☒ Site plan
☒ blue prints

Columbia County New Building Permit Application

For Office Use Only Application # 44371 Date Received 1/21 By MG Permit # 39280 / 3928 Waiver

Zoning Official LW / LH Date 1-29-20 Flood Zone X Land Use RLD Zoning PRD

FEMA Map # _____ Elevation _____ MFE _____ River _____ Plans Examiner J.C. Date 2-5-20

Comments _____

☑ NOC ☐ EH ☑ Deed or PA ☑ Site Plan ☐ State Road Info ☑ Well letter ☐ 911 Sheet ☐ Parent Parcel # _____

☐ Dev Permit # _____ ☐ In Floodway ☑ Letter of Auth. from Contractor ☐ F W Comp. letter

☐ Owner Builder Disclosure Statement ☐ Land Owner Affidavit ☐ Ellisville Water ☑ App Fee Paid ☑ Sub VF Form

Septic Permit No. 18-0612 OR City Water ☐ Fax (888) 372-3646

Applicant (Who will sign/pickup the permit) Regan Andersen Phone (386) 752-5152

Address 1482 SW Commercial Gln Lake City Fl 32025

Owners Name Carrie + Matt CASON Phone (386) 623-2806

911 Address 117 Pinnacle Gln Lake City, FL 32024

Contractors Name N. Stanley Crawford Phone (386) 752-5152

Address 1482 S.W. Commercial Gln Lake city FL 32025

Contractor Email Sccl@SCC183.com ***Include to get updates on this job.

Fee Simple Owner Name & Address _____

Bonding Co. Name & Address _____

Architect/Engineer Name & Address _____

Mortgage Lenders Name & Address _____

Circle the correct power company ☐ FL Power & Light ☑ Clay Elec. ☐ Suwannee Valley Elec. ☐ Duke Energy

Property ID Number parcel # 25-4S-16-03124-112 Estimated Construction Cost $150,000.00

Subdivision Name Hickory Cove Lot 12 Block ____ Unit ____ Phase ____

Driving Directions from a Major Road 47 S to 242 turn right, go down turn left into hickory Cove Subdivision. Job is on right.

Construction of 3 bedroom home ____ Commercial OR ✓ Residential

Proposed Use/Occupancy Residential Number of Existing Dwellings on Property 0

Is the Building Fire Sprinkled? NO If Yes, blueprints included ____ Or Explain _____

Circle Proposed ☐ Culvert Permit or ☒ Culvert Waive or ☐ D.O.T. Permit or ☐ Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 26' Side 26' Side 70' Rear 80'

Number of Stories 1 Heated Floor Area 1605 Total Floor Area 2423 Acreage 1/3

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.) _____

Regan came in 1/7/20

Columbia County Building Permit Application

CODE: Florida Building Code 2014 and the 2011 National Electrical Code.

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless pursued in good faith or a permit has been issued.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO CONTRACTOR AND AGENT: ***YOU ARE HEREBY NOTIFIED*** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

Carrie Casor _____ _____

Print Owners Name **Owners Signature**

****Property owners must sign here before any permit will be issued.**

****If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

Stanley Crawford _____

Contractor's Signature

Contractor's License Number RG0042896

Columbia County Competency Card Number ~~2083~~ 64

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 16th **day of** January **20**20.

Personally known X **or Produced Identification** _____

Regan Anderson _____

State of Florida Notary Signature (For the Contractor)

SEAL:

REGAN LEE ANDERSON
Notary Public - State of Florida
Commission # GG 938338
My Comm. Expires Dec 9, 2023
Bonded through National Notary Assn.

Inst: 202012001799 Date: 01/22/2020 Time: 3:31PM
Page 1 of 1 B: 1403 P: 2727, P.DeWitt Cason, Clerk of Court
Columbia, County, By: PT
Deputy Clerk

STATE OF **FLORIDA**
COUNTY OF **COLUMBIA**

PROPERTY # **Hickory Cove – Lot #12**
Parcel # 25-4S-16-03124-112

This instrument was Prepared By:
Stanley Crawford Construction, Inc.
1482 S.W. Commercial Glen
Lake City, Florida 32025

NOTICE OF COMMENCEMENT

The undersigned hereby gives notice that improvement will be made to certain real Property, and in accordance with Chapter 713, Florida Statutes, the following information Is provided in this Notice of Commencement.

1. Description of property: Hickory Cove Lot #12 **117 Pinnacle Gln. Lake City, FL 32024**
2. General description of improvement: **Construction of Single Family Dwelling**
3. Owner Name & Address: **Matthew D. & Carrie C. Cason**
   1211 SW Bascom Norris Drive, Lake City, FL 32025
4. Interest in property: **Fee Simple**
5. Name and address of fee simple title holder (if other than owner): **NONE**
6. Contractor: **Stanley Crawford Construction, Inc.**
   1482 SW Commercial Glen
   Lake City, Florida 32025
7. Surety **N/A**
   a. Name and address:
   b. Amount of bond:
8. Lender: **N/A**
9. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13 (1) (a) 7., Florida Statutes: **NONE**
10. In addition to himself, Owner designates _____ to receive a copy of the Lienor's Notice as provided in section 713.13 (1) (b), Florida Statutes.
11. Expiration date of notice of commencement (the expiration date is 1 year from The date of recording unless a different date is specified).

Matthew D. Cason

Carrie C. Cason

The foregoing instrument was acknowledged before me this 16th day of January, 2020, by **Matthew D. Cason & Carrie C. Cason**, whom is personally known to me and who did not take an oath.

REGAN LEE ANDERSON
Notary Public - State of Florida
Commission # GG 938338
My Comm. Expires Dec 9, 2023
Bonded through National Notary Assn.

Notary Public

December 9, 2023
My Commission Expires

SRWMD Wetlands

Parcels

Lake City Limits

2018 Flood Zones

0.2 PCT ANNUAL CHANCE

A

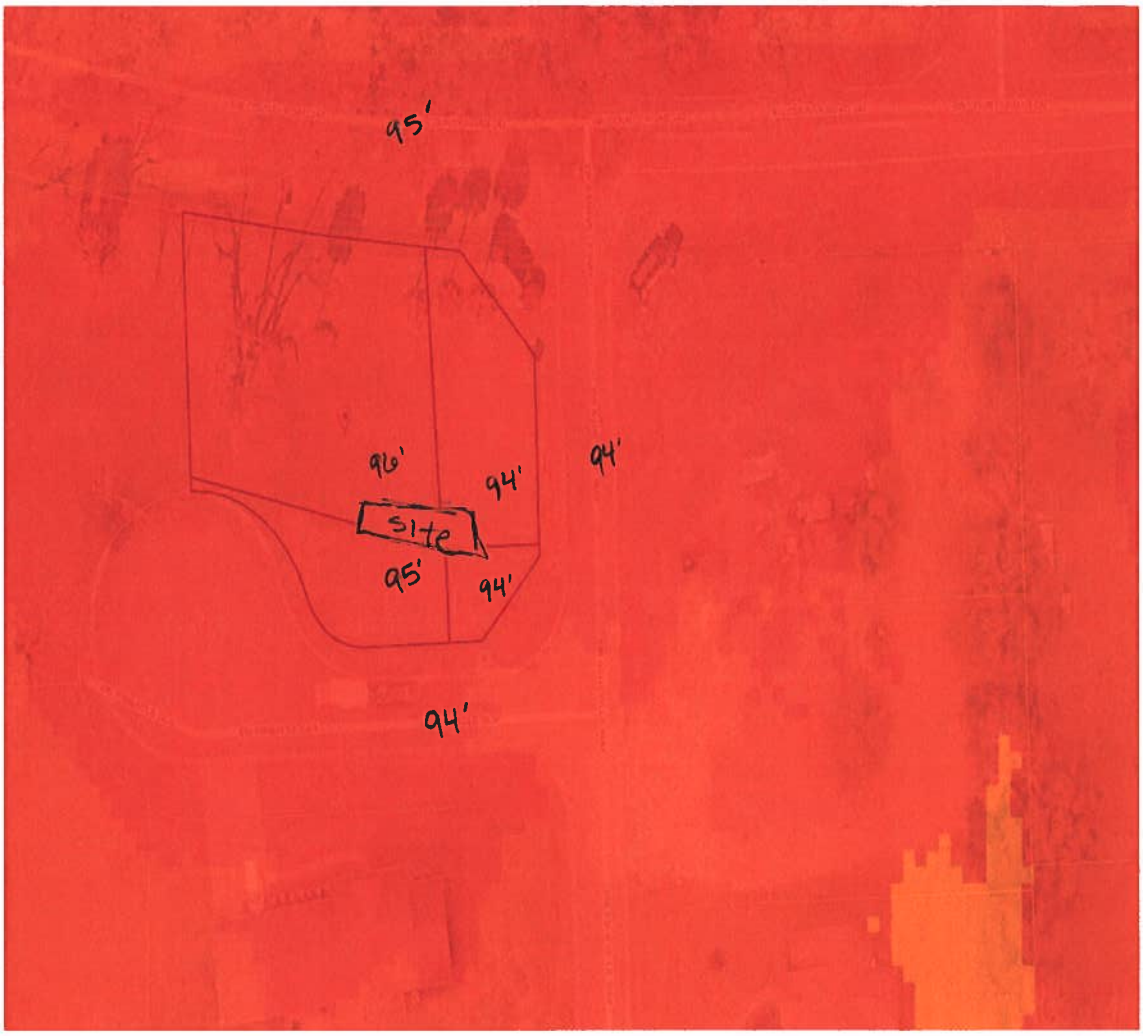
AE

AH

2018Aerials

LidarElevations

Printed: Wed Jan 29 2020 09:55:53 GMT-0500 (Eastern Standard Time)



Parcel Information

Parcel No: 25-4S-16-03124-112

Owner: CASON MATTHEW D & CARRIE C

Subdivision: HICKORY COVE

Lot: 12

Acres: 0.354722

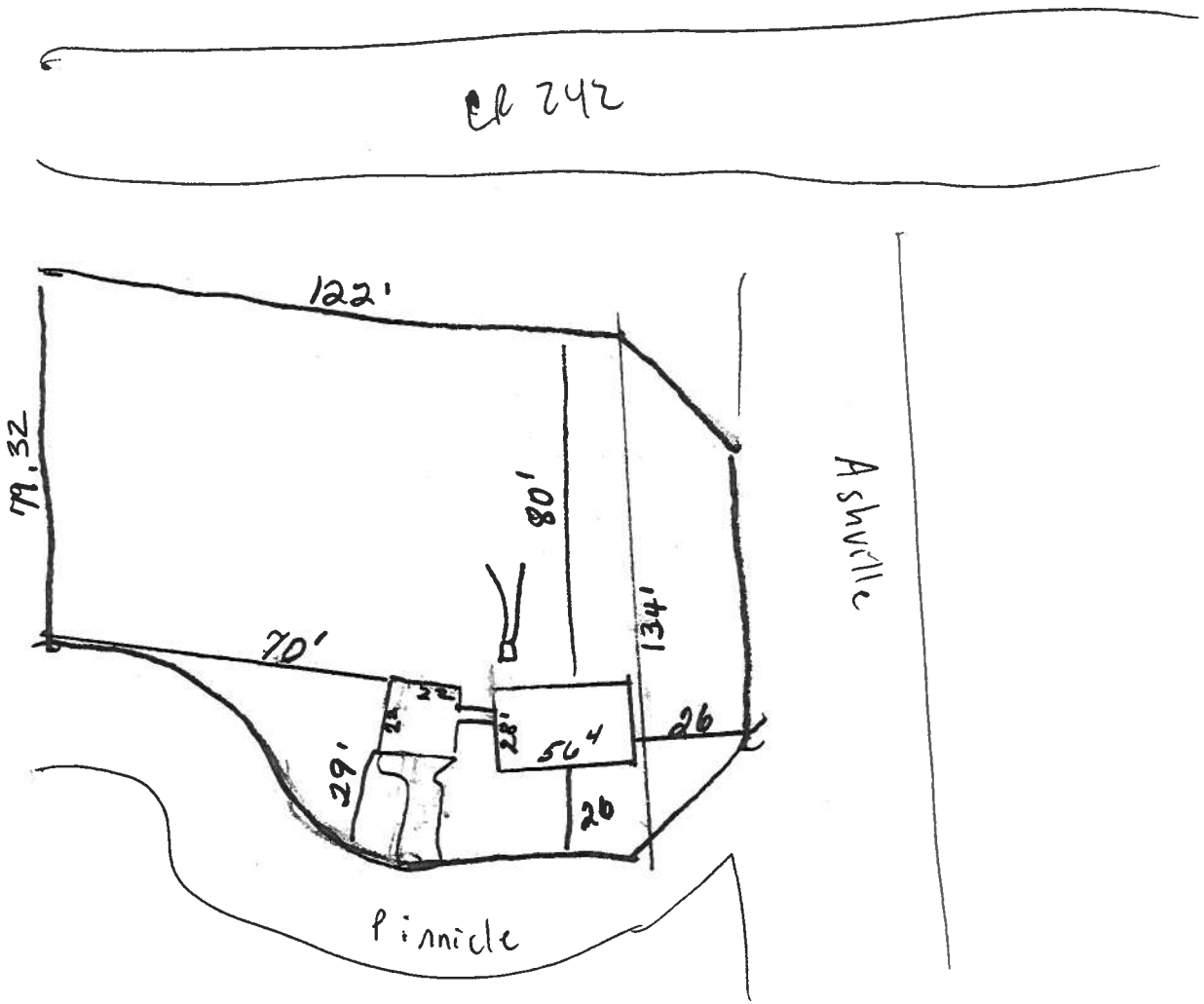
Deed Acres:

District: District 5 Tim Murphy

Future Land Uses: Residential - Low

Flood Zones:

Official Zoning Atlas: PRD, RSF-2



Lot 12 Hickory Cove

City Water

117 Pinnicle Glen

Lake City, FL Regan Anderson

Columbia County Property Appraiser

Jeff Hampton

2020 Working Values
updated: 1/6/2020

Parcel: << 25-4S-16-03124-112 >>

Owner & Property Info

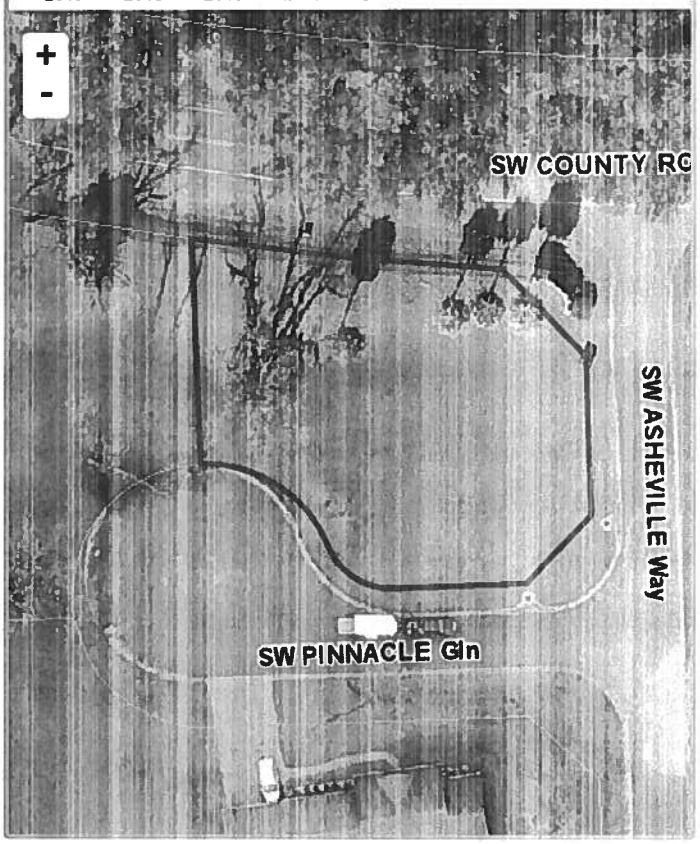
Result: 1 of 1

Owner	CASON MATTHEW D & CARRIE C 1211 SW BASCOM NORRIS DR STE 201 LAKE CITY, FL 32025		
Site	117 PINNACLE GLN,		
Description*	LOT 12 HICKORY COVE. WD 1157-149, QCD 1275-406,		
Area	0.34 AC	S/T/R	25-4S-16
Use Code**	VACANT (000000)	Tax District	2

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.
**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Aerial Viewer Pictometery Google Maps

2019 2016 2013 2010 2007 2005 Sales



Property & Assessment Values

2019 Certified Values		2020 Working Values	
Mkt Land (1)	$13,393	Mkt Land (1)	$13,393
Ag Land (0)	$0	Ag Land (0)	$0
Building (0)	$0	Building (0)	$0
XFOB (0)	$0	XFOB (0)	$0
Just	$13,393	Just	$13,393
Class	$0	Class	$0
Appraised	$13,393	Appraised	$13,393
SOH Cap [?]	$0	SOH Cap [?]	$0
Assessed	$13,393	Assessed	$13,393
Exempt	$0	Exempt	$0
Total Taxable	county:$13,393 city:$13,393 other:$13,393 school:$13,393	Total Taxable	county:$13,393 city:$13,393 other:$13,393 school:$13,393

Sales History

Sale Date	Sale Price	Book/Page	Deed	V/I	Quality (Codes)	RCode
5/22/2014	$100	1275/0406	QC	V	U	30
8/22/2008	$375,000	1157/0149	WD	V	Q	

Building Characteristics

Bldg Sketch	Bldg Item	Bldg Desc*	Year Blt	Base SF	Actual SF	Bldg Value
NONE						

Extra Features & Out Buildings (Codes)

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
NONE						

Land Breakdown

Land Code	Desc	Units	Adjustments	Eff Rate	Land Value
000000	VAC RES (MKT)	1.000 LT - (0.340 AC)	1.00/1.00 1.00/1.00	$13,393	$13,393

Search Result: 1 of 1

by: GrizzlyLogic.com

SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # 44371 JOB NAME Hickory Cove Lot #12

THIS FORM MUST BE SUBMITTED BEFORE A PERMIT WILL BE ISSUED

Columbia County issues combination permits. One permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the general contractors permit.

***NOTE:** It shall be the responsibility of the general contractor to make sure that all of the subcontractors are licensed with the Columbia County Building Department.*
Use website to confirm licenses: http://www.columbiacountyfla.com/PermitSearch/ContractorSearch.aspx

***NOTE:** If this should change prior to completion of the project, it is your responsibility to have a corrected form submitted to our office, before that work has begun.*

Violations will result in stop work orders and/or fines.

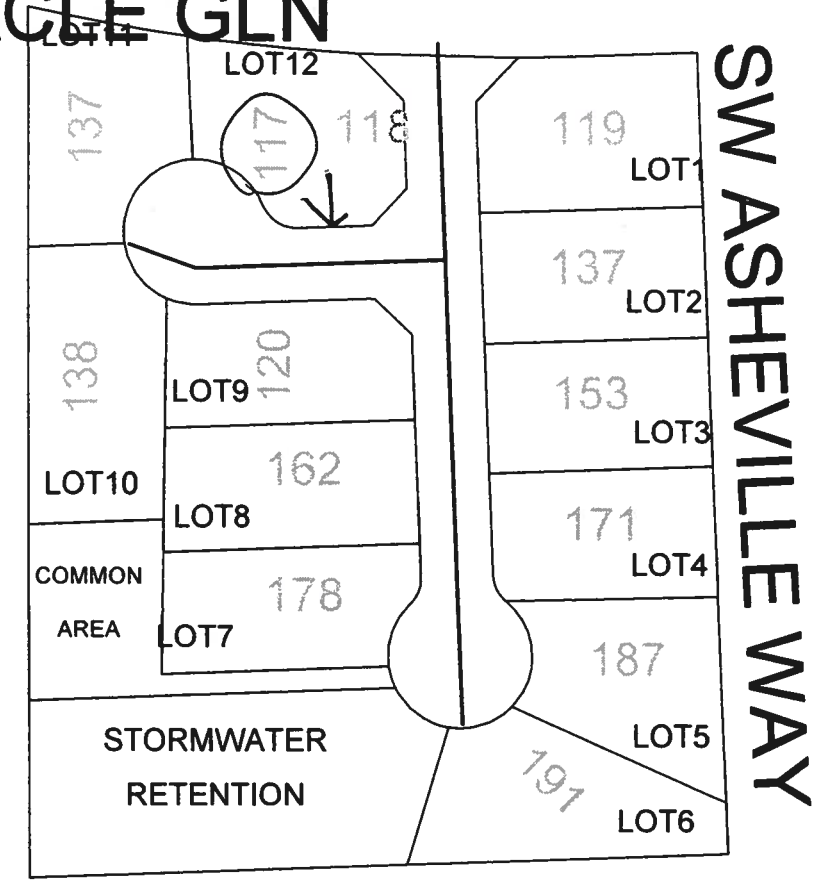
ELECTRICAL ☑ CC# 811	Print Name Ryan Beville Signature DocuSigned by: 42AD4395BFB64DD...	Company Name: RBI Electrical Contracting LLC	License #: EC13004236 Phone #: (352) 339-0369	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
MECHANICAL/ A/C ☐ CC# 1143	Print Name Donald Davis Signature	Company Name: High Springs Electric, Inc.	License #: CAC1815367 Phone #: (386) 623-0499	Need ☐ Lic ☑ Liab ☐ W/C ☐ EX ☐ DE
PLUMBING/ GAS ☑ CC# 767	Print Name Paul K Coleman Signature Paul K Coleman DA8497C80E5C4E9...	Company Name: Coleman's Plumbing, Inc.	License #: 7007-Cty/CFC1425694 Phone #: (352) 472-4114	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
ROOFING ☐ CC# 443	Print Name William Duffield Signature William Duffield DF6D7B2EEF5A49E...	Company Name: Duffield Home Improvements	License #: CCC1325785 Phone #: (352) 375-7008	Need ☐ Lic ☑ Liab ☑ W/C ☐ EX ☐ DE
SHEET METAL ☐ CC#	Print Name Signature	Company Name:	License #: Phone #:	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
FIRE SYSTEM/ SPRINKLER ☐ CC#	Print Name Signature	Company Name:	License#: Phone #:	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
SOLAR ☐ CC#	Print Name Signature	Company Name:	License #: Phone #:	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE
STATE SPECIALTY ☐ CC#	Print Name Signature	Company Name:	License #: Phone #:	Need ☐ Lic ☐ Liab ☐ W/C ☐ EX ☐ DE

Ref: F.S. 440.103; ORD. 2016-30

Columbia County 9-1-1 Addressing / GIS Department
30 July 2007
Map: Address Assignments for Hickory Cove S/D
(See Noted Items)
Scale: 1 inch = 125 feet

SW PINNACLE GLN

LOT#	ADDRESS ASSIGNMENT
1	119 SW ASHEVILLE WAY
2	137 SW ASHEVILLE WAY
3	153 SW ASHEVILLE WAY
4	171 SW ASHEVILLE WAY
5	187 SW ASHEVILLE WAY
6	191 SW ASHEVILLE WAY
7	178 SW ASHEVILLE WAY
8	162 SW ASHEVILLE WAY
9	120 SW PINNACLE GLN
10	138 SW PINNACLE GLN
11	137 SW PINNACLE GLN
*12	117 SW PINNACLE GLN
*12	118 SW ASHEVILLE WAY



Note 1: Building on Lot 9 re-addressed from 1012 SW County Road 242 to 120 SW Pinnacle Gln
Note 2: Building on Lot 1 no longer exist, address 962 SW County Road 242 DELETED
Note 3: Lot 12 Corner Lot, contact Address / GIS Dept for final address based on site plan.

Hickory Cove (PRD)

COLUMBIA COUNTY BUILDING DEPARTMENT
135 NE Hernando Ave, Suite B-21, Lake City, FL 32055
Phone: 386-758-1008 Fax: 386-758-2160

LETTER OF AUTHORIZATION TO SIGN FOR PERMITS

I, William Stanley Crawford (license holder name), licensed qualifier for Stanley Crawford Construction Inc. (company name), do certify that the below referenced person(s) listed on this form is/are contracted/hired by me, the license holder, or is/are employed by me directly or through an employee leasing arrangement; or, is an officer of the corporation; or, partner as defined in Florida Statutes Chapter 468, and the said person(s) is/are under my direct supervision and control and is/are authorized to purchase permits, call for inspections and sign on my behalf.

Printed Name of Person Authorized	Signature of Authorized Person
1. Mary Ann Crawford	1. Mary Ann Crawford
2. Carrie CASON	2. Carrie Cason
3. Regan Anderson	3. Regan Anderson
4.	4.
5.	5.

I, the license holder, realize that I am responsible for all permits purchased, and all work done under my license and fully responsible for compliance with all Florida Statutes, Codes, and Local Ordinances. I understand that the State and County Licensing Boards have the power and authority to discipline a license holder for violations committed by him/her, his/her agents, officers, or employees and that I have full responsibility for compliance with all statutes, codes and ordinances inherent in the privilege granted by issuance of such permits.

<u>If at any time the person(s) you have authorized is/are no longer agents, employee(s), or officer(s), you must notify this department in writing of the changes and submit a new letter of authorization form, which will supersede all previous lists. Failure to do so may allow unauthorized persons to use your name and/or license number to obtain permits.</u>

Stanley Crawford _____ 1/22/2020
License Holders Signature (Notarized) License Number Date

NOTARY INFORMATION:
STATE OF: Florida COUNTY OF: Columbia

The above license holder, whose name is Stanley Crawford, personally appeared before me and is known by me or has produced identification (type of I.D.) FL D.L. on this 22nd day of January, 20 20.

Brenda Rapp
NOTARY'S SIGNATURE (Seal/Stamp)

BRENDA RAPP
MY COMMISSION # GG127253
EXPIRES: August 01, 2021

STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
APPLICATION FOR CONSTRUCTION PERMIT

PERMIT NO. 18-0612
DATE PAID: 7-25-18
FEE PAID:
RECEIPT#: 135306

APPLICATION FOR:
[X] New System [ ] Existing System [ ] Holding Tank [ ] Innovative
[ ] Repair [ ] Abandonment [ ] Temporary [ ]

APPLICANT: Matthew & Carrie Cason

AGENT: Stanley Crawford Construction, Inc TELEPHONE: (386) 752-5152

MAILING ADDRESS: 1482 SW Commercial Glen, Lake City, FL. 32025

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. SYSTEMS MUST BE CONSTRUCTED BY A PERSON LICENSED PURSUANT TO 489.105(3)(m) OR 489.552, FLORIDA STATUTES. IT IS THE APPLICANT'S RESPONSIBILITY TO PROVIDE DOCUMENTATION OF THE DATE THE LOT WAS CREATED OR PLATTED (MM/DD/YY) IF REQUESTING CONSIDERATION OF STATUTORY GRANDFATHER PROVISIONS.

PROPERTY INFORMATION

LOT: 12 BLOCK: N/A SUBDIVISION: Hickory Cove PLATTED: 2007

PROPERTY ID #: 25-4S-16-03124-112 ZONING: Res I/M OR EQUIVALENT: [Y / (N)]

PROPERTY SIZE: 0.34 ACRES WATER SUPPLY: [ ] PRIVATE PUBLIC [ ]<=2000GPD [X]>2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? [Y / (N)] DISTANCE TO SEWER: N/A FT

PROPERTY ADDRESS: 117 Pinnacle Glen, Lake City FL. 32024

DIRECTIONS TO PROPERTY:

BUILDING INFORMATION [✓] RESIDENTIAL [ ] COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	Commercial/Institutional System Design Table 1, Chapter 64E-6, FAC
1	House	3	1,650	
2				
3				
4				

[ ] Floor/Equipment Drains [ ] Other (Specify)

SIGNATURE: Stanley Crawford DATE: 6/29/18

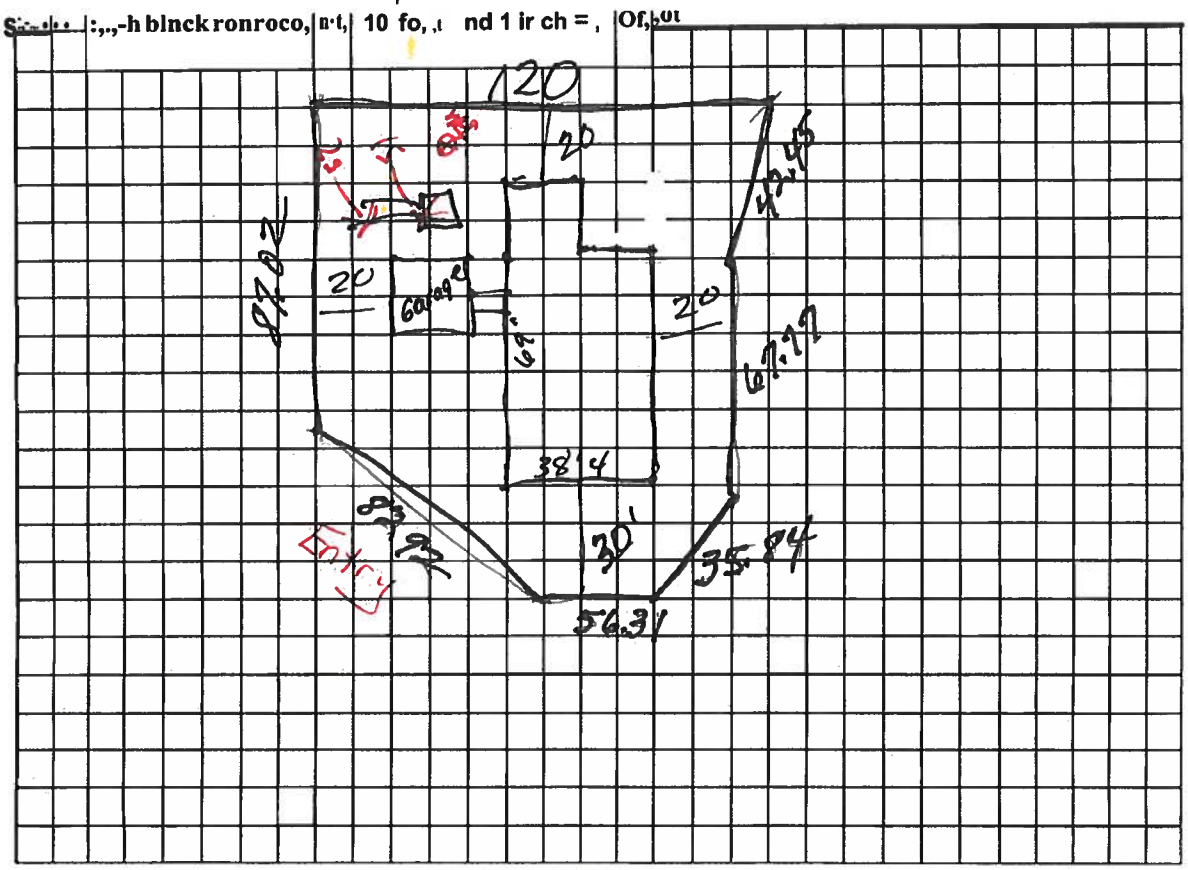
DH 4015, 08/09 (Obsoletes previous editions which may not be used)
Incorporated 64E-6.001, FAC

STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR CONSTRUCTION PERMIT

Permit Application Number 18-0612

Lot 12 Hickory Cove

PART II - SITEPLAN



Notes: City Water

Site Plan submitted by: Stanley Cumbest 6/29/18

Plan Approved X Not Approved ___ Date 7/27/20

By Columbia County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

CITY OF LAKE CITY
Florida's Gateway Est. 1859

February 7, 2020

Stanley Crawford Construction
1482 SW Commercial Glen
Lake City, FL 32025

RE: Service Availability Letter

To Whom It May Concern,

Thank you for your inquiry regarding the availability of city utilities. The City of Lake City has potable water available to tap into at 117 SW Pinnacle Glen, Parcel 25-4S-16-0324-112.

This availability response does not represent the City of Lake City's commitment for or reservation of capacity. In accordance with the City of Lake City's policies and procedures, commitment to serve is made only upon the City of Lake City's approval of your application for service and receipt of your payment for all applicable fees.

If you have any questions, please feel free to contact me at (386) 719-5786 during our normal business hours of 8:00 am to 4:30 pm, Monday through Friday. I will be happy to assist you.

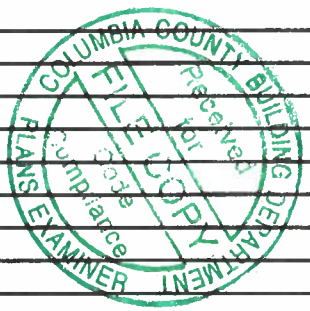
Sincerely,

Shasta Pelham
Utility Service Coordinator

Brian Scott
Director of Distribution and Collections

As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and approval numbers on the building components listed below if they will be utilized on the construction project for which you are applying for a building permit. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. Statewide approved products are listed online @ www.floridabuilding.org

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
1. EXTERIOR DOORS			
A. SWINGING	Masonite		FL 4904-R8
B. SLIDING			
C. SECTIONAL/ROLL UP	CHI	Automatic Door	FL 15012-R4
D. OTHER			
2. WINDOWS			
A. SINGLE/DOUBLE HUNG	Kinro	Model # 9750	FL 993-R15
B. HORIZONTAL SLIDER			
C. CASEMENT			
D. FIXED			
E. MULLION			
F. SKYLIGHTS			
G. OTHER			
3. PANEL WALL			
A. SIDING			
B. SOFFITS			
C. STOREFRONTS			
D. GLASS BLOCK			
E. OTHER			
4. ROOFING PRODUCTS			
A. ASPHALT SHINGLES	Tamko	Premium	FL 18355-R4
B. NON-STRUCTURAL METAL			
C. ROOFING TILES			
D. SINGLE PLY ROOF			
E. OTHER			
5. STRUCTURAL COMPONENTS			
A. WOOD CONNECTORS			
B. WOOD ANCHORS			
C. TRUSS PLATES			
D. INSULATION FORMS			
E. LINTELS			
F. OTHERS			
6. NEW EXTERIOR ENVELOPE PRODUCTS			



The products listed below did not demonstrate product approval at plan review. I understand that at the time of inspection of these products, the following information must be available to the inspector on the jobsite; 1) copy of the product approval, 2) performance characteristics which the product was tested and certified to comply with, 3) copy of the applicable manufacturers installation requirements.
Further, I understand these products may have to be removed if approval cannot be demonstrated during inspection.

Stanley Crane 1/16/20
Contractor OR Agent Signature Date

NOTES: _____

FORM R405-2017

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	New Project lot 12	Builder Name:	SCCI
Street:	117 Pinnacle Gln	Permit Office:	
City, State, Zip:	LakeCity , FL ,	Permit Number:	
Owner:		Jurisdiction:	
Design Location:	FL, Gainesville	County:	Columbia (Florida Climate Zone 2)

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	3
5. Is this a worst case?	No
6. Conditioned floor area above grade (ft²)	1605
Conditioned floor area below grade (ft²)	0

7. Windows (199.3 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.31	199.33 ft²
SHGC:	SHGC=0.22	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
d. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		2.000 ft.
Area Weighted Average SHGC:		0.220

8. Floor Types (1605.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	1605.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (1686.0 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	1686.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (1605.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30.0	1605.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Main	6	321

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	33.0	SEER:14.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	33.4	HSPF:8.20

14. Hot water systems	
a. Electric	Cap: 50 gallons
	EF: 0.980
b. Conservation features	
None	

15. Credits: Pstat

COLUMBIA COUNTY BUILDING DEPARTMENT — Received for FILE COPY — Code Compliance — PLANS EXAMINER

Glass/Floor Area: 0.124

Total Proposed Modified Loads: 47.63

Total Baseline Loads: 47.77

PASS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.

SUNCOAST INSULATORS
825 NW 253rd Terrace
Newberry, FL 32669
(352) 472-8595
Fax (352) 472-2633

PREPARED BY:
DATE: 1-14-2020

I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.

OWNER/AGENT:
DATE: 01-16-2020

Review of the plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed this building will be inspected for compliance with Section 553.908 Florida Statutes.

GREAT SEAL OF THE STATE OF FLORIDA — IN GOD WE TRUST

BUILDING OFFICIAL:
DATE:

- **Compliance requires certification by the air handler unit manufacturer that the air handler enclosure qualifies as certified factory-sealed in accordance with R403.3.2.1.**
- **Compliance requires an Air Barrier and Insulation Inspection Checklist in accordance with R402.4.1.1 and this project requires an envelope leakage test report with envelope leakage no greater than 5.00 ACH50 (R402.4.1.2).**

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

PROJECT

Title:	New Project lot 12	Bedrooms:	3	Address Type:	Street Address
Building Type:	User	Conditioned Area:	1605	Lot #	
Owner Name:		Total Stories:	1	Block/Subdivision:	
# of Units:	1	Worst Case:	No	PlatBook:	
Builder Name:	SCCI	Rotate Angle:	0	Street:	117 Pinnacle Gln
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	LakeCity , FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Gainesville	FL_GAINESVILLE_REGI	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	1605	14445

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	Main	1605	14445	Yes	3	3	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
____	1	Slab-On-Grade Edge Insulation	Main	188 ft	0	1605 ft²	----	0	0	1

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Rad Barr	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
____	1	Gable or shed	Composition shingles	1738 ft²	334 ft²	Medium	N	0.96	No	0.9	No	0	22.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	150	1605 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Ins Type	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	Main	30	Blown	1605 ft²	0.11	Wood

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
___	1	N	Exterior	Frame - Wood	Main	13	38	4	9		345.0 ft²		0.23	0.75	0
___	2	E	Exterior	Frame - Wood	Main	13	55	4	9		498.0 ft²		0.23	0.75	0
___	3	S	Exterior	Frame - Wood	Main	13	38	4	9		345.0 ft²		0.23	0.75	0
___	4	W	Exterior	Frame - Wood	Main	13	55	4	9		498.0 ft²		0.23	0.75	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
___	1	N	Insulated	Main	None	.46	3		6	8	20 ft²
___	2	S	Insulated	Main	None	.46	6		6	8	40 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
___	1	N	1	Vinyl	Double (Clear)	Yes	0.31	0.22	N	30.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	2	N	1	Vinyl	Double (Clear)	Yes	0.31	0.22	N	13.3 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	3	E	2	Vinyl	Double (Clear)	Yes	0.31	0.22	N	30.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	4	E	2	Vinyl	Double (Clear)	Yes	0.31	0.22	N	20.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	5	E	2	Vinyl	Double (Clear)	Yes	0.31	0.22	N	4.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	6	S	3	Vinyl	Double (Clear)	Yes	0.31	0.22	N	30.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	7	S	3	Vinyl	Double (Clear)	Yes	0.31	0.22	N	24.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	8	W	4	Vinyl	Double (Clear)	Yes	0.31	0.22	N	18.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10
___	9	W	4	Vinyl	Double (Clear)	Yes	0.31	0.22	N	30.0 ft²	2 ft 0 in	1 ft 0 in	Drapes/blinds	Interior 10

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000286	1203.8	66.08	124.28	.1128	5

HEATING SYSTEM

√	#	System Type	Subtype	Speed	Efficiency	Capacity	Block	Ducts
___	1	Electric Heat Pump/	None	Single	HSPF:8.2	33.4 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
___	1	Central Unit/	None	Single	SEER: 14	33 kBtu/hr	990 cfm	0.75	1	sys#1

FORM R405-2017

INPUT SUMMARY CHECKLIST REPORT

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
____	1	Electric	None	Main	0.98	50 gal	60 gal	120 deg	None

SOLAR HOT WATER SYSTEM

√	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
____	None	None			ft²		

DUCTS

√	#	Supply Location	Supply R-Value	Supply Area	Return Location	Return Area	Leakage Type	Air Handler	CFM 25 TOT	CFM25 OUT	QN	RLF	HVAC # Heat	HVAC # Cool
____	1	Attic	6	321 ft²	Attic	80.25 ft²	Default Leakage	Main	(Default) c	(Default) c			1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Cooling	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]	[X]	[ ]	[ ]	[ ]
Heating	[X]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[X]
Venting	[ ]	[ ]	[X]	[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[X]	[X]	[ ]

Thermostat Schedule: HERS 2006 Reference

Schedule Type		Hours 1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	80	80	80	80
	PM	80	80	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM	78	78	78	78	78	78	78	78	78	78	78	78
	PM	78	78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66
Heating (WEH)	AM	66	66	66	66	66	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	66	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft²	0 ft	0.3	Main

FORM R405-2017

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST

Florida Department of Business and Professional Regulation
Simulated Performance Alternative (Performance) Method

Applications for compliance with the 2017 Florida Building Code, Energy Conservation via the residential Simulated Performance Method shall include:

- ☐ *This checklist*
- ☐ *A Form R405 report that documents that the Proposed Design complies with Section R405.3 of the Florida Energy Code. This form shall include a summary page indicating home address, e-ratio and the pass or fail status along with summary areas and types of components, whether the home was simulated as a worst-case orientation, name and version of the compliance software tool, name of individual completing the compliance report (one page) and an input summary checklist that can be used for field verification (usually four pages/may be greater).*
- ☐ *Energy Performance Level (EPL) Display Card (one page)*
- ☐ *HVAC system sizing and selection based on ACCA Manual S or per exceptions provided in Section R403.7*
- ☐ *Mandatory Requirements (five pages)*

Required prior to CO for the Performance Method:

- ☐ *Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)*
- ☐ *A completed Envelope Leakage Test Report (usually one page)*
- ☐ *If Form R405 duct leakage type indicates anything other than "default leakage", then a completed Form R405 Duct Leakage Test Report (usually one page)*

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 100

The lower the Energy Performance Index, the more efficient the home.

1. New home or, addition	1. New (From Plans)
2. Single-family or multiple-family	2. Single-family
3. No. of units (if multiple-family)	3. 1
4. Number of bedrooms	4. 3
5. Is this a worst case? (yes/no)	5. No
6. Conditioned floor area (sq. ft.)	6. 1605
7. Windows, type and area	
a) U-factor:(weighted average)	7a. 0.310
b) Solar Heat Gain Coefficient (SHGC)	7b. 0.220
c) Area	7c. 199.3
8. Skylights	
a) U-factor:(weighted average)	8a. NA
b) Solar Heat Gain Coefficient (SHGC)	8b. NA
9. Floor type, insulation level:	
a) Slab-on-grade (R-value)	9a. 0.0
b) Wood, raised (R-value)	9b.
c) Concrete, raised (R-value)	9c.
10. Wall type and insulation:	
A. Exterior:	
1. Wood frame (Insulation R-value)	10A1. 13.0
2. Masonry (Insulation R-value)	10A2.
B. Adjacent:	
1. Wood frame (Insulation R-value)	10B1.
2. Masonry (Insulation R-value)	10B2.
11. Ceiling type and insulation level	
a) Under attic	11a. 30.0
b) Single assembly	11b.
c) Knee walls/skylight walls	11c.
d) Radiant barrier installed	11d. No

12. Ducts, location & insulation level	
a) Supply ducts	R 6.0
b) Return ducts	R 6.0
c) AHU location	Main
13. Cooling system:	Capacity 33.0
a) Split system	SEER
b) Single package	SEER
c) Ground/water source	SEER/COP
d) Room unit/PTAC	EER
e) Other	14.0
14. Heating system:	Capacity 33.4
a) Split system heat pump	HSPF
b) Single package heat pump	HSPF
c) Electric resistance	COP
d) Gas furnace, natural gas	AFUE
e) Gas furnace, LPG	AFUE
f) Other	8.20
15. Water heating system	
a) Electric resistance	EF 0.98
b) Gas fired, natural gas	EF
c) Gas fired, LPG	EF
d) Solar system with tank	EF
e) Dedicated heat pump with tank	EF
f) Heat recovery unit	HeatRec%
g) Other	
16. HVAC credits claimed (Performance Method)	
a) Ceiling fans	
b) Cross ventilation	No
c) Whole house fan	No
d) Multizone cooling credit	
e) Multizone heating credit	
f) Programmable thermostat	Yes

*Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

I certify that this home has complied with the Florida Building Code, Energy Conservation, through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL display card will be completed based on installed code compliant features.

Builder Signature: _____ Date: 1/21/2020

Address of New Home: 117 Pinnacle Gln City/FL Zip: LakeCity, FL

Florida Building Code, Energy Conservation, 6th Edition (2017)
Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:	117 Pinnacle Gln LakeCity , FL ,	Permit Number:

MANDATORY REQUIREMENTS See individual code sections for full details.

✓ **SECTION R401 GENERAL**

☐ **R401.3 Energy Performance Level (EPL) display card (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law (Section 553.9085, Florida Statutes) requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit. The building official shall verify that the EPL display card completed and signed by the builder accurately reflects the plans and specifications submitted to demonstrate code compliance for the building. A copy of the EPL display card can be found in Appendix RD.

☐ **R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.

Exception: Dwelling units of R-2 Occupancies and multiple attached single family dwellings shall be permitted to comply with Section C402.5.

☐ **R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.

☐ **R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.

☐ **R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Exception: Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope.

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

☐ **R402.4.2 Fireplaces.** New wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air. Where using tight-fitting doors on factory-built fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight-fitting doors on masonry fireplaces, the doors shall be listed and labeled in accordance with UL 907.

☐ **R402.4.3 Fenestration air leakage.** Windows, skylights and sliding glass doors shall have an air infiltration rate of no more than 0.3 cfm per square foot (1.5 L/s/m2), and swinging doors no more than 0.5 cfm per square foot (2.6 L/s/m2), when tested according to NFRC 400 or AAMA/WDMA/CSA 101/I.S.2/A440 by an accredited, independent laboratory and listed and labeled by the manufacturer.

Exception: Site-built windows, skylights and doors.

MANDATORY REQUIREMENTS - (Continued)

☐ **R402.4.4 Rooms containing fuel-burning appliances.** In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table R402.1.2, where the walls, floors and ceilings shall meet not less than the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section R403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Section R402.4.2 and Section R1006 of the Florida Building Code, Residential.

☐ **R402.4.5 Recessed lighting.** Recessed luminaires installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires shall be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling covering.

SECTION R403 SYSTEMS

R403.1 Controls.

☐ **R403.1.1 Thermostat provision (Mandatory).** At least one thermostat shall be provided for each separate heating and cooling system.

☐ **R403.1.3 Heat pump supplementary heat (Mandatory).** Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load.

☐ **R403.3.2 Sealing (Mandatory)** All ducts, air handlers, filter boxes and building cavities that form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section C403.2.9.2 of the Commercial Provisions of this code and shall be shown to meet duct tightness criteria below.

Duct tightness shall be verified by testing in accordance with ANSI/RESNET/ICC 380 by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i), Florida Statutes, to be "substantially leak free" in accordance with Section R403.3.3.

☐ **R403.3.2.1 Sealed air handler.** Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design airflow rate when tested in accordance with ASHRAE 193.

☐ **R403.3.3 Duct testing (Mandatory).** Ducts shall be pressure tested to determine air leakage by one of the following methods:

1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufa handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exceptions:

1. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.
2. Duct testing is not mandatory for buildings complying by Section 405 of this code.

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.

☐ **R403.3.5 Building cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums.

☐ **R403.4 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3.

☐ **R403.4.1 Protection of piping insulation.** Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

☐ **R403.5.1 Heated water circulation and temperature maintenance systems (Mandatory).** Heated water circulation systems shall be in accordance with Section R403.5.1.1. Heat trace temperature maintenance systems shall be in accordance with Section R403.5.1.2. Automatic controls, temperature sensors and pumps shall be accessible. Manual controls shall be readily accessible.

☐ **R403.5.1.1 Circulation systems.** Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.

☐ **R403.5.1.2 Heat trace systems.** Electric heat trace systems shall comply with IEEE 515.1 or UL 515. Controls for such systems shall automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy.

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.5.5 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank.

R403.5.6 Water heater efficiencies (Mandatory).

☐ **R403.5.6.1.1 Automatic controls.** Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C).

☐ **R403.5.6.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water-heating systems to be turned off.

☐ **R403.5.6.2 Water-heating equipment.** Water-heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water-heating category. Solar water heaters shall meet the criteria of Section R403.5.6.2.1.

☐ **R403.5.6.2.1 Solar water-heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water-heating systems should meet the following criteria:

1. Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal; and
2. Be installed at an orientation within 45 degrees of true south.

☐ **R403.6 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential, or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation including: Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

☐ **R403.6.1 Whole-house mechanical ventilation system fan efficacy**When installed to function as a whole-house mechanical ventilation system, fans shall meet the efficacy requirements of Table R403.6.1.

Exception: Where whole-house mechanical ventilation fans are integral to tested and listed HVAC equipment, they shall be powered by an electronically commutated motor.

☐ **R403.6.2 Ventilation air.** Residential buildings designed to be operated at a positive indoor pressure or for mechanical ventilation shall meet the following criteria:

1. The design air change per hour minimums for residential buildings in ASHRAE 62.2, Ventilation for Acceptable Indoor Air Quality, shall be the maximum rates allowed for residential applications.
2. No ventilation or air-conditioning system make-up air shall be provided to conditioned space from attics, crawlspaces, attached enclosed garages or outdoor spaces adjacent to swimming pools or spas.
3. If ventilation air is drawn from enclosed space(s), then the walls of the space(s) from which air is drawn shall be insulated to a minimum of R-11 and the ceiling shall be insulated to a minimum of R-19, space permitting, or R-10 otherwise.

R403.7 Heating and cooling equipment (Mandatory).

☐ **R403.7.1 Equipment sizing.** Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on the equipment loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies, based on building loads for the directional orientation of the building. The manufacturer and model number of the outdoor and indoor units (if split system) shall be submitted along with the sensible and total cooling capacities at the design conditions described in Section R302.1. This Code does not allow designer safety factors, provisions for future expansion or other factors that affect equipment sizing. System sizing calculations shall not include loads created by local intermittent mechanical ventilation such as standard kitchen and bathroom exhaust systems. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

TABLE R403.6.1
WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICACY

FAN LOCATION	AIRFLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY [a] (CFM/WATT)	AIRFLOW RATE MAXIMUM (CFM)
Range hoods	Any	2.8 cfm/watt	Any
In-line fan	Any	2.8 cfm/watt	Any
Bathroom, utility room	10	1.4 cfm/watt	<90
Bathroom, utility room	90	2.8 cfm/watt	Any

For SI: 1 cfm = 28.3 L/min.

a. When tested in accordance with HVI Standard 916

MANDATORY REQUIREMENTS - (Continued)

☐ **R403.7.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section 403.7, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load.

The published value for AHRI total capacity is a nominal, rating-test value and shall not be used for equipment sizing. Manufacturer's expanded performance data shall be used to select cooling-only equipment. This selection shall be based on the outdoor design dry-bulb temperature for the load calculation (or entering water temperature for water-source equipment), the blower CFM provided by the expanded performance data, the design value for entering wet-bulb temperature and the design value for entering dry-bulb temperature.

Design values for entering wet-bulb and dry-bulb temperatures shall be for the indoor dry bulb and relative humidity used for the load calculation and shall be adjusted for return side gains if the return duct(s) is installed in an unconditioned space.

Exceptions:

1. Attached single- and multiple-family residential equipment sizing may be selected so that its cooling capacity is less than the calculated total sensible load but not less than 80 percent of that load.
2. When signed and sealed by a Florida-registered engineer, in attached single- and multiple-family units, the capacity of equipment may be sized in accordance with good design practice.

R403.7.1.2 Heating equipment capacity.

☐ **R403.7.1.2.1 Heat pumps.** Heat pump sizing shall be based on the cooling requirements as calculated according to Section R403.7.1.1, and the heat pump total cooling capacity shall not be more than 1.15 times greater than the design cooling load even if the design heating load is 1.15 times greater than the design cooling load.

☐ **R403.7.1.2.2 Electric resistance furnaces.** Electric resistance furnaces shall be sized within 4 kW of the design requirements calculated according to the procedure selected in Section R403.7.1.

☐ **R403.7.1.2.3 Fossil fuel heating equipment.** The capacity of fossil fuel heating equipment with natural draft atmospheric burners shall not be less than the design load calculated in accordance with Section R403.7.1.

☐ **R403.7.1.3 Extra capacity required for special occasions.** Residences requiring excess cooling or heating equipment capacity on an intermittent basis, such as anticipated additional loads caused by major entertainment events, shall have equipment sized or controlled to prevent continuous space cooling or heating within that space by one or more of the following options:

1. A separate cooling or heating system is utilized to provide cooling or heating to the major entertainment areas.
2. A variable capacity system sized for optimum performance during base load periods is utilized.

☐ **R403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the IECC—Commercial Provisions in lieu of Section R403.

☐ **R403.9 Snow melt and ice system controls (Mandatory)** Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F (10°C), and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F (4.8°C).

☐ **R403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections R403.10.1 through R403.10.5.

☐ **R403.10.1 Heaters.** The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater mounted on the exterior of the heater, or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

☐ **R403.10.2 Time switches.** Time switches or other control methods that can automatically turn off and on according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Pumps that operate solar- and waste-heat-recovery pool heating systems.
3. Where pumps are powered exclusively from on-site renewable generation.

☐ **R403.10.3 Covers.** Outdoor heated swimming pools and outdoor permanent spas shall be equipped with a vapor-retardant cover on or at the water surface or a liquid cover or other means proven to reduce heat loss.

Exception: Where more than 70 percent of the energy for heating, computed over an operation season, is from site-recovered energy, such as from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

☐ **R403.10.4 Gas- and oil-fired pool and spa heaters.** All gas- and oil-fired pool and spa heaters shall have a minimum thermal efficiency of 82 percent for heaters manufactured on or after April 16, 2013, when tested in accordance with ANSI Z 21.56. Pool heaters fired by natural or LP gas shall not have continuously burning pilot lights.

☐ **R403.10.5 Heat pump pool heaters.** Heat pump pool heaters shall have a minimum COP of 4.0 when tested in accordance with AHRI 1160, Table 2, Standard Rating Conditions-Low Air Temperature. A test report from an independent laboratory is required to verify procedure compliance. Geothermal swimming pool heat pumps are not required to meet this standard.

☐ **R403.11 Portable spas (Mandatory).** The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14.

SECTION R404

ELECTRICAL POWER AND LIGHTING SYSTEMS

☐ **R404.1 Lighting equipment (Mandatory).** Not less than 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

Exception: Low-voltage lighting.

R404.1.1 Lighting equipment (Mandatory). Fuel gas lighting systems shall not have continuously burning pilot lights.

2017 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

TABLE 402.4.1.1
AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

				CHECK
Project Name:	New Project lot 12	Builder Name:	SCCI	
Street:	117 Pinnacle Gln	Permit Office:		
City, State, Zip:	LakeCity , FL ,	Permit Number:		
Owner:		Jurisdiction:		
Design Location:	FL, Gainesville			

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA	
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.	
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.	
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.	
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.		
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.	
Floors (including above-garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.	
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.	
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.		
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity spaces.	
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.		
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.	
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.	
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.		
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the sub-floor or drywall.		
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.		

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

Envelope Leakage Test Report (Blower Door Test)

Residential Prescriptive, Performance or ERI Method Compliance
2017 Florida Building Code, Energy Conservation, 6th Edition

Jurisdiction:	Permit #:

Job Information

Builder: SCCI	Community:	Lot: NA
Address: 117 Pinnacle Gln		
City: LakeCity	State: FL	Zip:

Air Leakage Test Results *Passing results must meet either the Performance, Prescriptive, or ERI Method*

○ **PRESCRIPTIVE METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding 7 air changes per hour at a pressure of 0.2 inch w.g. (50 Pascals) in Climate Zones 1 and 2.

○ **PERFORMANCE or ERI METHOD**-The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding the selected ACH(50) value, as shown on Form R405-2017 (Performance) or R406-2017 (ERI), section labeled as Infiltration, sub-section ACH50.

ACH(50) specified on Form R405-2017-Energy Calc (Performance) or R406-2017 (ERI): 5.000

_____ CFM(50) x 60 ÷ 14445 Building Volume = _____ ACH(50)

☐ **PASS**

☐ When ACH(50) is less than 3, Mechanical Ventilation installation must be verified by building department.

Method for calculating building volume:

○ Retrieved from architectural plans

● Code software calculated

○ Field measured and calculated

R402.4.1.2 Testing. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), *Florida Statues*.or individuals licensed as set forth in Section 489.105(3)(f), (g), or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the*code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

During testing:
1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, back draft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Testing Company

Company Name: _____ Phone: _____

I hereby verify that the above Air Leakage results are in accordance with the 2017 6th Edition Florida Building Code Energy Conservation requirements according to the compliance method selected above.

Signature of Tester: _____ Date of Test: _____

Printed Name of Tester: _____

License/Certification #: _____ Issuing Authority: _____

wrightsoft

Load Short Form
Entire House
Stanley Crawford Construction

Job:
Date: Jan 12, 2020
By: Donna Brackeen

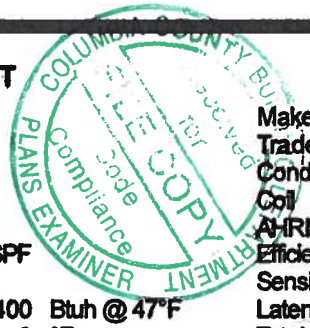
Project Information

For: Hickory Cove #12
Lake City

Design Information

	Htg	Clg
Outside db (°F)	33	93
Inside db (°F)	70	75
Design TD (°F)	38	18
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	33	50

Infiltration	
Method	Simplified
Construction quality	Average
Fireplaces	0



HEATING EQUIPMENT

Make	Goodman Mfg.
Trade	GOODMAN
Model	GSZ160361B
AHRI ref	201691846

Efficiency	8.2 HSPF	
Heating input		
Heating output	33400	Btuh @ 47°F
Temperature rise	0	°F
Actual air flow	0	cfm
Air flow factor	0	cfm/Btuh
Static pressure	0	in H2O
Space thermostat		

Capacity balance point = 27 °F

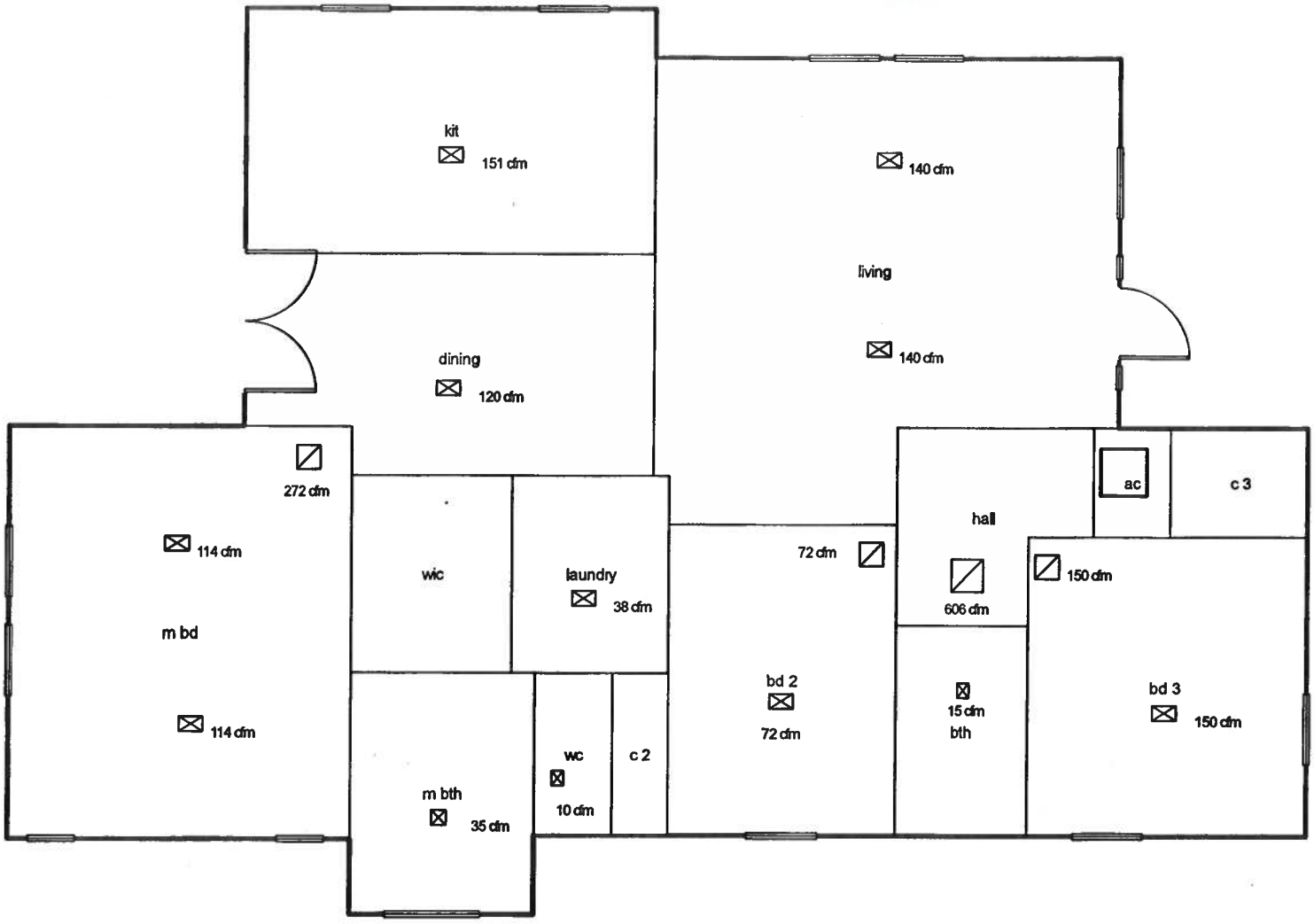
COOLING EQUIPMENT

Make	Goodman Mfg.
Trade	GOODMAN
Cond	GSZ160361B
Coil	ARUF37C14A
AHRI ref	201691846

Efficiency	11.5 EER, 14 SEER	
Sensible cooling	23100	Btuh
Latent cooling	9900	Btuh
Total cooling	33000	Btuh
Actual air flow	1100	cfm
Air flow factor	0.045	cfm/Btuh
Static pressure	0.50	in H2O
Load sensible heat ratio	0.84	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
living	352	6406	6290	0	281
kit	180	3781	3388	0	151
dining	153	1711	2699	0	120
m bd	255	5762	5091	0	227
wic	57	0	0	0	0
laundry	56	140	863	0	38
m bth	80	1757	786	0	35
wc	23	512	220	0	10
c 2	16	0	0	0	0
bd 2	128	1605	1619	0	72
bth	51	705	344	0	15
bd 3	151	4760	3365	0	150
c 3	27	0	0	0	0
ac	15	0	0	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



PLEASE NOTE: THIS FORM MUST BE ENTIRELY FILLED OUT AND RETURNED TO US WITH PLANS. BEFORE ENERGY FORM CALCULATIONS WILL BEGIN. ENERGY FORMS ARE DONE ON A FIRST COME BASIS...NORMALLY... 2 TO 5 DAYS

ENERGY CALCULATION INFORMATION

DATE: 01/13/2020

BUILDER NAME: Stanley Crawford Construction Inc.

CONTACT INFO: PHONE (386) 752-5152 FAX _____ E-MAIL SCC1@SCC183.com

JOB NAME: Hickory Cove Lot #12

JOB ADDRESS: 117 Pinnacle Gln Lake City, FL 32024

WHAT COUNTY IS JOB BEING BUILT IN? Columbia

DIRECTION HOUSE FACES: East

SET OF PLANS – DIGITAL PREFERED

1. DO YOU HAVE A COPY OF THE MANUAL J? YES ✓ NO _____
   IF YES, SKIP TO QUESTION #9.
2. LIVING AREA SQUARE FOOT: [redacted] 1,605
3. WATER HEATER SIZE (GAL) CIRCLE ONE: 20 30 40 (50) 52 66 80 TANKLESS
4. WATER HEATER: GAS ____ LP OR NATURAL GAS ELECTRIC X
5. WATER HEATER(S) LOCATIONS(S) Laundry Room
6. COOLING BTU'S: _____ SEER RATING _____
7. HVAC UNIT(S) LOCATIONS Hall Closet

8. HEATING BTU'S: _____ HSPF_____ GAS _____ ELECTRIC _____

9. ROOF: SHINGLE X METAL_____ OTHER_____

10. FLOOR:SLAB X RAISED WOOD_____ OTHER_____

11. WINDOW GLASS: CLEAR X TINTED _____

12. WINDOW FRAME MATERIAL: VINYL X WOOD___ METAL___

13. WINDOW RATINGS: S.H.G.C _____ U-VALUE _____

14. INSULATION TYPE: FIBERGLASS X SPRAY FOAM _____

15. IF THE HOUSE WILL NOT PASS CODE AS ORIGINALLY ENTERED, WHAT ARE YOUR PREFERRED UPGRADES? _____