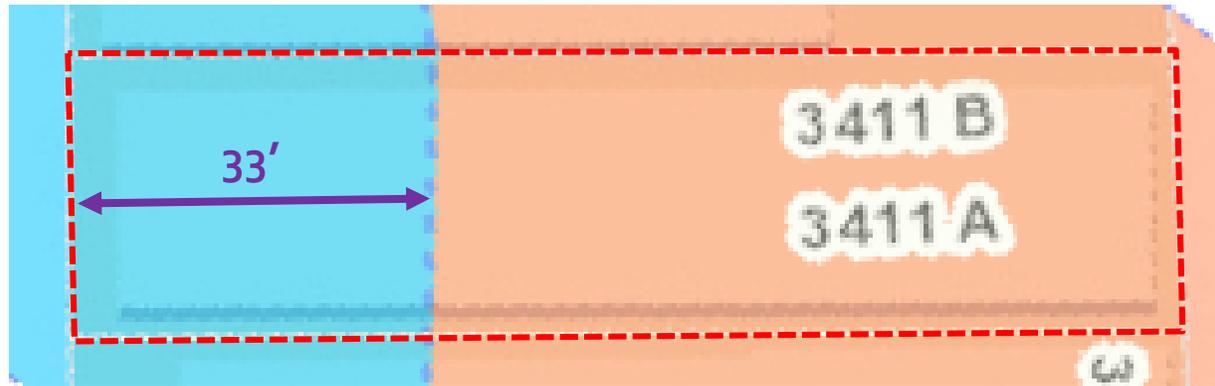
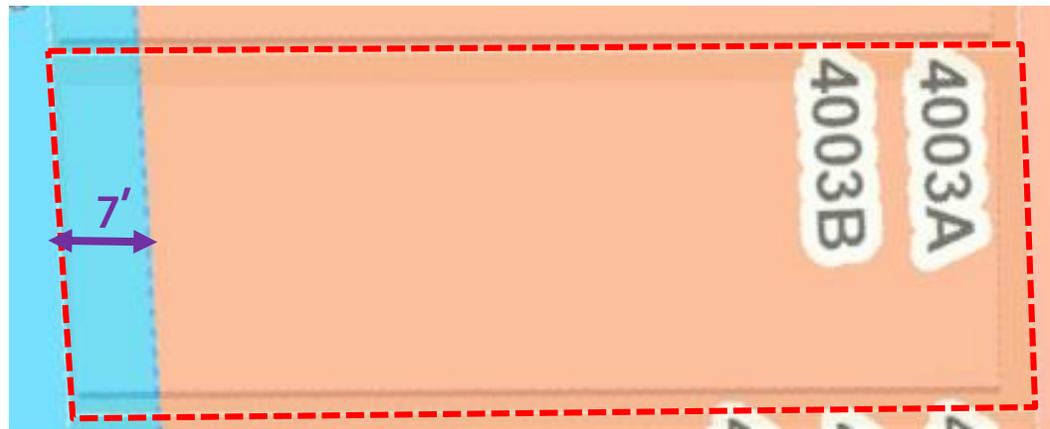


BFE Variants



VE Flood
Zones vary in
distance onto
different
properties

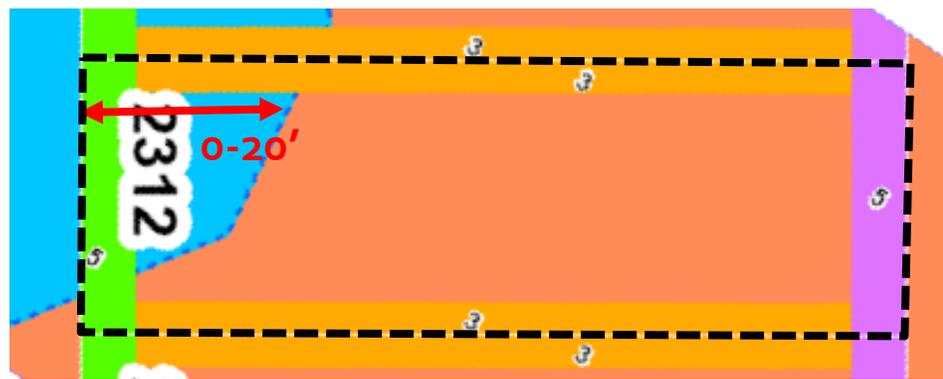
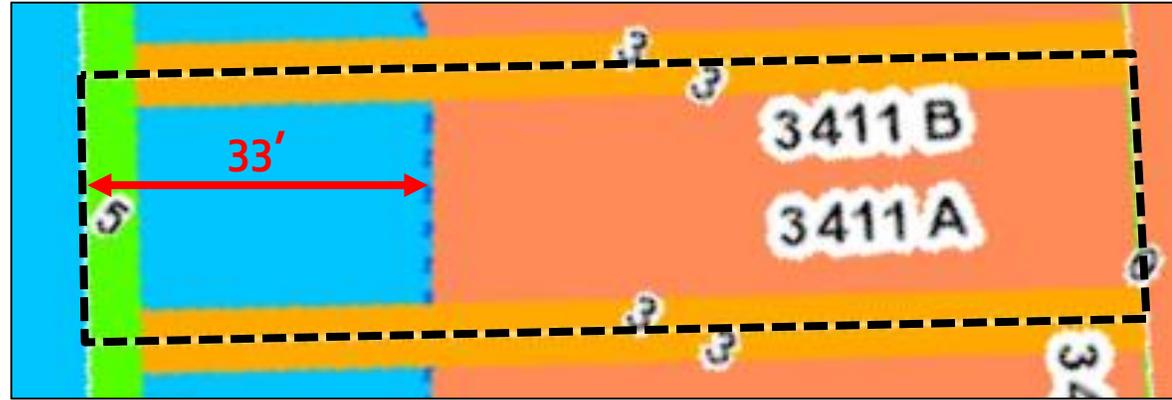
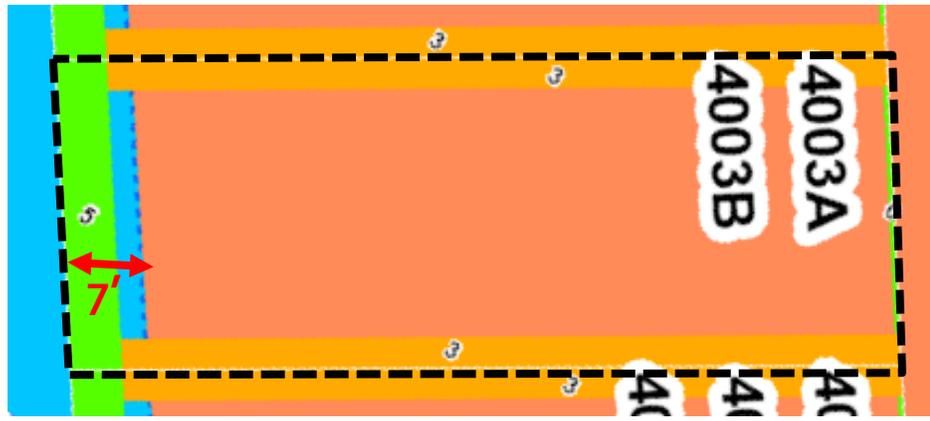
Beach



 Extent of Flood
Zone Limit

VE Flood Zones vary in distance onto different properties

Beach

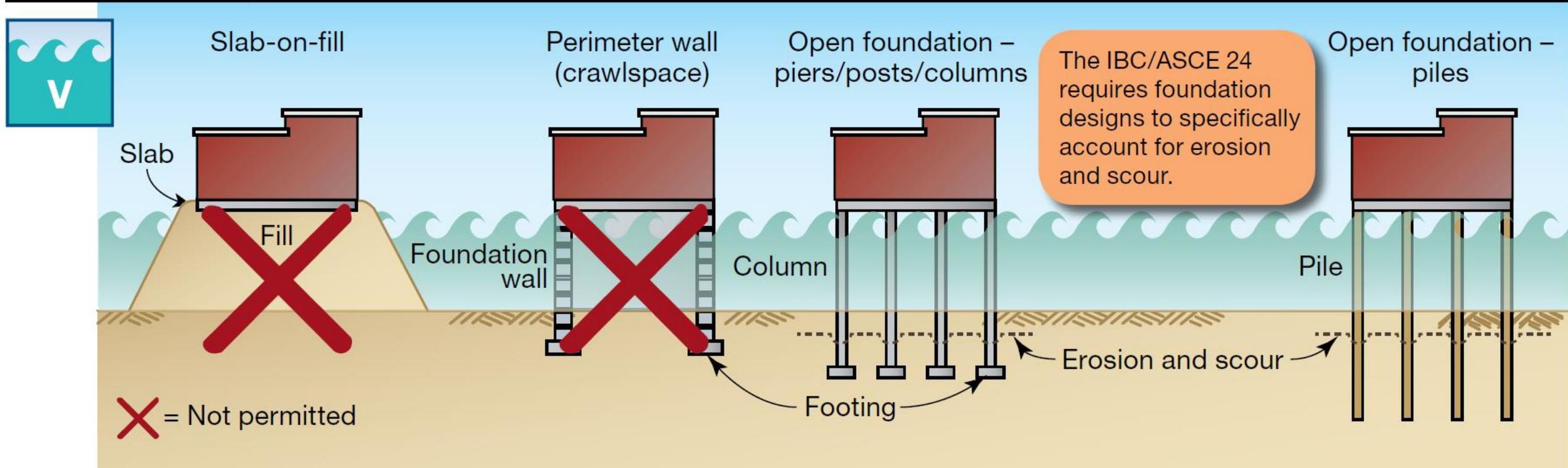


 Extent of Flood Zone Limit

Comparison of VE Zone Requirements

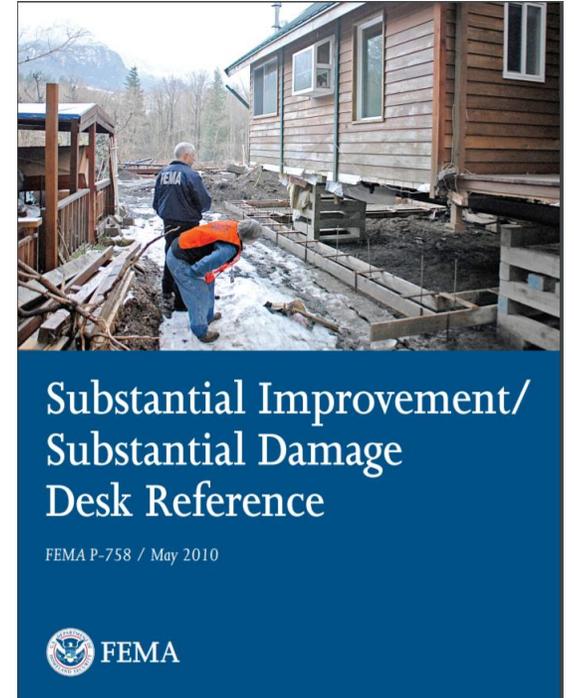
FOUNDATION TYPE

NFIP and IBC/ASCE 24



Remodels & Additions

- What is considered new?
- Substantial improvement
 - 50% value of structure



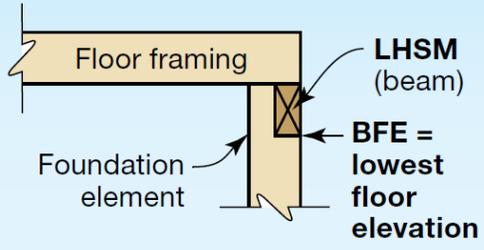
LOWEST FLOOR ELEVATION at bottom of LHSM

Lowest Floor Elevation

NFIP



LHSM = Lowest horizontal structural member



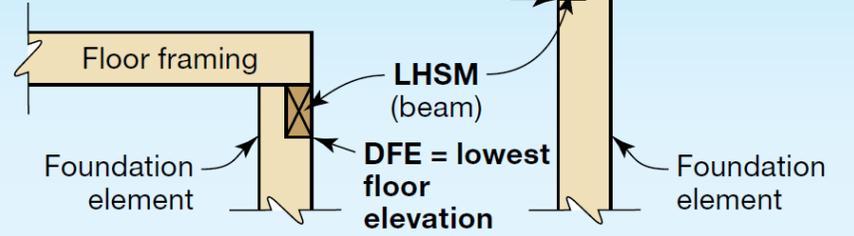
IBC/ASCE 24 ASCE 7-10 Chapter 6



LHSM parallel to wave direction

LHSM perpendicular to wave direction

BFE + 1 ft or DFE* = lowest floor elevation



*whichever is higher



Enclosed Area



Design and Construction Guidance for Breakaway Walls

Below Elevated Buildings Located in Coastal High Hazard
Areas in accordance with the National Flood Insurance
Program

Technical Bulletin 9 / August 2008



FEMA



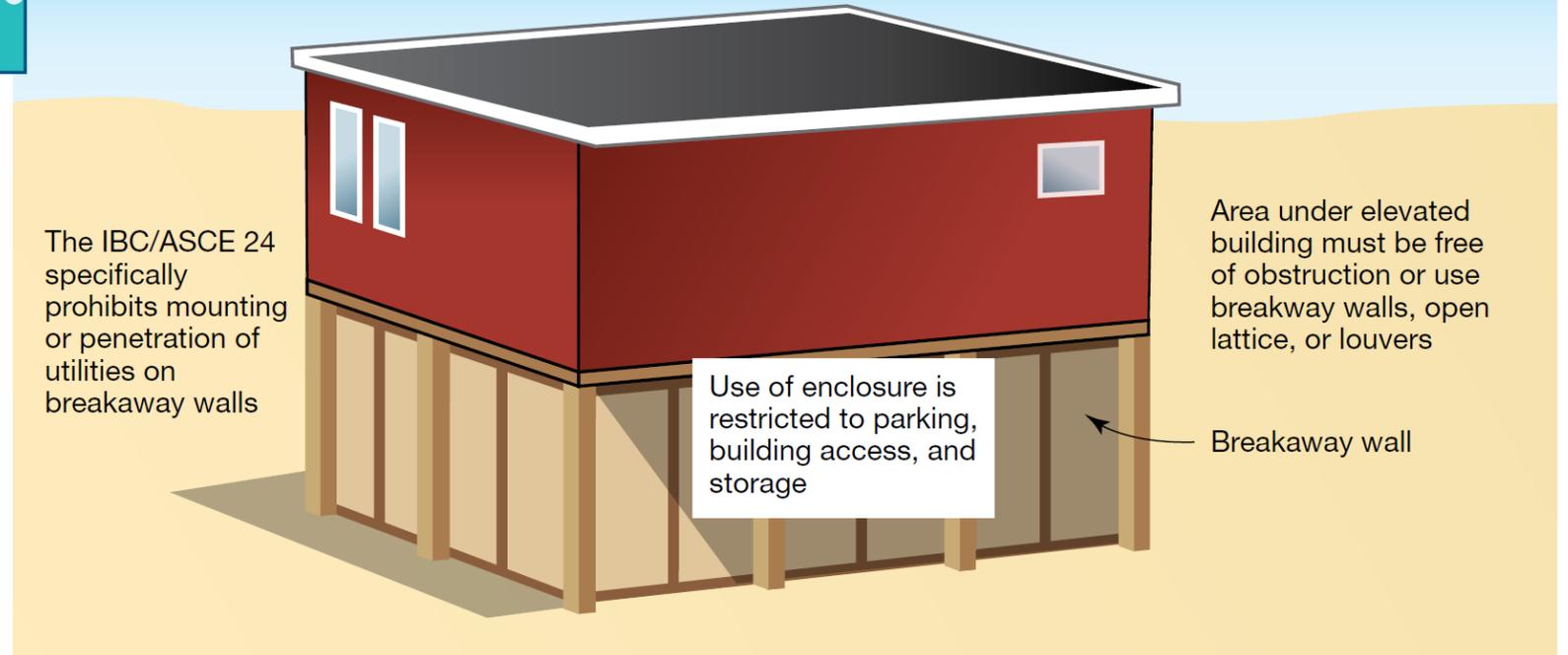
Enclosures and Breakaway Walls

ENCLOSURES below elevated buildings

NFIP and IBC/ASCE 24



The IBC/ASCE 24 specifically prohibits mounting or penetration of utilities on breakaway walls



Use of enclosure is restricted to parking, building access, and storage

Area under elevated building must be free of obstruction or use breakaway walls, open lattice, or louvers

Breakaway wall

What is allowed below the BFE?

Free of obstructions except:

- A vehicle
- A small storage container less than 100 SF
- Miscellaneous items



Free-of-Obstruction Requirements

for Buildings Located in Coastal High Hazard Areas
in accordance with the National Flood Insurance Program

Technical Bulletin 5 / August 2008



Stairs & Elevators



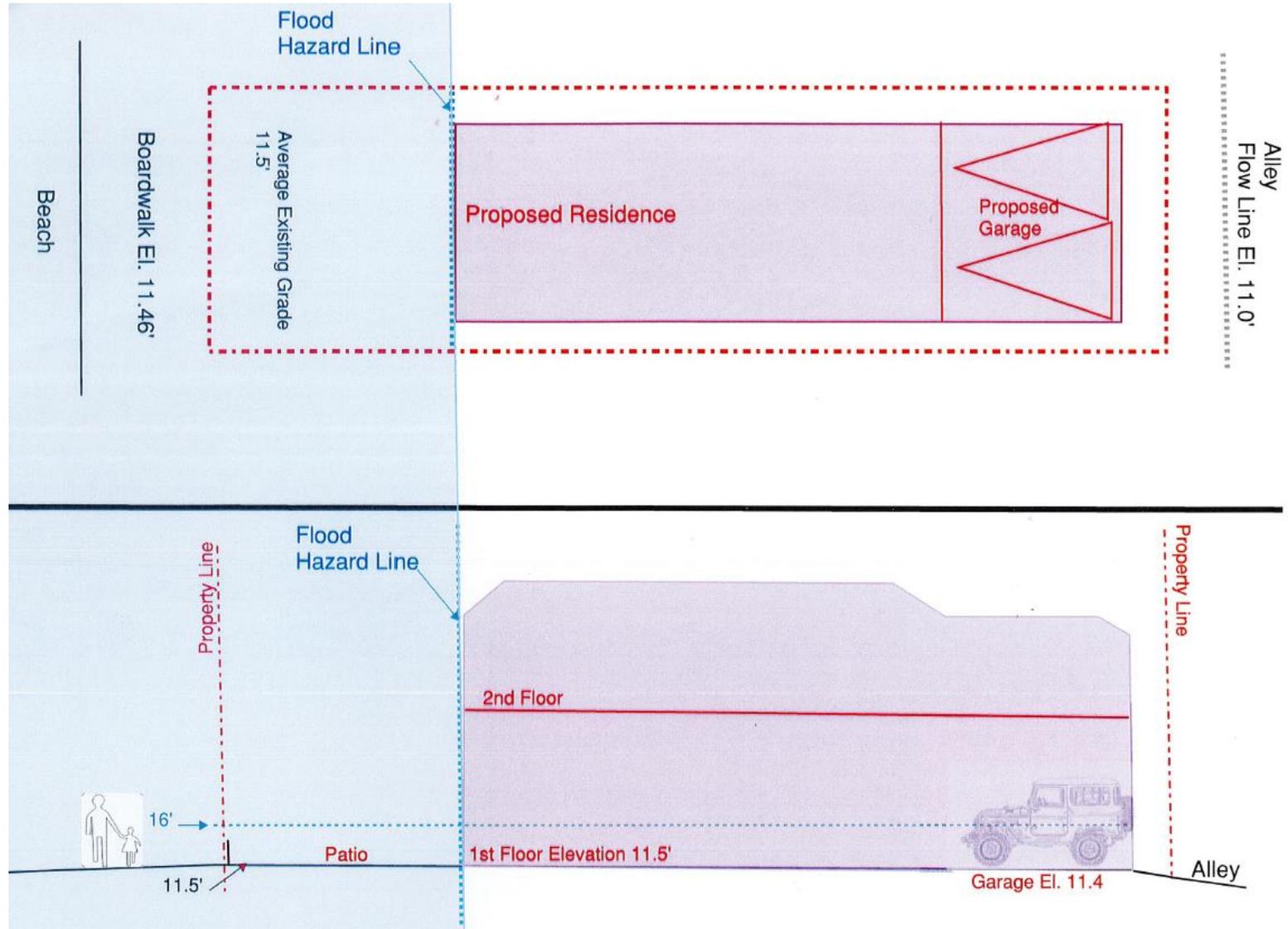
Elevator Installation

for Buildings Located in Special Flood Hazard Areas in accordance with the National Flood Insurance Program

Technical Bulletin 4 / November 2010



Can I avoid this?



FEMA Website Resources

- <https://www.fema.gov/building-code-resources>



Zoning Code Overview



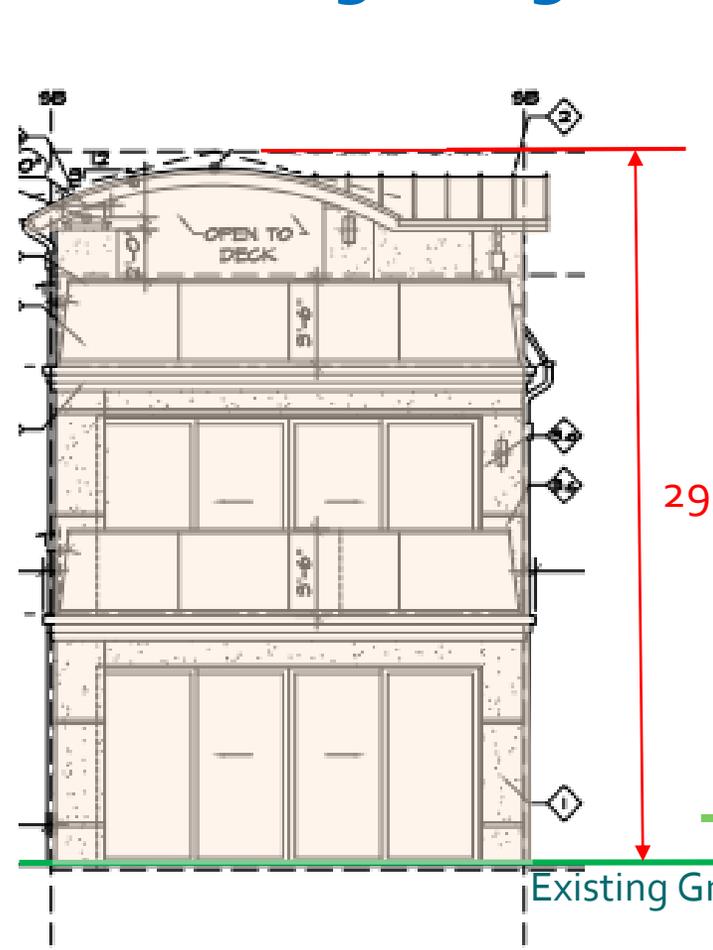
Community Meeting

April 8, 2019

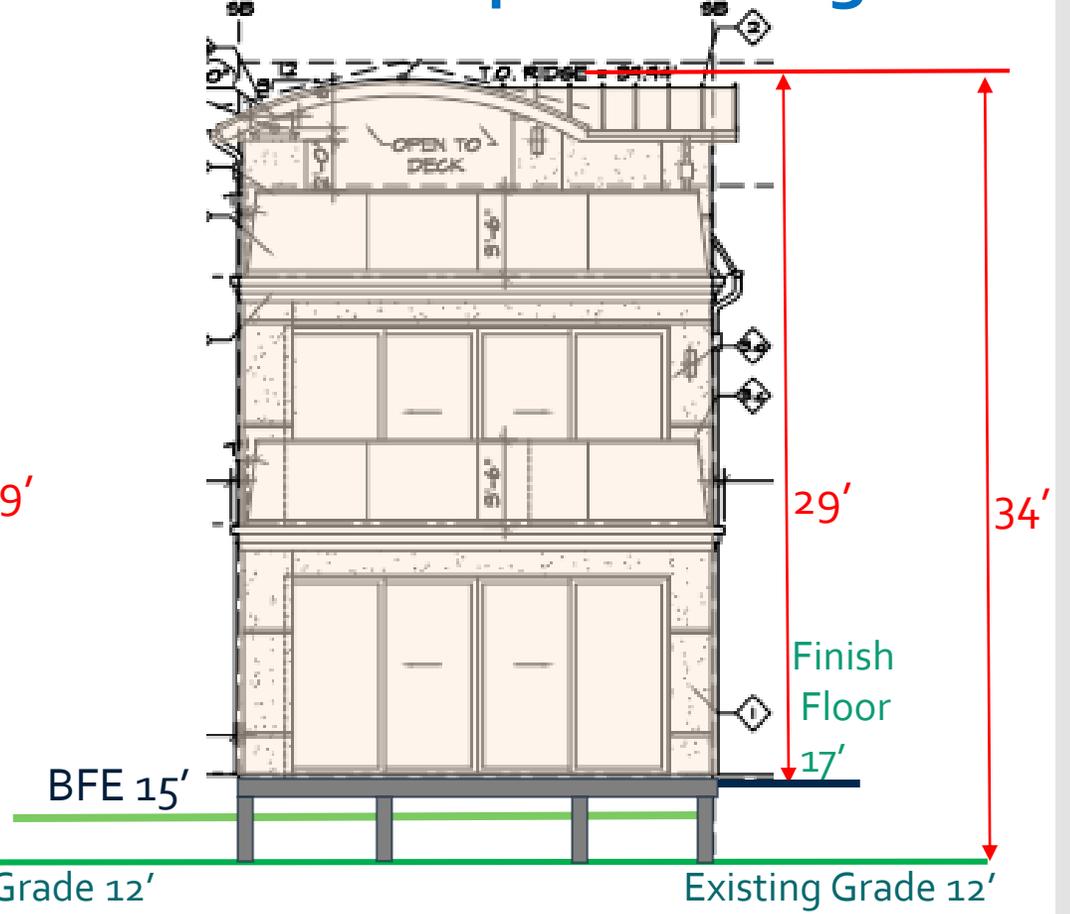
Building Height

Existing Grade
vs
Finished Floor

Existing Design

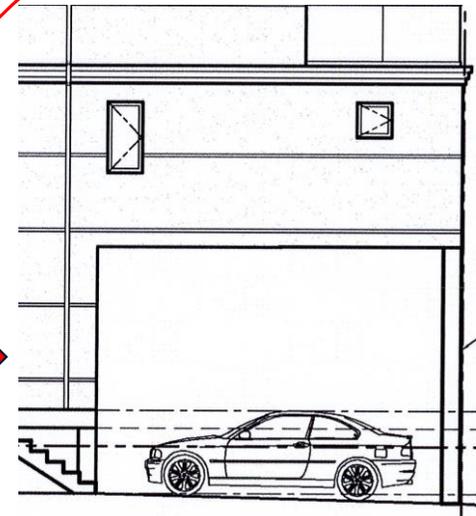
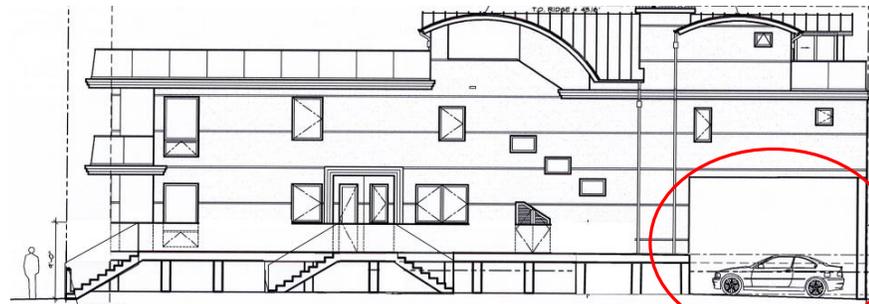


FEMA Compliant Design



Parking

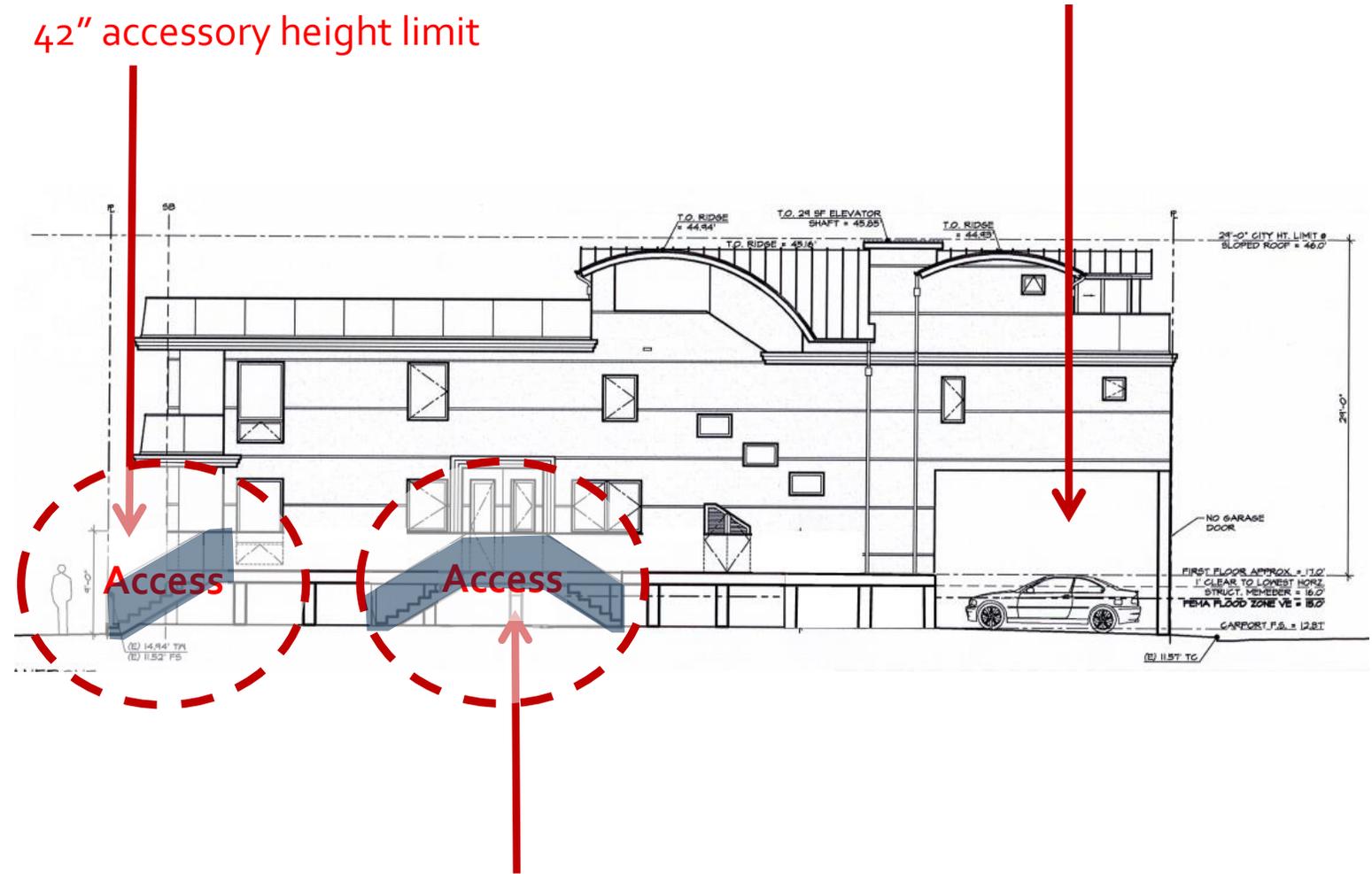
- Zoning Code requires garages
- Breakaway wall designs
 - Seismic & wind-load conflicts
- Garages may be infeasible
- Carports?
 - Variance/ Modification
 - Code Amendment



Access to Dwellings

Front Setback

- 42" accessory height limit

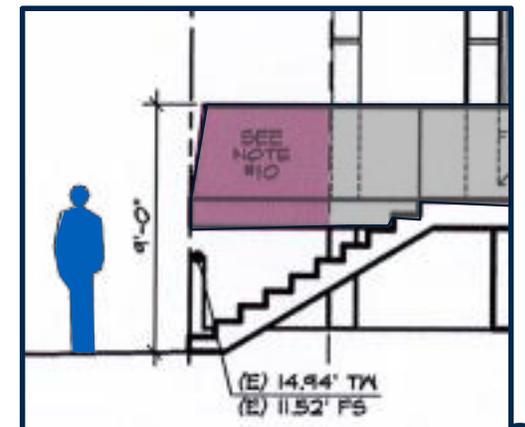
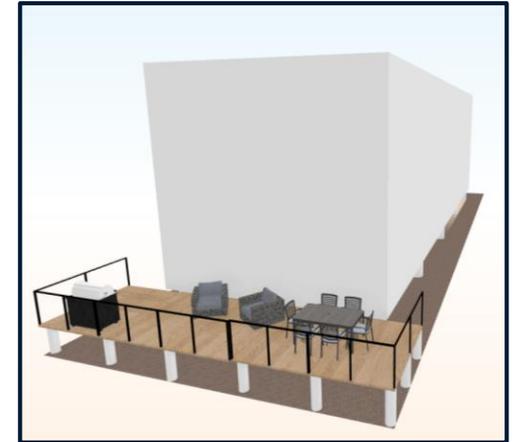
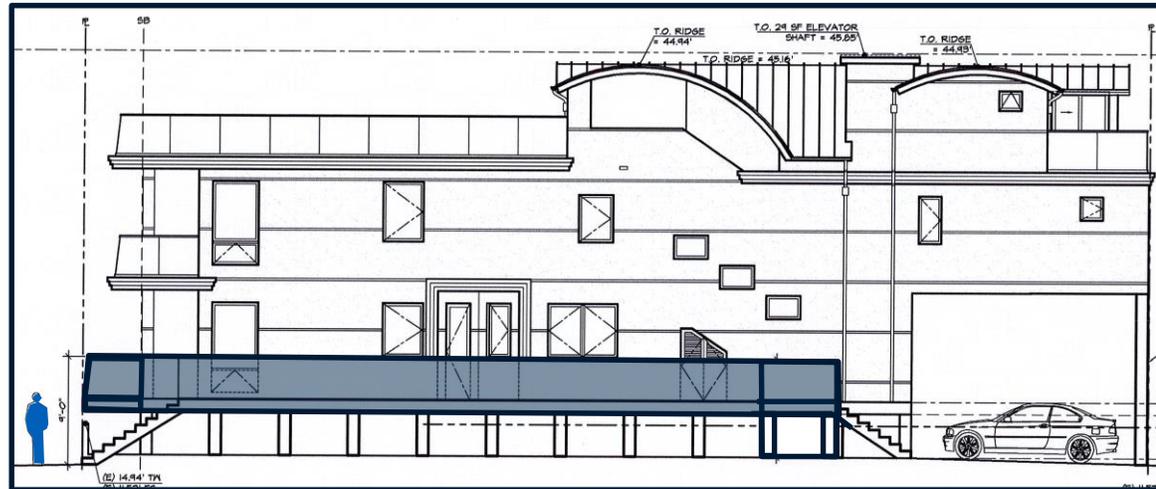


Side Setback

- Landing within setback?
- 18" stair/deck limit, 6' accessory height limit

Accessory Structures

- Measure height from existing grade or finished floor?
- Allow raised decks to encroach into setbacks?
- Visual, compatibility, privacy issues
- Building code challenges



Potential Zoning Amendments

- Changes to building height measurement?
- Allow carports instead of garages?
- Allow access stairs in setbacks?
- Allow height flexibility for other accessory structures?

Options for Moving Forward

1. Locate structure outside VE flood zone
2. Comply with new building codes and
 - Request variance for conflicting features or
 - Wait for Zoning/LCP amendments
3. Wait for City's FEMA challenge
 - Could take 1-2 years
 - May be unsuccessful

Continue the Discussion

- Add your email to the sign-in sheet
- Attend future public meetings
- Email us directly

- City Website – FEMA Resource Page
 - PowerPoint available online

<https://www.newportbeachca.gov/government/departments/community-development/building-division/floodplain-management-information>

Questions

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**FEMA contact information
available at the back