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May 5, 2021

Ms. Angela Burch

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ladyjmjane@gmail.com

re: ENGINEER'S REPORT – 188 NW CASTLEWOOD COURT, LAKE CITY, FL

#### FIELD OBSERVATIONS

As requested, on February 27, 2021, the home at the above referenced property was inspected. The home is a framed structure bearing on a monolithic slab foundation. The garage is unfinished except for sheathing on the interior walls; the ceiling is unfinished. The interior of the living space is completely finished.

The depth of the footing is approximately 16" to 20"; the siding covers the top of the footing and slab. The trusses are appropriately connected to the wall framing. All-thread uplift connectors are visible at the top of the wall separating the garage from the living area. No cracks were detected in the visible slab or exterior hardscape. The structure is in excellent condition.

Per Columbia County Lidar elevations, the structure is 89.0 +/- . The adjacent road elevations on NW Suwannee Valley Road vary from 89.0 +/- to 84.0 +/- and on NW Castlewood Court elevations vary from 92.0 +/- to 84 +/- . The ground slopes to the northeast. The site is graded to prevent runoff from impacting the structure. Although the structure's finished floor elevation is less than the required 1' above the adjacent roads, I certify that the finished floor elevation will protect the structure against water damage from a base flood event, as defined in Article 8 of the Land Development Regulations.

Per the attached Elevation Letter by Victor Marrero, P.E., P.S.M. dated May 4, 2021, based on the south property line elevation of 92.0, the finished floor elevation of the home is 89.18.

No wetlands are present on the site. The structure is located in Zone X-shaded. Per SRWMD, the BFE for the site is 86.6. The SRWMD Flood Report is attached.

### RECOMMENDATIONS

In my professional opinion, this structure meets the specifications in the Florida Building Code 2020, 7<sup>th</sup> Edition.

### LIMITATIONS

This report is limited to field observations. The observations were cursory. Recommendations are based on these observations. Other conditions not visible at the surface may be present. I am unable to certify or guarantee no future deterioration, settlement or movement of the structure.

Should you have any questions, please don't hesitate to contact me.

Respectfully,



Carol Chadwick, PE  
cn=Carol Chadwick, PE,  
o=This item has been  
electronically signed  
and sealed by Carol  
Chadwick, PE using a  
digital signature., ou,  
email=ccpewyo@gmail.  
com, c=US  
2021.05.05 21:23:27  
-04'00'

Carol Chadwick, P.E.

CC Job #FL21053

Front of the structure.



Right side of the structure.



Rear side of the structure.



Left side of the structure.



Footing at rear of structure.



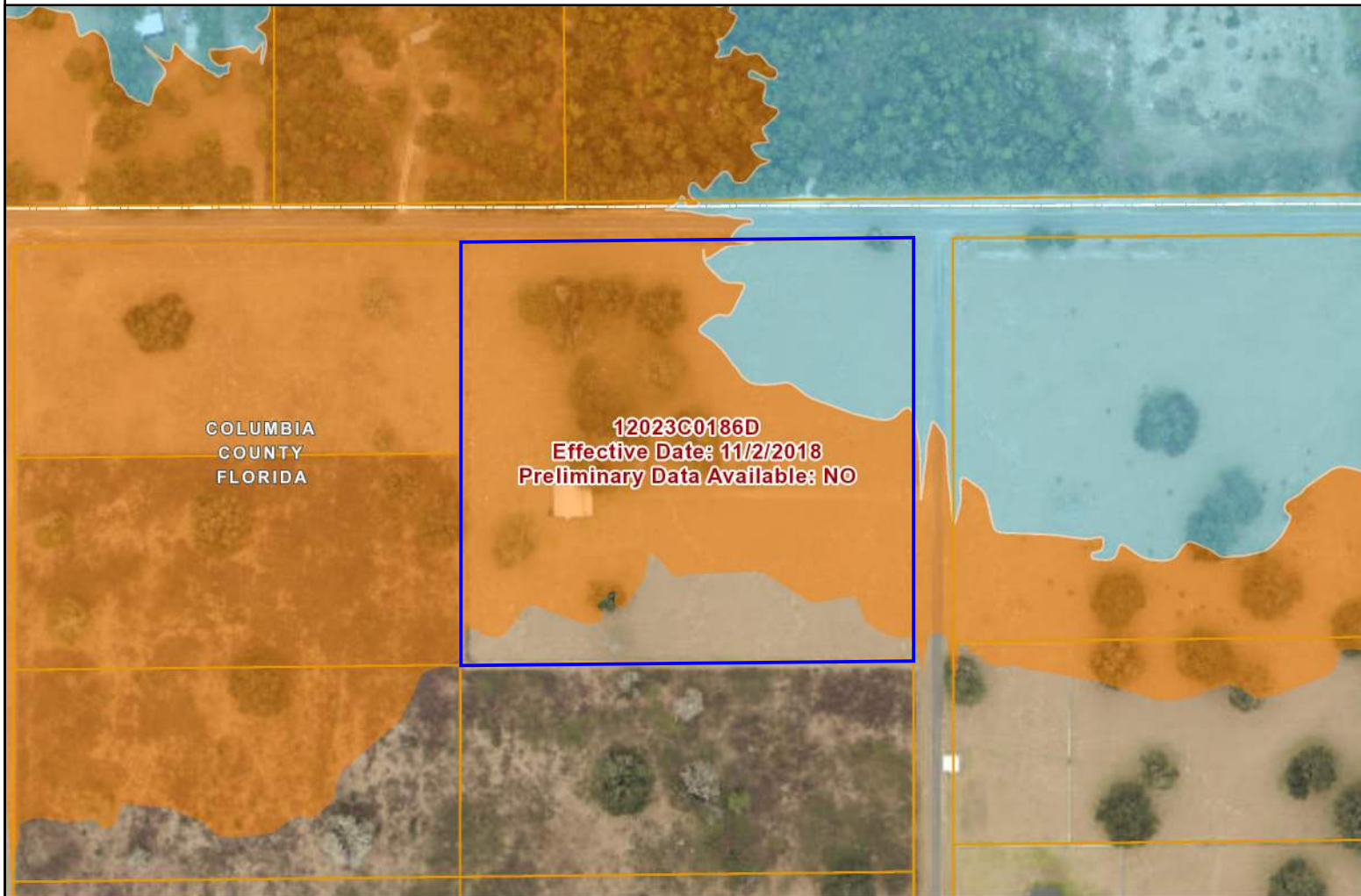
Simpson ties at exposed trusses.



All-thread connectors exposed at interior wall separating garage from living space.



# Suwannee River Water Management District Effective Flood Information Report



## LOCATION

Date: 2-27-2021

Parcel: 29-2S-16-01777-114

County: COLUMBIA

STR: S029 T02 R16

Columbia Flood Hazard Areas Status  
11/2/2018

## FLOOD INFORMATION

Special Flood Hazard Area?  
(SFHA): Yes

Flood Zone(s): X-SHADED, AE

Floodway: No

1% Annual Chance  
Flood Elev (BFE): 86.6 (feet)

10% Annual Chance  
Flood Elev: 79.9 (feet)

50% Annual Chance  
Flood Elev: 69.7 (feet)

Note: Elevations are based on NAVD88

FIRM Panel(s): 12023C0186D

- |   |                               |                       |                  |
|---|-------------------------------|-----------------------|------------------|
| 1% Flood - Floodway (High Risk)         | 1% Flood - Zone VE (HighRisk) | Depressions           | FIRM Panel Index |
| 1% Flood - Zone AE (High Risk)          | Floodway Increase             | Base Flood Elevations | Parcels          |
| 1% Flood - Zone A, AH, or AO (HighRisk) | SFHA Decrease                 | Cross Sections        | River Marks      |
| 0.2% Flood - X-Shaded (Moderate Risk)   | SFHA Increase                 | County Boundaries     | Wetlands         |

The Federal Emergency Management Agency (FEMA) maintains information about map features, such as street locations and names, in or near designated flood hazard areas. The information herein represents the best available data as of the effective date shown. The applicable Flood Insurance Study and a Digital Flood Insurance Rate Map is available online (<http://www.srwmdfloodreport.com>). To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to also consult the FEMA Map Service Center at 1-800-358-9616 (<http://www.msc.fema.gov>) for information on available products associated with this FIRM panel. Available products from the Map Service Center may include previously issued Letters of Map Change. Requests to revise flood information in or near designated flood hazard areas may be provided to FEMA during the community review period on preliminary maps, or through the Letter of Map Change process for effective maps.

## Base Flood Elevation (BFE)

The elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1-A30, AR, AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent chance of equaling or exceeding that level in any given year.

### A

Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.

### AE, A1-A30

Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. In most instances, base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

### AH

Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Usually areas of ponding with flood depths of 1 to 3 feet. Base Flood Elevations are determined.

### AO

Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30-year mortgage. Usually areas of sheet flow on sloping terrain with flood depths of 1 to 3 feet. Base Flood Elevations are determined.

### Supplemental Information:

10%-chance flood elevations (10-year flood-risk elevations) and 50%-chance flood elevations (2-year flood-risk elevations), are calculated during detailed flooding studies but are not shown on FEMA Digital Flood Insurance Rate Maps (FIRMs). They have been provided as supplemental information in the Flood Information section of this report.

## AE FW (FLOODWAYS)

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood (1% annual chance flood event). The floodway must be kept open so that flood water can proceed downstream and not be obstructed or diverted onto other properties.

Please note, if you develop within the regulatory floodway, you will need to contact your Local Government and the Suwannee River Water Management District prior to commencing with the activity. Please contact the District at 800.226.1066.

### VE

Areas with a 1% annual chance of flooding over the life of a 30-year mortgage with additional hazards due to storm-induced velocity wave action. Base Flood Elevations (BFEs) derived from detailed analyses.

### X 0.2 PCT (X Shaded, 0.2 PCT ANNUAL CHANCE FLOOD HAZARD)

Same as Zone X; however, detailed studies have been performed, and the area has been determined to be within the 0.2 percent annual chance floodplain (also known as the 500-year flood zone). Insurance purchase is not required in this zone but is available at a reduced rate and is recommended.

### X

All areas outside the 1-percent annual chance floodplain are Zone X. This includes areas of 1% annual chance sheet flow flooding where average depths are less than 1 foot, areas of 1% annual chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1% annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.

## LINKS

### FEMA:

<http://www.fema.gov>

### SRWMD:

<http://www.srwmd.state.fl.us>

## CONTACT

SRWMD  
9225 County Road 49  
Live Oak, FL 32060

(386) 362-1001

Toll Free:  
(800) 226-1066



Affine Engineering and Surveying, Inc.

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Date: 5/4/2021

Ms. Angela Burch

307.686.8080

Re: **Elevation Letter—188 NW Castlewood Court, Lake City, FL.**

SUBJECT:

FINISH FLOOR HEIGHT VERIFICATION

To whom it may concern,

During a field survey conducted 5/4/2021 on Lot 14 of Suwannee Valley Farms Unit I – Parcel 29-2S-16-01777-114-7350, the finish floor of the existing structure was measured. According to an elevation letter prepared by Carol Chadwick PE - Job#FL21053 signed 2-27-2021, the elevation of the extension of the south property line to the centerline of NW Castlewood Court is at elevation 92.0'. Based on that elevation and after measuring the elevation of the Finish Floor, it was found that the Finish Floor is at elevation 89.18 feet.



Victor O. Marrero, PE, PSM

Florida PSM 6586

