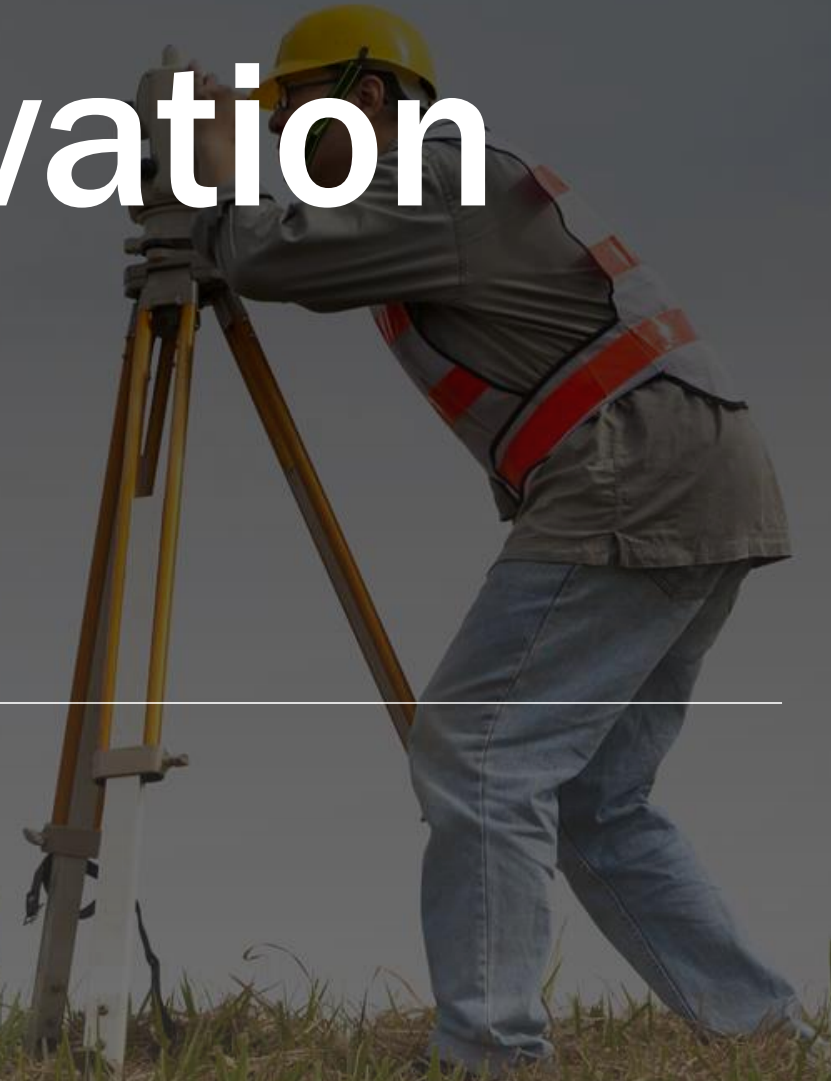


Update on Elevation Certificate Requirements

PRESENTATION TO COLLIER AND LEE COUNTY SURVEYORS

FLOODPLAIN MANAGEMENT SECTION

OCTOBER 3, 2018





**Teamwork
makes the
dream work!**

Agenda

1. Overview of commitment and requirements to the Community Rating System Program
2. CRS Audit findings
3. Internal Audit findings
4. Under Construction Elevation Certificates (EC)
 1. Overview of review process
 2. How to view errors/omissions
 3. Corrections letter
5. SOP for uploading to GMD public portal for E-permits
6. Flood Vent Requirements
7. Manufactured home best practices
8. Pool, A/C, and generator equipment
9. Proposed changes to the Flood Damage Prevention Ord.

Community Rating System Program

Commitment

- Review and maintain ECs for all new structures in the SFHA
- Recertification every year
- Verification visit every three years

Benefits

- Saves the community over \$7.9 million dollars every year
- Educates residents on floodplain issues and supports best management practices

Activity 310 – EC Audit

- Send all ECs: 2,200 from 2015-2017
- Computer audit of 70 ECs during a three year time period
- Any errors/omissions are considered “non-compliant” in Section A-D

CRS and FMP Staff Findings

CRS AUDIT FINDINGS

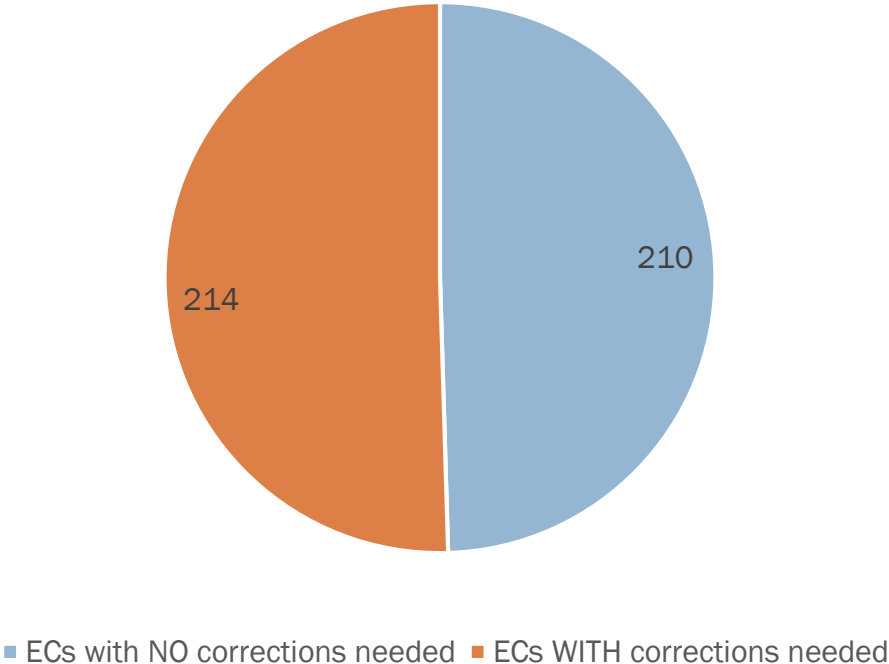
1. Zip Code omissions
2. Building Diagram #5 cannot have A8a (square footage of crawlspace or enclosure) completed
3. If elevation of attached garage is provided in C2d, A9a Area of Garage must also be provided (and vice versa)
4. Map/Panel Number is not in the correct format
5. If A8d_Engineered Flood Openings Crawl is checked, an engineering certificate must be attached.
6. A building with an enclosure cannot be Diagram 5

FMP STAFF FINDINGS: JULY – SEPTEMBER

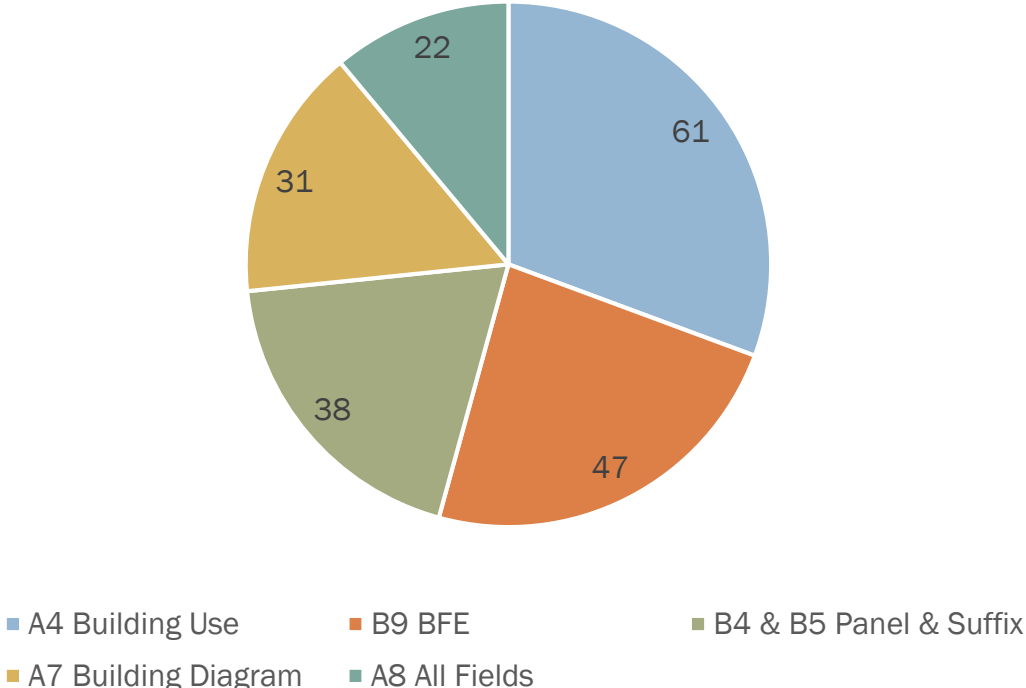
1. A2 Street Address: Must be complete with city/state/zip and on every page
2. A4. Building Use: Residential, not Residence
3. A5. Lat/Long & Datum: Lat: 26.1776, Long: -81.8069 OR DMS Lat: 26° 10' 39.4464" N, DMS Long: 81° 48' 25.0056" W
4. B9. BFE: BFE determinations in AH flood zone
5. B1. Community Name: Collier County, not Naples

FPM staff findings: July - September

EC Correction Stats



Most Common Error Types



Good and Bad Photos



Responding to Audit Findings

1. Under Construction Elevation Certificate added to conditions as of September 4th
 1. Required at the SAME time as spot survey
2. Inspection hold will be placed on permit at the “spot survey” review and released with under construction EC is reviewed for compliance
3. Under Construction EC will ONLY be rejected for compliance issues, i.e. elevation, venting, no photos provided, etc.
4. HOWEVER, these errors/omissions will be noted under the Conditions on the GMD Public Portal for review
5. Finished Construction ECs must be fixed and all errors/omissions addressed prior to submittal
6. FUTURE: a Correction Letter will be sent to the surveyor informing them of any errors/omissions on the Under Construction EC.



Overview on Flood Vents

Flood Vent Requirements



1. Noted in A8d. Engineered flood openings
2. Noted in A9. Engineered flood openings, if applicable
3. Information to include in Section D, Comments
 1. Engineered: number, calculations (only for engineered vents)
 2. Non-engineered: review plans for calculation information
4. One close-up photo of vent (so we can confirm the make/model), see examples
5. At least one wall photo(s) of where the flood vents are located
6. Attach the Engineer Report
7. Installed **BELOW** BFE
 1. Proposed changes to FDPO will required garage slab is at or 1 ft below BFE.

Flood Vent Info to put in Section D, Comments

1. Flaws in the comments?

Comments (including type of equipment and location, per C2(e), if applicable)

A9c) FLOOD OPENINGS ARE INSTALLED ABOVE BASE FLOOD ELEVATION. PER THE ATTACHED ICC-ES REPORT, THE FLOOD SOLUTIONS MODEL FS-1608-HEX STATES THAT THE COVERAGE IS 110 SQ FEET PER VENT, THEREFORE $5 \times 110 = 550$ SQ FEET OF COVERAGE, AND THE NET FREE AIR IS 91.4 SQ. INCHES PER VENT, THEREFORE $91.4' \times 5 = 457$ SQ INCHES

C2 a) INDICATES ELEVATION OF FINISHED FLOOR LIVING AREA.

C2 e) INDICATES ELEVATION OF THE AIR CONDITIONER.

THE ELEVATION OF THE POOL EQUIPMENT PAD IS 7.7'.

2. Correct components?

Examples of Close Up Flood Vents (good)



Examples of Flood Vent on Walls (good)



Photo Five

Example Flood Vent Photos (not good)





Most Widely Accepted and Trusted

ICC-ES Evaluation Report

ESR-3760

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org

Reissued 03/2018
This report is subject to renewal 03/2020.

DIVISION: 08 00 00—OPENINGS
SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

FLOOD SOLUTIONS, LLC

ONE INDUSTRIAL PARK DRIVE, BUILDING 27
PELHAM, NEW HAMPSHIRE 03076

EVALUATION SUBJECT:

STATIC FLOOD VENTS

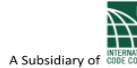


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Most Widely Accepted and Trusted

ICC-ES Evaluation Report

ESR-2074

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org

Reissued 02/2017
This report is subject to renewal 02/2019.

DIVISION: 08 00 00—OPENINGS
SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

SMARTVENT PRODUCTS, INC.

430 ANDBRO DRIVE, UNIT 1
PITMAN, NEW JERSEY 08071

EVALUATION SUBJECT:

SMART VENT® AUTOMATIC FOUNDATION FLOOD VENTS: MODELS #1540-520; #1540-521; #1540-510; #1540-511; #1540-570; #1540-574; #1540-524; #1540-514



Look for the trusted marks of Conformity!

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ICC-ES Evaluation Report

ESR-3560

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Reissued 09/2017
This report is subject to renewal 09/2018.

DIVISION: 08 00 00—OPENINGS
SECTION: 08 95 43—VENTS/FOUNDATION FLOOD VENTS

REPORT HOLDER:

FLOOD FLAPS®, LLC

POST OFFICE BOX 1003
ISLE OF PALMS, SOUTH CAROLINA 29451

EVALUATION SUBJECT:

**FLOOD FLAPS® AUTOMATIC FLOOD VENTS:
MODELS FFWF12; FFFNF12; FFWF08; FFFNF08; FFWF05; FFFNF05**



Look for the trusted marks of Conformity!

"2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"

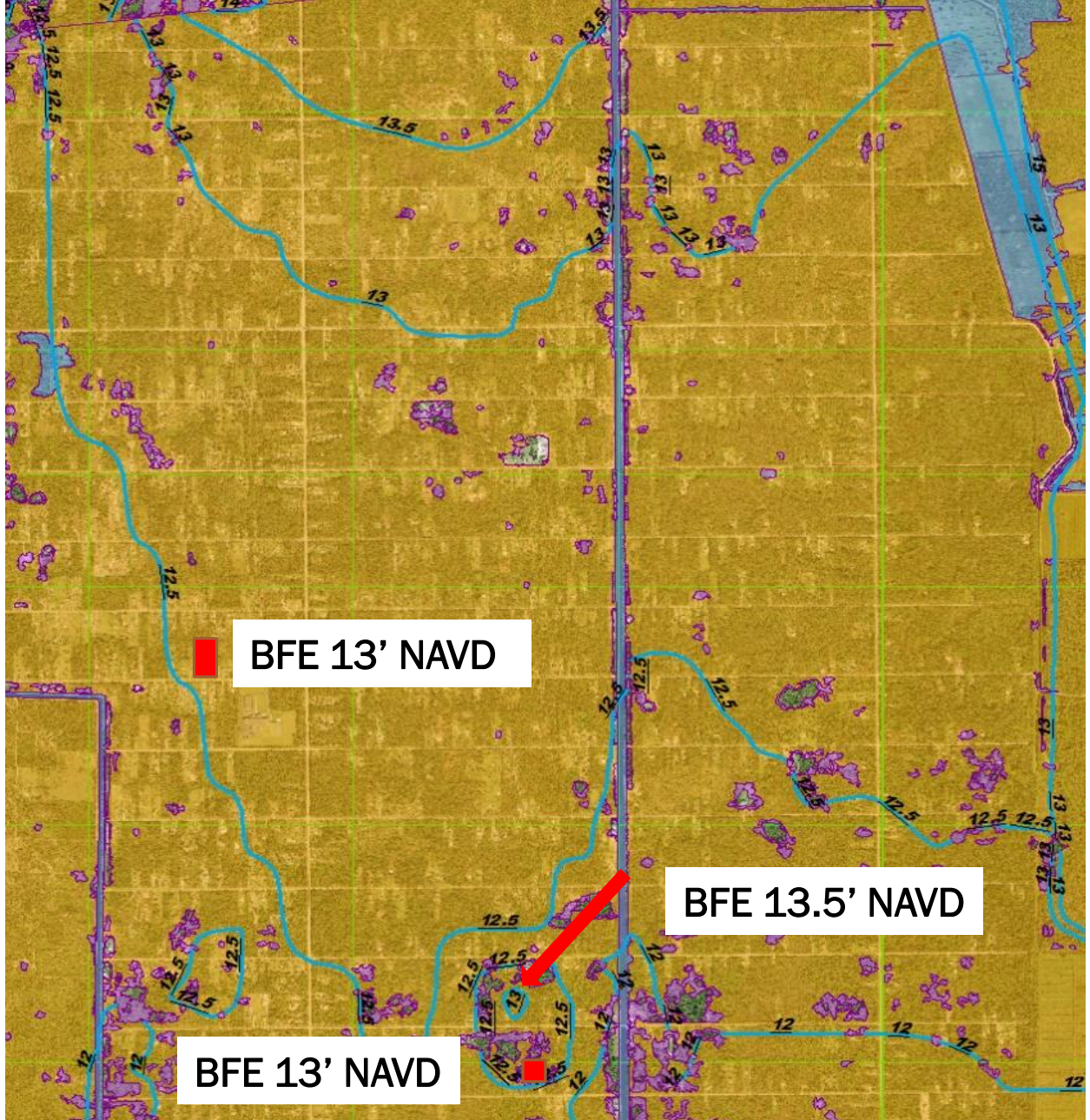
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How to determine the BFE in the AH Flood Zone

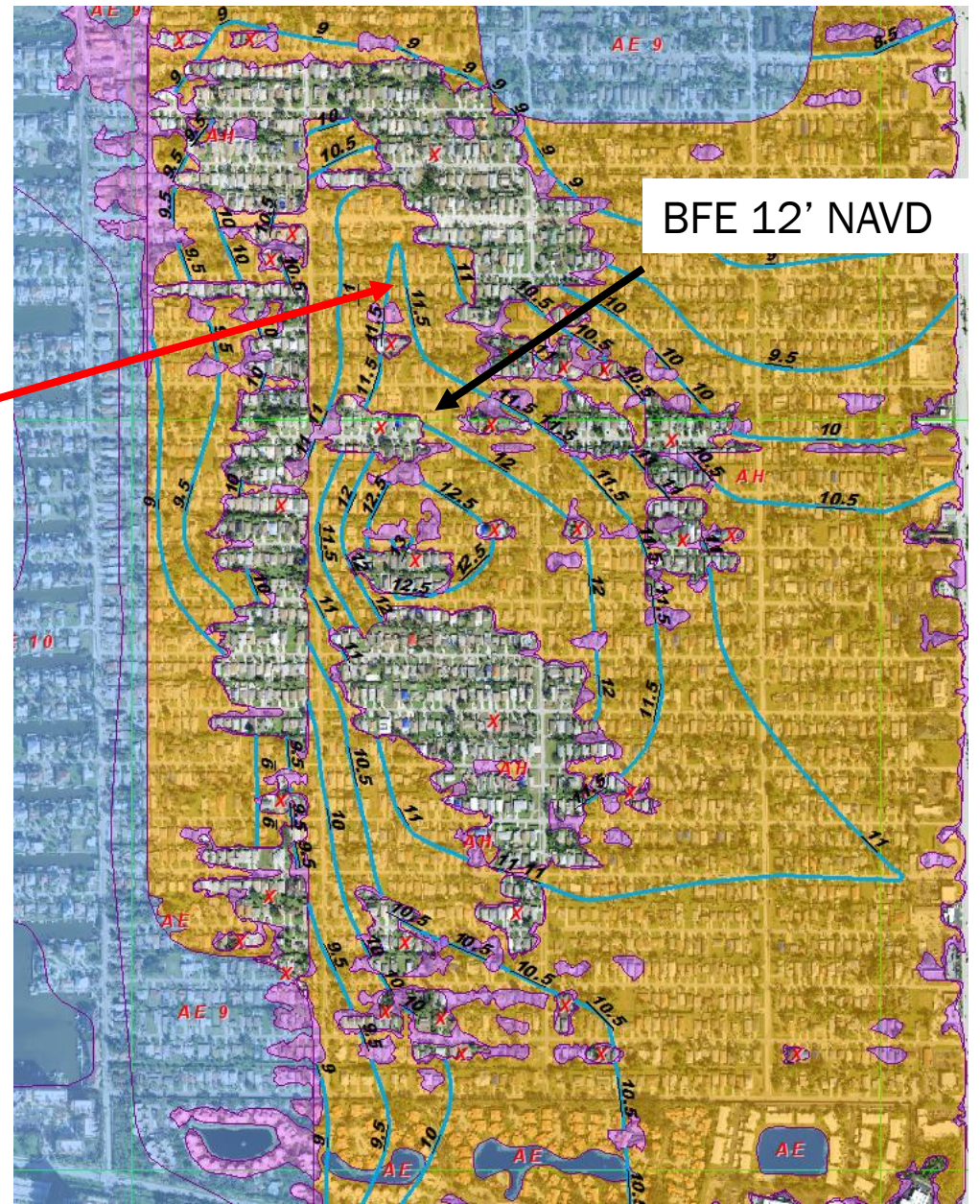
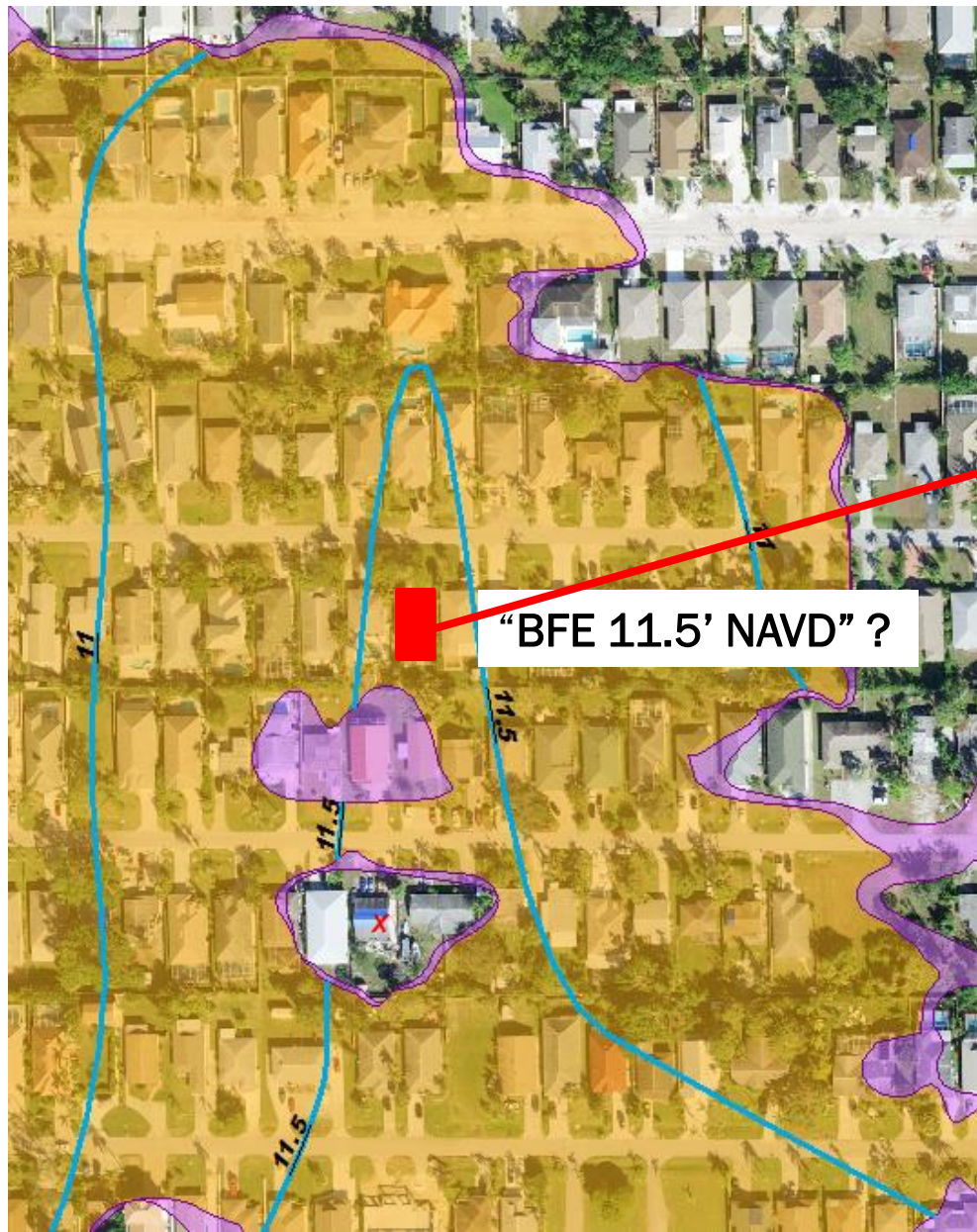
The BFE determination is always the **higher** elevation of the two or more contour lines, regardless of how close the structure is to the contour line with the lower elevation.

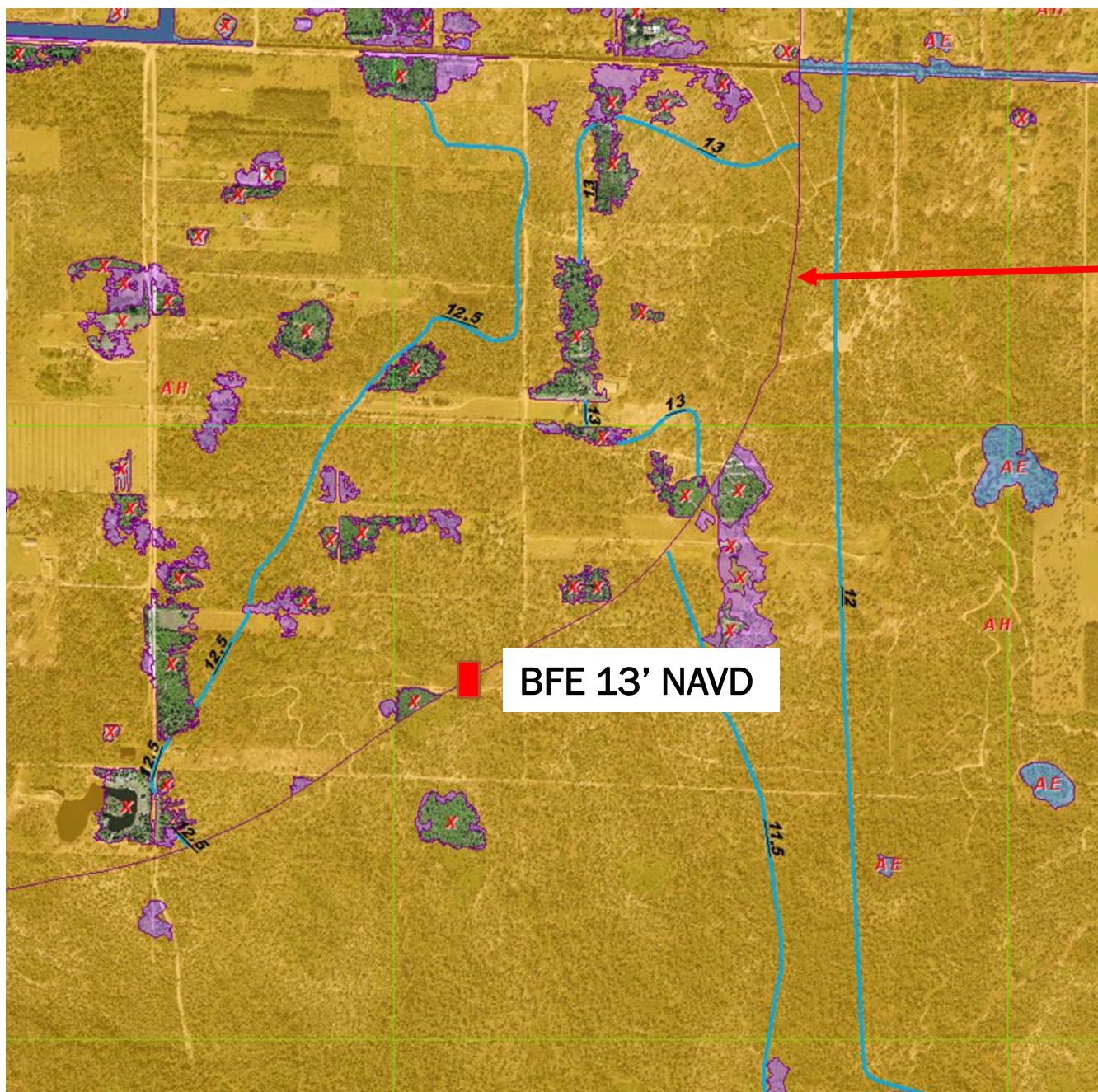


BFE 13' NAVD

BFE 13.5' NAVD

BFE 13' NAVD





BFE 13' NAVD

Thin purple line is a basin boundary.



Overview of Manufacture Home Elevation Certification Information

FDPO Sec. 62-127. - Specific standards.

62-127(4) Standards for Manufactured Homes and Recreational Vehicles. (a) All Manufactured homes to be placed, or substantially improved within Zones A1-30, AH, and AE, on sites: (i) outside of an Existing manufactured home park or subdivision; (ii) in a New manufactured home park or subdivision; (iii) in an Expansion to an existing manufactured home park or subdivision; or (iv) in an Existing manufactured home park or subdivision on which a Manufactured home has incurred "Substantial damage" as the result of a Flood, the Lowest floor shall be elevated on a permanent foundation to no lower than the BFE and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(b) All Manufactured homes to be placed or substantially improved in an Existing manufactured home park or subdivision that are not subject to the provisions of paragraph 4(a) of this subsection, must be elevated so that either: (i) The Lowest floor of the Manufactured home is elevated to no lower than the BFE; or (ii) The Manufactured home chassis is supported by reinforced piers, or other foundation elements of at least an equivalent strength, that are no less than 36 inches in height above the grade and securely anchored to an adequate foundation system to resist flotation, collapse, and lateral movement.



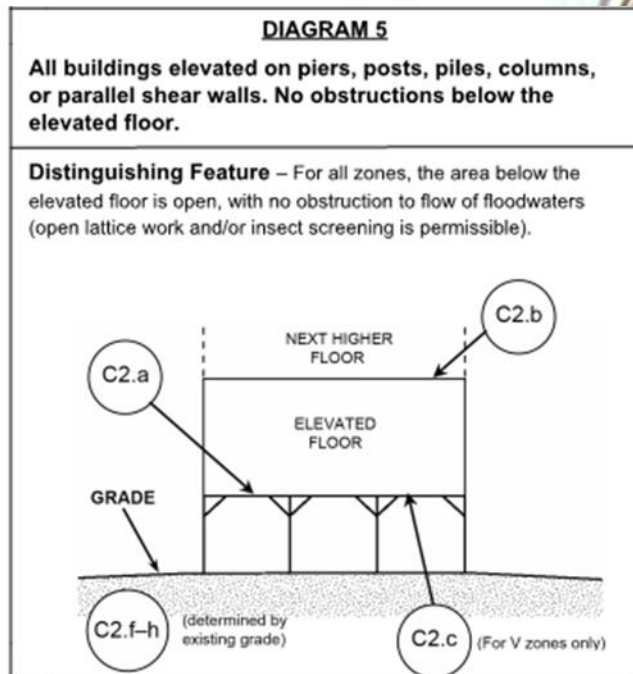
MHU Elevation Information post Hurricane Irma

1. Many MHUs were flooded during Hurricane Irma resulting in substantial damage due to flooding.
2. This means that in MHUs in existing mobile home parks or subdivisions where one (1) MHU was substantially damaged due to flooding, ALL MHUs must be elevated to BFE +1.
 1. Goodland, Plantation Island, and Chokoloskee
3. In areas, that did not incur substantial damage due to flooding (i.e. wind damage), MHUs can be elevated 36” above COR.

Manufactured Home Information

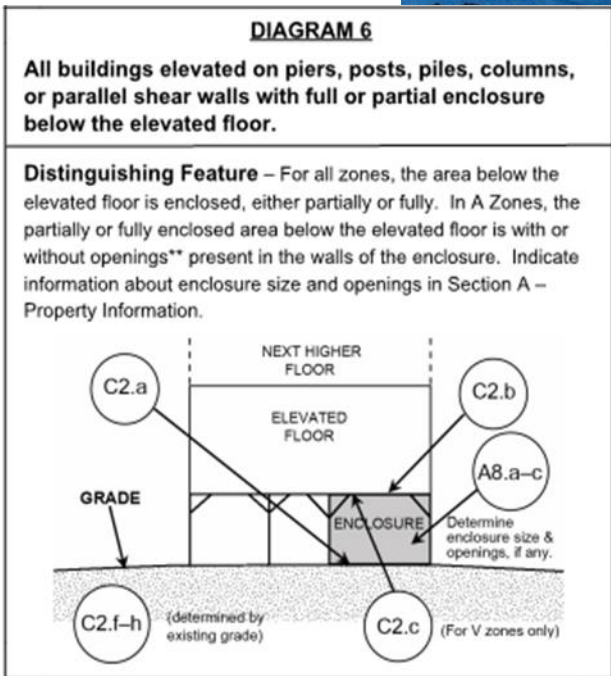
1. New Application Form required for MHU installs
 1. Required Flood Zone, BFE, proposed lowest floor elevation
 2. A/C package or split system identified
 3. Skirting information required
2. Building Diagram #
 1. 5 -no obstruction
 2. 6 - obstruction with vents
 3. 8 - perimeter walls with vents
3. Accessory structures
 1. For replacement of lanai enclosures, would be helpful to have elevation provided
 2. When Kick plates are below BFE, they require flood vents

Example MHU Installs – no obstruction



- Building Diagram # 5 (no obstruction)
- Crawlspace
- Do NOT complete A8
- C2a) needs to be the lowest floor (finished floor) and not the slab/grade elevation

Example MHU Installs - with obstruction



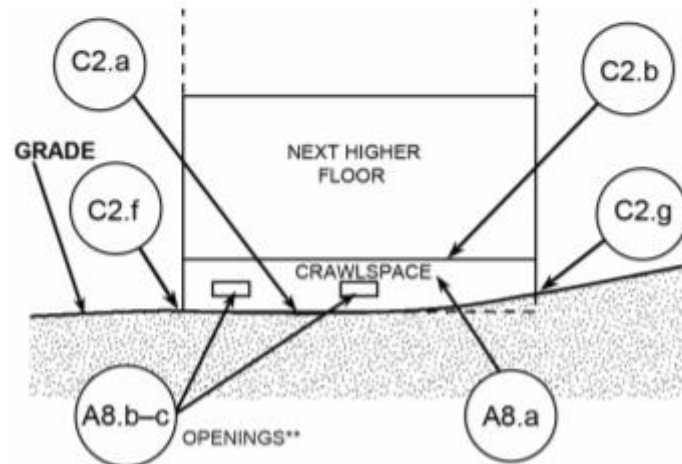
- Building Diagram # 6 – enclosure/obstruction
- Rigid Skirting requires flood
- Vents below BFE.
- Complete A8a) – A8d)
- Add flood vent calcs. info to Section D, Comments
- At least one close up photos of vents.
- At least one photo showing vents on two walls
- Attach Flood Vent Evaluation Report, as applicable

Example Modular Home Install - perimeter wall

DIAGRAM 8

All buildings elevated on a crawlspace with the floor of the crawlspace at or above grade on at least 1 side, with or without an attached garage.

Distinguishing Feature – For all zones, the area below the first floor is enclosed by solid or partial perimeter walls. In all A zones, the crawlspace is with or without openings** present in the walls of the crawlspace. Indicate information about crawlspace size and openings in Section A – Property Information.

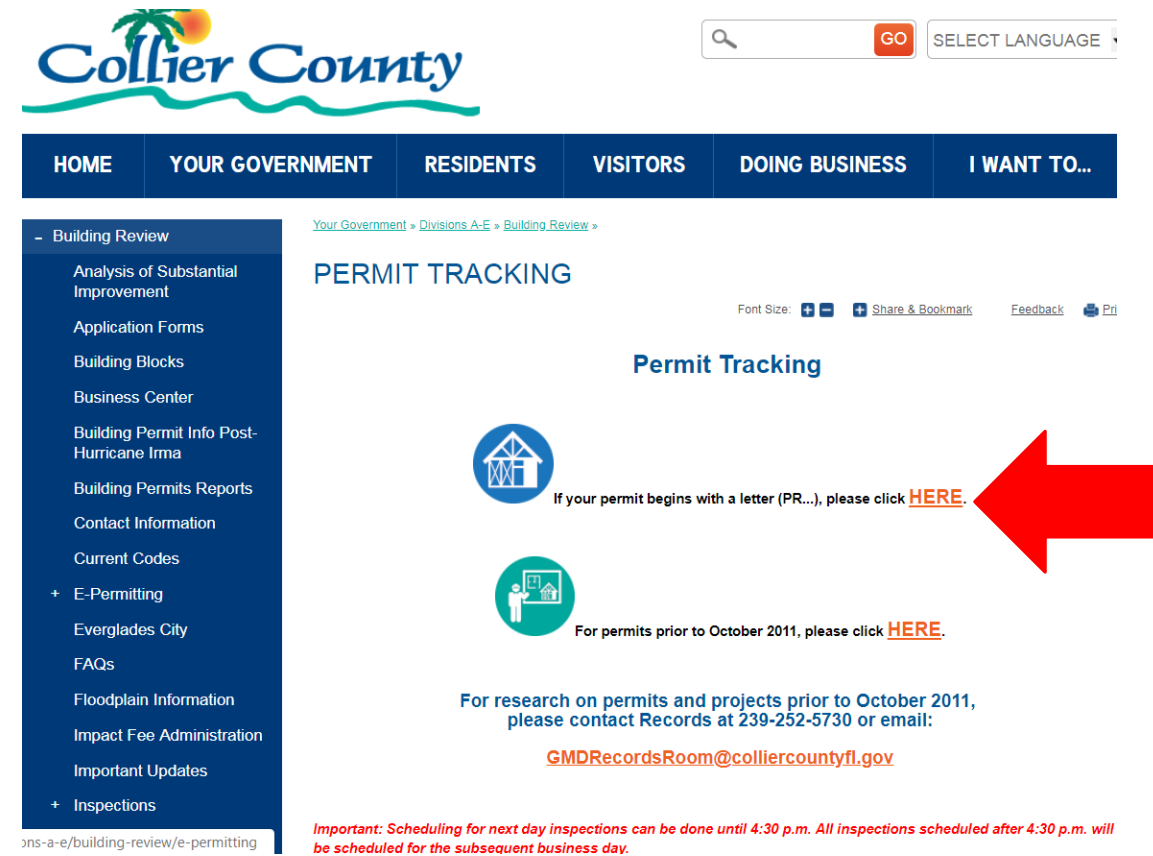


Steps to review comments on the CityView Public Portal

1.



2.



3.

Permit Tracking | Collier County, FL x Welcome - CityView Portal x E-Permitting | Collier County, FL x bccportal

Not secure | cvportal.colliergov.net/cityviewweb

Apps mc Municode Google Building Review Imported From IE Statutes & Constituti Caroline's and Desire

Collier County FLORIDA **GMD Public Portal**

[Sign In](#) / [Register](#) [Portal Home](#) [Property Search](#) [Portal Help](#)


New permitting application submittals are available from 8am to 5pm on normal business days.

The requirement to complete building permit application reviews within pre-established time frames before returning 50% of the building permit application review fee, as described in Building Block "A-126 Building Review Performance Standard", is suspended until further notice. This action is effective as of September 6, 2017, at 12:00 noon, concurrent with the Collier County Board of County Commissioners adopting a resolution declaring a State of Emergency in Collier County due to Hurricane Irma.

Permitting questions related to post Hurricane Irma can be directed to the following email address PermitPostIrma@colliergov.net


Thursday nights are the regularly scheduled weekly maintenance for the CityView Portal and Interactive Voice Response (IVR) system servers. As a result, there may be brief outages to the site/IVR and their features. We apologize for any inconvenience.

REMINDER: YOU MUST BE LOGGED IN USING YOUR COLLIER COUNTY PORTAL REGISTERED USER ACCOUNT TO VIEW BUILDING PERMIT AND PLANNING REVIEW COMMENTS.




Code Enforcement

[Submit a New Complaint](#)
[Status and Fees](#)




Building Department

[Submit a Building Application](#)
[Impact Fee Calculator](#)
[Request a Meeting](#)
[Status and Fees](#)
[Upload Submittals](#)



Planning Department

[Submit a Planning Application](#)
[Impact Fee Calculator](#)
[Status and Fees](#)
[Upload Submittals](#)



Contractor Licensing

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[Upload Submittals](#)

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- [Property Search](#)
- [Pay Fees](#)
- [Permit Forms](#)
- [Planning Forms](#)
- [E-Permitting Guides](#)
- [Pay CE Fees](#)

Address

Growth Management Division - Planning and Regulation
2800 N. Horseshoe Drive
Naples, FL 34104

Inspections:
(239) 252-2406

Permit Cancellations

Permit Extensions:
(239) 252-2403

4.

rch - CityV x +

Not secure | cvportal.colliergov.net/CityViewWeb/Permit/Locator

Google Building Review Imported From IE Statutes & Constituti Caroline's and Desire CityView Portal

GMD Public Portal

[Sign In](#) / [Register](#) [Portal Home](#) [Property Search](#) [Portal Help](#)

Search for Permits

Search:

Enter all or part of a permit number, address, Parcel number or name/address of a contact on the permit and then click the go button.

5.



Links

- [Home](#)
- [Property Search](#)
- [Pay Fees](#)
- [Permit Forms](#)
- [Planning Forms](#)
- [E-Permitting Guides](#)
- [Pay CE Fees](#)

Address

Growth Management Division - Planning and Regulation
 2800 N. Horseshoe Drive
 Naples, FL 34104

- Inspections:**
(239) 252-2406
- Permit Cancellations**
- Permit Extensions:**
(239) 252-2493
- E-Permitting:**
(239) 252-2332
- Permit Issuance:**
(239) 252-2428
- E-Planning:**
(239) 252-1036
- Floodplain Hotline:**
(239) 252-2942
- Code Enforcement:**
(239) 252-2440
- Code Enforcement:**
(239) 252-2100

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Permit Application Status

In order to schedule inspections, you need to be signed in.

[Expand All](#) / [Collapse All](#)

Note: You can collapse and expand individual sections by clicking the header of the section you wish to collapse/expand.

▼ **Summary**

Application Number: PRBD20180744697
 Application Type: Building
 Application Status: Inspections Commenced
 Property Owner's Full Name: CCC FRONTERRA LLC
 Category of Work: New Construction
 Occupancy Code: Residential, One and Two Family New or Guest House
 Description of Work: New Construction - Single Family House - Non Impact Glass
 8879 MADRID CIR LOT 40
 3 Bedroom 2 Bath 1 Half Bath RT
 Application Date: 07/23/2018
 Issued Date: 08/24/2018
 Expiration Date: 03/17/2019
 1-2 Family or Comm: 1-2 Family

▶ **Locations**

▶ **Contacts**

▶ **Permits (Click to See Reviews)**

▶ **Fees**

▶ **Deposits & Bonds**

▶ **Inspections**

▶ **Conditions**

▶ **Documents & Images**

6.



Under Construction Elevation Certificate

Open

Date Received: 09/29/2018

At the time of permit application, the permitted structure is in the special flood hazard area. An Under Construction Elevation Certificate is required within 10 days of passing a 704 shell reinforcement, 103/133 inspection of slab or other foundation system. Prior to obtaining County approval of the Under Construction Elevation Certificate, the permit holder's construction activities are at his/her own risk. Under Construction Elevation Certificates must verify the slab meets minimum elevations per the Florida Building Code and Chapter 62, Collier County Code of Laws and Ordinances (e.g., BFE +1 or 18" above the crown of the road, whichever is higher, and the elevation established by the SFWMD permit). > Under Construction Elevation Certificate

provided: ***REJECTED*** (F Fajardo 9/7/2018) NAVD Flood Zone AH, BFE: 11.5, FFE: 14.86, Garage: 14.36, LAG: 13.7, HAG: 13.9. ***Rejected for: A6. pictures capturing all sides of the building are required and must be labeled (e.g. front, rear, right side, left side) and dated on the original FEMA form. Please also correct for auditing purposes: please fill out A9.a), change B1. to "Collier County 120067," B4. to "12012C0412," and address is required to be consistent on all pages.***
 Finished Construction Elevation Certificate required. KingstonSean
 09/27/2018 9:38 AM

Condition Type: Inspection Hold



Digitally Signed ECs can be uploaded to CityView Public Portal

A permit applicant or a “interested party” can upload digitally signed ECs to the CityView Public Portal

Revision Inspection Hold	Resolved	Building Review and Permitting	> Revision Inspection Hold<			
Condition Type: Inspection Hold Permit Number: PRBD2017031180706						
Fire	Open	North Naples Fire District	>Fire Notes: A change in engineering requirements for the sprinkler system was accepted with the sprinkler permit plans to avoid delays for paperwork, but the change (not requiring the engineer to sign and seal the shop drawings) must also be brought in as a revision to this building permit. Jpd 1/25/18			
Condition Type: CO Hold						
Sub Permit(s) Co Hold	Open	Building Review and Permitting	PREL20180318136 INSTALLATION OF LOW VOLTAGE, AREA OF REFUGE, SYSTEM, BUILDING 2, PRBD20170311807			
Condition Type: CO Hold						
Under Construction Elevation Certificate	Resolved		At the time of permit application, the permitted structure is in the special flood hazard area. An Under Construction Elevation Certificate is required within 10 days of passing a 704 shell reinforcement, 103/133 inspection of slab or other foundation system. Prior to obtaining County approval of the Under Construction Elevation Certificate, the permit holder's construction activities are at his/her own risk. Under Construction Elevation Certificates must verify the slab meets minimum elevations per the Florida Building Code and Chapter 62, Collier County Code of Laws and Ordinances (e.g., BFE +1 or 18" above the crown of the road, whichever is higher, and the elevation established by the SFWMD permit). C.Soter - Resolved -TEST			
Condition Type: CO Hold Date Resolved: 09/28/2018						

Upload Documents

Documents & Images

[Submittals](#) | [Portal Home](#)

	Condition Type: Permit Hold				
Elevation Certificate	Open	Building Review and Permitting	> Elevation Certificate. AH 11.50 NAVD flood zone. Proposed FFE 13.80 NGVD (12.50 NAVD) resubmit corrected elevation		
Condition Type: CO Hold Resolution Comments:					
	Documents:	Browse...			
		SURVEY.pdf NOC LOT 24.pdf			

Questions?

Contact Information

General Flood Information Requests,
including Flood Zone Determinations:

FloodInfoRequest@colliercountyfl.gov

Emailing Digitally Signed Elevation
Certificates

BuildingFloodDocs@colliercountyfl.gov



DIAGRAM 1A

All slab-on-grade single- and multiple-floor buildings (other than split-level) and high-rise buildings, either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor is at or above ground level (grade) on at least 1 side.*

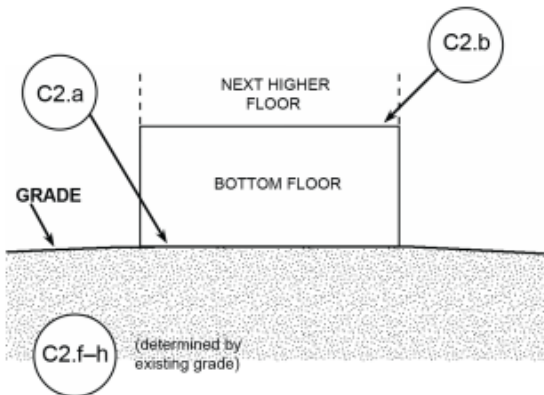
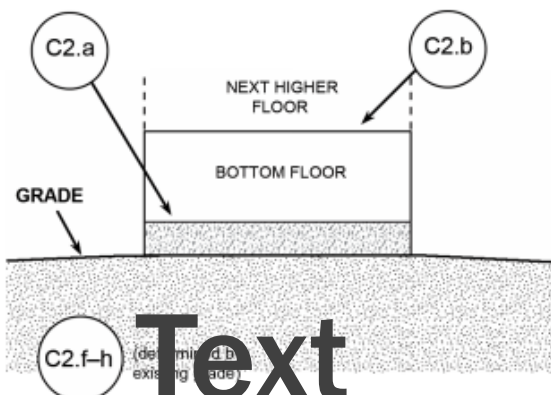


DIAGRAM 1B

All raised-slab-on-grade or slab-on-stem-wall-with-fill single- and multiple-floor buildings (other than split-level), either detached or row type (e.g., townhouses); with or without attached garage.

Distinguishing Feature – The bottom floor is at or above ground level (grade) on at least 1 side.*



Text

DIAGRAM 5

All buildings elevated on piers, posts, piles, columns, or parallel shear walls. No obstructions below the elevated floor.

Distinguishing Feature – For all zones, the area below the elevated floor is open, with no obstruction to flow of floodwaters (open lattice work and/or insect screening is permissible).

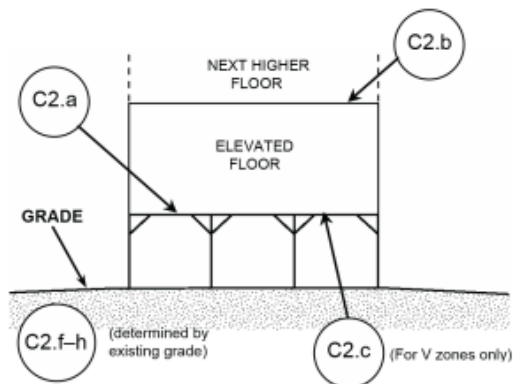


DIAGRAM 6

All buildings elevated on piers, posts, piles, columns, or parallel shear walls with full or partial enclosure below the elevated floor.

Distinguishing Feature – For all zones, the area below the elevated floor is enclosed, either partially or fully. In A Zones, the partially or fully enclosed area below the elevated floor is with or without openings** present in the walls of the enclosure. Indicate information about enclosure size and openings in Section A – Property Information.

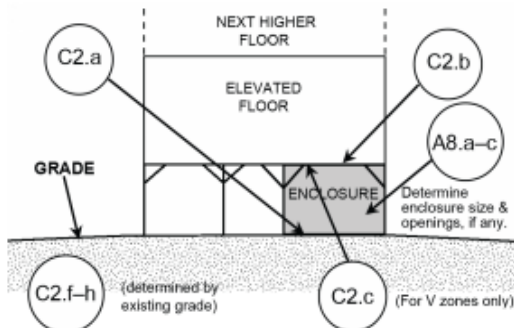


DIAGRAM 8

All buildings elevated on a crawlspace with the floor of the crawlspace at or above grade on at least 1 side, with or without an attached garage.

Distinguishing Feature – For all zones, the area below the first floor is enclosed by solid or partial perimeter walls. In all A zones, the crawlspace is with or without openings** present in the walls of the crawlspace. Indicate information about crawlspace size and openings in Section A – Property Information.

