

OK # 6340

Glenn Needs to Re-do Site Plan
See Attached Page

A. A. Rise

Columbia County Remodel Permit Application

For Office Use Only Application # 1907-62 Date Received 7/16 By JW Permit # 38523
 Zoning Official JWA Date 8-6-19 Flood Zone AE Land Use ESA Zoning A8-3
 FEMA Map # 0512C Elevation 54' MFE 55' River Santa Fe Plans Examiner T.C. Date 8-5-19
 Comments Non Habitable Bldg., Minimum floor elevation 55', need Elevation Certificate
 NOC Deed or PA Dev Permit # 19-005 In Floodway Letter of Auth. from Contractor on file
 F W Comp. letter Owner Builder Disclosure Statement Land Owner Affidavit Ellisville Water App Fee Paid
 Site Plan Env. Health Approval 19-0626 Sub VF Form 2090's signature ELIAS

before please

Applicant (Who will sign/pickup the permit) Glenn Keen Fax _____ Phone (386) 567-0156
 Address 167 SE Comet Court Lake City, FL 32024
 Owners Name NANSEA MARKHAM (Skinner) Phone (904) 502-0538
 911 Address 853 SE Julia Terrace Lake City, FL 32024
 Contractors Name C. JASON ELIXSON Phone (386) 623-1741
 Address 7490 CR 18 LAKE BUTLER, FL 32054
 Contractor Email khframing@aff.net ***Include to get updates on this job.

Fee Simple Owner Name & Address NA
 Bonding Co. Name & Address NA
 Architect/Engineer Name & Address Beue G. Schaefer, PE LLC 14705 MAINS
 Mortgage Lenders Name & Address NA Atchua, FL
 Circle the correct power company FL Power & Light Clay Elec Suwannee Valley Elec. Duke Energy 32615
 Property ID Number 26-65-17-09859-815 Estimated Construction Cost 16,000.00
 Subdivision Name Hawks Ridge Acres Lot 15 Block _____ Unit _____ Phase 2
 Driving Directions from a Major Road 41 south through Ellisville to clubhouse lane
turn left to Sydney, go to Julia Terrace, turn right
to dead end on left 12'12

Construction of WOOD SHED Commercial OR Residential
 Type of Structure (House; Mobile Home; Garage; Exxon) shed
 Use/Occupancy of the building now ACCESSORY STRUCTURE Is this changing NO
 If Yes, Explain, Proposed Use/Occupancy Garage
 Is the building Fire Sprinkled? NO If Yes, blueprints included _____ Or Explain _____
 Entrance Changes (Ingress/Egress) NO If Yes, Explain _____

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

Glenn was advised on what's needed 7-17-19

Call-spoke to Glenn 8-6-19

SFD Permit 36622 finalized 10/30/18

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.

Nansea Markham
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.

Contractor's Signature

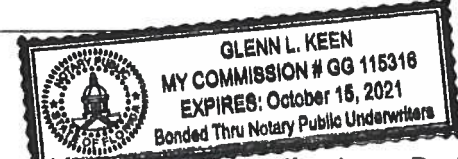
Contractor's License Number CBC1250331
Columbia County
Competency Card Number 708

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 12th day of July 2019.

Personally known or Produced Identification

State of Florida Notary Signature (For the Contractor)

SEAL:





STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL
SYSTEM

CR # 10-6761

PERMIT NO. 19-0626
DATE PAID: 8/16/19
FEE PAID: 205.00
RECEIPT #: 1429052

APPLICATION FOR CONSTRUCTION PERMIT

APPLICATION FOR:

New System Existing System Holding Tank Innovative
 Repair Abandonment Temporary

APPLICANT: LARRY & NANCY SKINNER

AGENT: GLEN KEEN

TELEPHONE: (386) 867-0156

MAILING ADDRESS: 167 SE COMET COURT

LAKE CITY

FL 32024

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: 15 BLOCK: N/A SUBDIVISION: HAWK RIDGE ACRES URSD PLATTED: _____

PROPERTY ID #: 26-6S-17-09859-815 ZONING: AG I/M OR EQUIVALENT: NO

PROPERTY SIZE: 10.560 ACRES WATER SUPPLY: PRIVATE PUBLIC <=2000GPD >2000GPD

IS SEWER AVAILABLE AS PER 381.0065, FS? NO DISTANCE TO SEWER: N/A FT

PROPERTY ADDRESS: 853 SE JULIA TER.

DIRECTIONS TO PROPERTY:

441 SOUTH PAST I-75, TURN LEFT ON CLUB HOUSE RD. TURN RIGHT ON SIDNEY ST. TURN RIGHT ON JULIA TER.

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	2	1,536	HOUSE
2			288	ART STUDIO
3			1,824	TOTAL
4				

Floor/Equipment Drains Other (Specify) _____

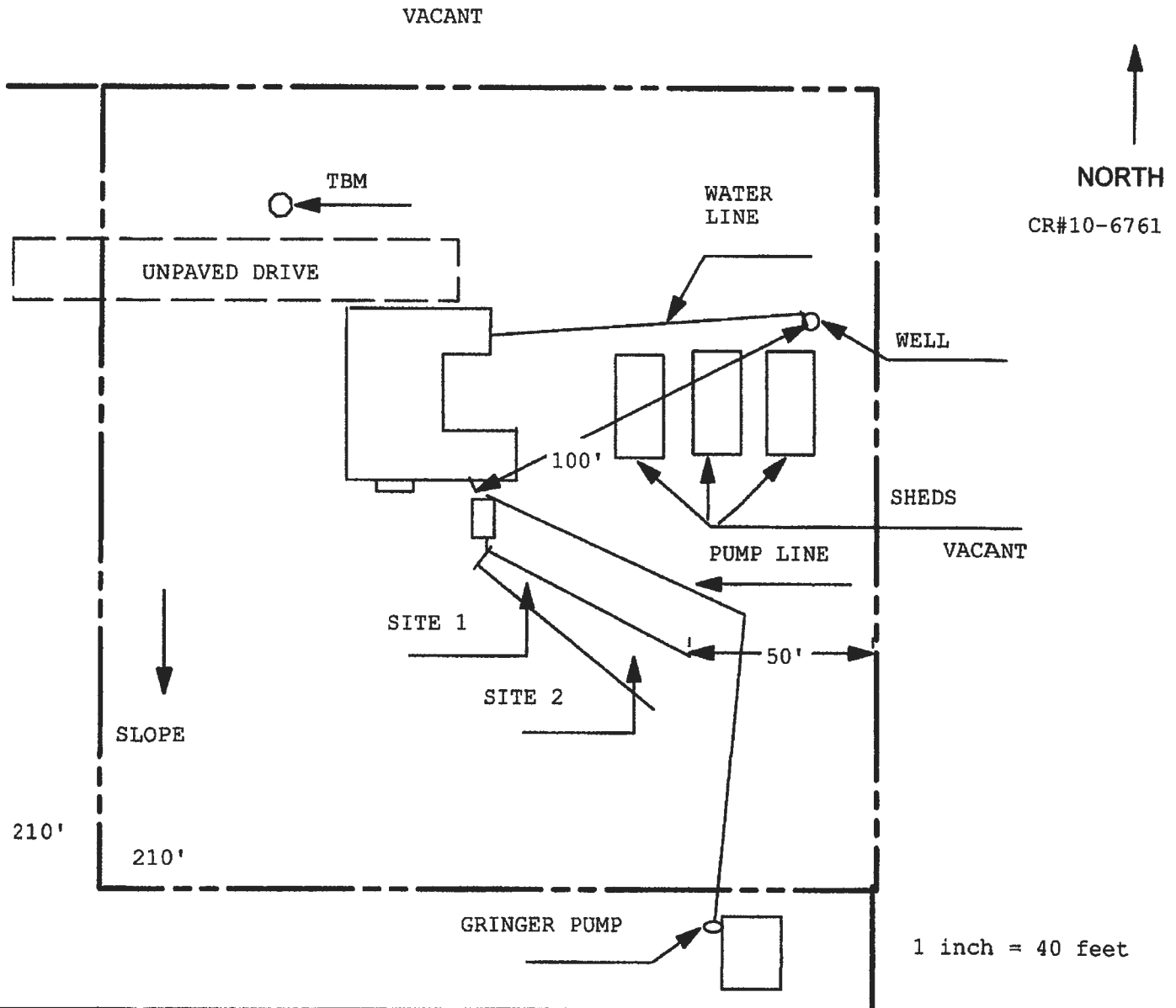
SIGNATURE: [Signature]

DATE: 8/12/19

Application for Onsite Sewage Disposal System Construction Permit. Part II Site Plan

Permit Application Number: 19-0620

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT



Site Plan Submitted By _____ Date _____
 Plan Approved X Not Approved _____ Date 8/20/19

By [Signature] EST [Signature] CPHU

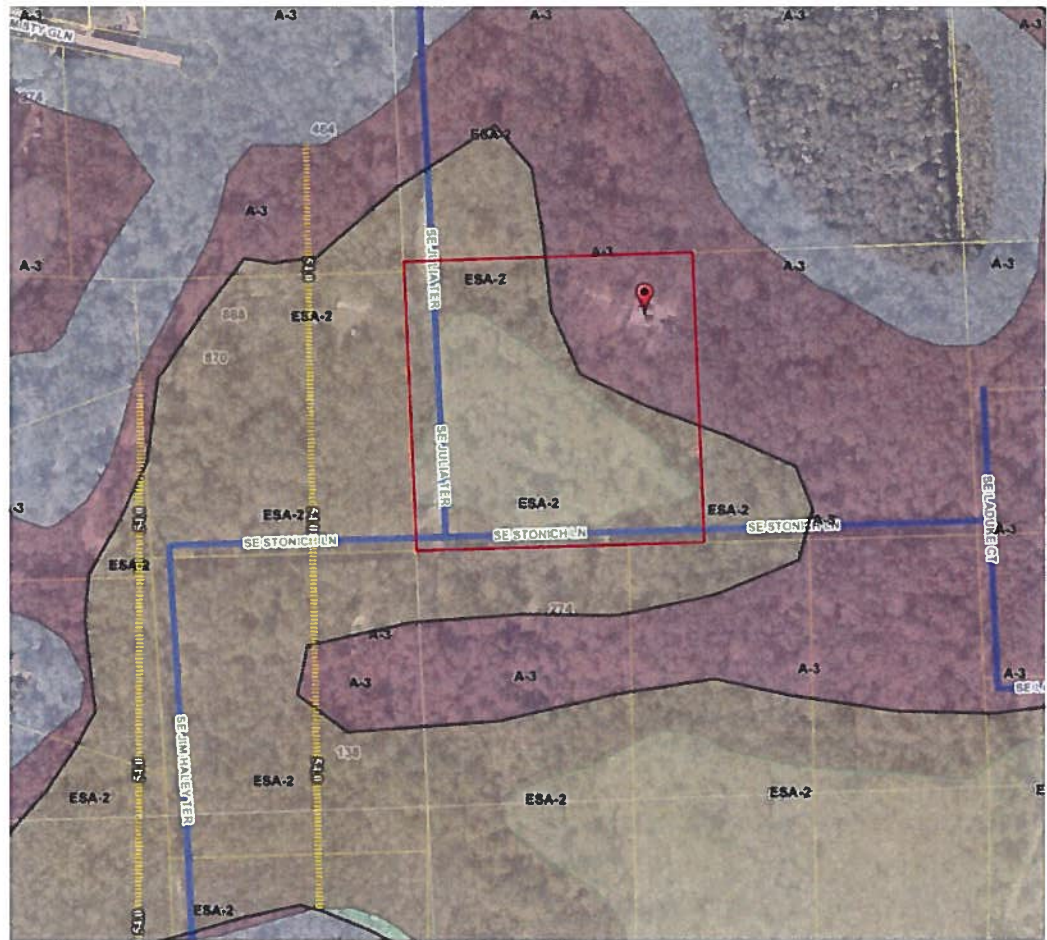
Notes: _____

Legend

- Parcels
- 2018Aerials
- Addresses
- SRWMD Wetlands
- SectionTownshipAndRange
- 2018 Flood Zones
 - 0.2 PCT ANNUAL CHANCE
 - A
 - AE
 - AH
- Roads
 - Roads
 - others
 - Dirt
 - Interstate
 - Main
 - Other
 - Paved
 - Private
- DevZones1
 - others
 - A-1
 - A-2
 - A-3
 - CG
 - CHI
 - CI
 - CN
 - CSV
 - ESA-2
 - I
 - ILW
 - MUD-1
 - PRD
 - PRRD
 - RMF-1
 - RMF-2
 - RO
 - RR
 - RSF-1
 - RSF-2
 - RSF-3
 - RSF/MH-1
 - RSF/MH-2
 - RSF/MH-3
 - DEFAULT
- Addressing:2018 Base Flood Elevations Group
- 2018 Base Flood Elevations
 - DEFAULT
 - Base Flood Elevations
- 2018 Base Flood Elevation Zones
 - 0.2 PCT ANNUAL CHANCE
 - A
 - AE
 - AH

Columbia County, FLA - Building & Zoning Property Map

Printed: Tue Aug 06 2019 08:30:36 GMT-0400 (Eastern Daylight Time)



Parcel Information

Parcel No: 26-6S-17-09859-815
 Owner: SKINNER LARRY &
 Subdivision: HAWKS RIDGE ACRES UNR
 Lot:
 Acres: 11.193778
 Deed Acres: 10.56 Ac
 District: District 4 Toby Witt
 Future Land Uses: Environmentally Sensitive Areas -1
 Flood Zones: AE
 Official Zoning Atlas: A-3, ESA-2

All data, information, and maps are provided "as is" without warranty or any representation of accuracy, timeliness of completeness. Columbia County, FL makes no warranties, express or implied, as to the use of the information obtained here. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts all limitations, including the fact that the data, information, and maps are dynamic and in a constant state of maintenance, and update.

Legend

Parcels

2018Aerials

Addresses

SRWMD Wetlands

SectionTownshipAndRange

2018 Flood Zones

0.2 PCT ANNUAL CHANCE

A

AE

AH

Roads

Roads

others

Dirt

Interstate

Main

Other

Paved

Private

DevZones1

others

A-1

A-2

A-3

CG

CHI

CI

CN

CSV

ESA-2

I

ILW

MUD-1

PRD

PRRD

RMF-1

RMF-2

RO

RR

RSF-1

RSF-2

RSF-3

RSF/MH-1

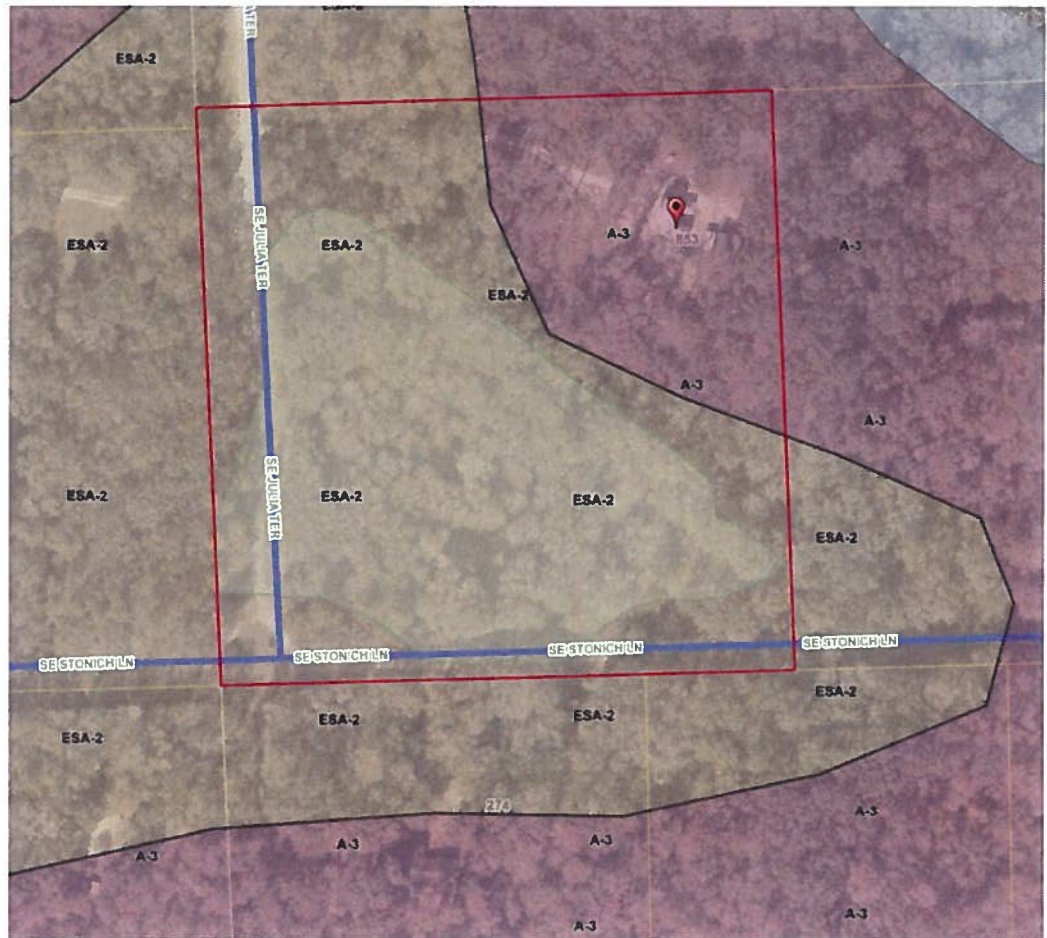
RSF/MH-2

RSF/MH-3

DEFAULT

Columbia County, FLA - Building & Zoning Property Map

Printed: Tue Aug 06 2019 08:27:32 GMT-0400 (Eastern Daylight Time)



Parcel Information

Parcel No: 26-6S-17-09859-815

Owner: SKINNER LARRY &

Subdivision: HAWKS RIDGE ACRES UNR

Lot:

Acres: 11.193778

Deed Acres: 10.56 Ac

District: District 4 Toby Witt

Future Land Uses: Environmentally Sensitive Areas -1

Flood Zones: AE

Official Zoning Atlas: A-3, ESA-2

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Legend

Parcels

2018Aerials

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SRWMD Wetlands

Roads

Roads

others

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Interstate

Main

Other

Paved

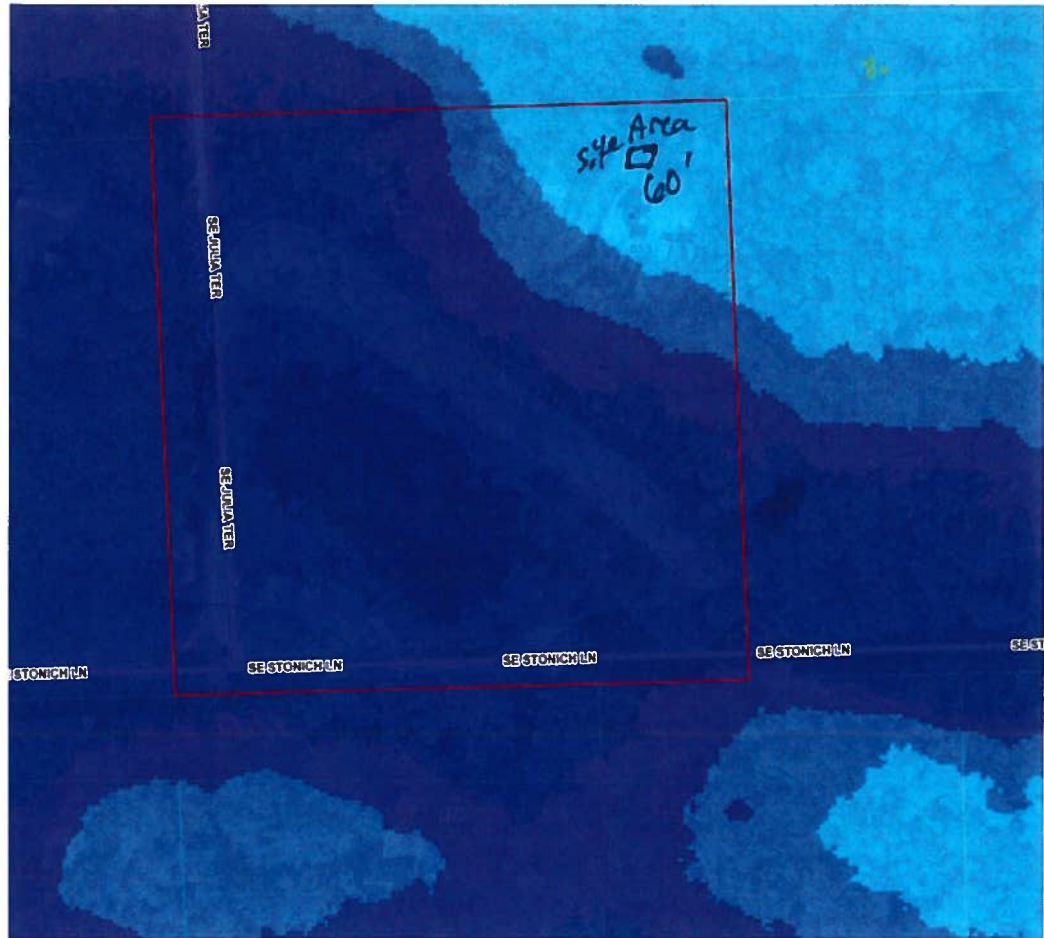
Private

Lidar Elevations



Columbia County, FLA - Building & Zoning Property Map

Printed: Tue Aug 06 2019 09:01:38 GMT-0400 (Eastern Daylight Time)



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NOTICE OF COMMENCEMENT

Clerk's Office Stamp
Inst: 201912016338 Date: 07/16/2019 Time: 12:33PM
Page 1 of 1 B: 1388 P: 2614, P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy Clerk

Tax Parcel Identification Number:

26-65-17-09859-815

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description):
a) Street (job) Address: 853 SE Julia Terrace

2. General description of improvements: SHIP/ART STUDIO

3. Owner Information or Lessee information if the Lessee contracted for the improvements:
a) Name and address: NANSEA MARKHAM 853 SE Julia TERRACE LAKECITY, FL 32024
b) Name and address of fee simple titleholder (if other than owner)
c) Interest in property

4. Contractor Information
a) Name and address: JASON ELIXSON CONSTRUCTION, LLC. 7490 CR 18 LAKE BUTLER 32054 FL
b) Telephone No.: 386-823-1791

5. Surety Information (if applicable, a copy of the payment bond is attached):
a) Name and address:
b) Amount of Bond:
c) Telephone No.:

6. Lender
a) Name and address:
b) Phone No.:

7. Person 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:
a) Name and address:
b) Telephone No.:

8. In addition to himself or herself, Owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(l)(b), Florida Statutes:
a) Name: OF
b) Telephone No.:

9. Expiration date of Notice of Commencement (the expiration date will be 1 year from the date of recording unless a different date is specified):

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR 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 YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

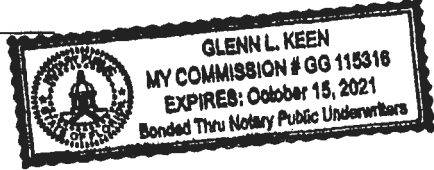
STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Signature of Owner or Lessee, or Owner's or Lessee's Authorized Office/Director/Partner/Manager
NANSEA MARKHAM
Printed Name and Signatory's Title/Office

The foregoing instrument was acknowledged before me, a Florida Notary, this 12th day of July, 2019, by:
Nansea Markham as owner for
(Name of Person) (Type of Authority) (name of party on behalf of whom instrument was executed)

Personally Known OR Produced Identification Type

Notary Signature Notary Stamp or Seal:



SUBCONTRACTOR VERIFICATION

APPLICATION/PERMIT # _____ JOB NAME Markham Shed

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 <input checked="" type="checkbox"/>	Print Name <u>Dennis Conklin</u> Signature <u>Don Conklin</u> Company Name: <u>D&S Electrical Erection RUDOCK</u> License #: <u>EC13003800</u> Phone #: <u>(386) 623 9055</u>	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
MECHANICAL/ A/C <input type="checkbox"/> CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
PLUMBING/ GAS <input type="checkbox"/> CC# <u>759</u>	Print Name <u>Roger Whiddon</u> Signature <u>its attached</u> Company Name: <u>Lake City Plumbing</u> License #: <u>CFC1428686</u> Phone #: <u>386 759-7367</u>	Need <input type="checkbox"/> Lic <input checked="" type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
ROOFING <input checked="" type="checkbox"/>	Print Name <u>Jason Elixson</u> Signature <u>[Signature]</u> Company Name: <u>JASON ELIXSON CONSTRUCTION LLC</u> License #: <u>CCC1325777</u> Phone #: <u>386-623-1741</u>	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
SHEET METAL <input type="checkbox"/> CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
FIRE SYSTEM/ SPRINKLER <input type="checkbox"/> CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
SOLAR <input type="checkbox"/> CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE
STATE <input type="checkbox"/> SPECIALTY CC# _____	Print Name _____ Signature _____ Company Name: _____ License #: _____ Phone #: _____	Need <input type="checkbox"/> Lic <input type="checkbox"/> Liab <input type="checkbox"/> W/C <input type="checkbox"/> EX <input type="checkbox"/> DE

SKINNER/MARKHAM SHED

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER 190762 CONTRACTOR JASON ELIXSON PHONE (386) 623-1741
THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County 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 permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

Any changes, the permitted contractor is responsible for the corrected form being submitted to this office prior to the start of that subcontractor beginning any work. Violations will result in stop work orders and/or fines.

ELECTRICAL	Print Name _____ License #: _____	Signature _____ Phone #: _____
MECHANICAL/ A/C _____	Print Name _____ License #: _____	Signature _____ Phone #: _____
PLUMBING/ GAS <u>759</u>	Print Name <u>Roger Whiddon</u> License #: <u>CFC1428686</u>	Signature <u>RWhiddon</u> Phone #: <u>386-754-7367</u>
ROOFING	Print Name _____ License #: _____	Signature _____ Phone #: _____
SHEET METAL	Print Name _____ License #: _____	Signature _____ Phone #: _____
FIRE SYSTEM/ SPRINKLER	Print Name _____ License #: _____	Signature _____ Phone #: _____
SOLAR	Print Name _____ License #: _____	Signature _____ Phone #: _____

*ONE TIME ONLY!!
OBSOLETE FORM
7.17.19*

Prepared by and return to:

Clay Martin
Attorney at Law
Folds, Walker & Maltby, LLC
527 East University Avenue
Gainesville, FL 32601
352-372-1282
File No. Skinner

Inst: 201912011423 Date: 05/17/2019 Time: 1:37PM
Page 1 of 2 B: 1384 P: 2218. P.DeWitt Cason, Clerk of Court
Columbia, County, By: BD
Deputy ClerkDoc Stamp-Deed: 0.70

[Space Above This Line For Recording Data]

Special Warranty Deed

This Special Warranty Deed made this 15th day of May, 2019 between Larry Douglas Skinner, an unmarried man, whose post office address is 1801 Kinard Road, Bryceville, FL 32009, grantor, and Nansea Carole Markham Skinner, an unmarried woman, whose post office address is 853 SE Julia Terrace, Lake City, FL 32024, grantee:

(Whenever used herein the terms grantor and grantee include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Columbia County, Florida, to-wit:

Begin at the NW corner of SW ¼ of SW ¼ of Section 26, Township 6 South, Range 17 East, thence run North 88° 10' 07" East, along the North line of SW ¼ of SW ¼ a distance of 654.04 feet, thence South 02° 52' 16" East, 704.20 feet, thence South 88° 15' 51" West, 654.06 feet to a point on the West line of said SW ¼ of SW ¼, thence North 02° 52' 16" West, along said west line, 703.11 feet to the Point of Beginning,

Also known as LOT 15, HAWKS RIDGE ACRES PHASE 2, Unrecorded Subdivision. IN COLUMBIA COUNTY, FLORIDA.

Subject to taxes for 2019 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

THIS INSTRUMENT WAS PREPARED AT THE REQUEST OF, AND UNDER THE INSTRUCTION OF, THE GRANTOR, LARRY DOUGLAS SKINNER, WITHOUT BENEFIT OF TITLE EXAMINATION. NO REVIEW OR EXAMINATION OF TITLE TO THE ABOVE-DESCRIBED PROPERTY HAS BEEN MADE BY CLAY MARTIN, OR THE FIRM OF FOLDS, WALKER & MALTBY, LLC AND THE DESCRIPTION WAS DERIVED WITHOUT A SURVEY AND NO OPINIONS OR REPRESENTATIONS ARE BEING MADE EITHER EXPRESSLY OR IMPLIEDLY BY SUCH INDIVIDUAL OR FIRM AS TO THE ACCURACY OF SAID DESCRIPTION.

This is a conveyance between spouses or former spouses pursuant to a Marital Settlement Agreement filed with the Court on May 7, 2019, and a Final Judgment of Dissolution of Marriage entered May 8, 2019, at Official Records Book 4683, Page 1758, Official Records of Alachua County, Florida, in Alachua County Case No. 01-2019-DR-0074, following an action for dissolution of their marriage, wherein the real property described herein was their marital home, and therefore no documentary stamps are due pursuant to Florida Statute 201.02(7), (2018).

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under grantors.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Amanda Gregory
Witness Name: _____

Larry Douglas Skinner
Larry Douglas Skinner

Lisa Knox
Witness Name: _____

State of Florida
County of Alachua

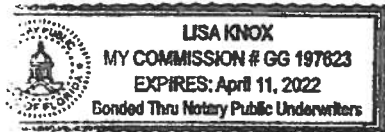
The foregoing instrument was acknowledged before me this 15th day of May, 2019 by Larry Douglas Skinner, who is personally known or has produced a driver's license as identification.

[Notary Seal]

Lisa Knox
Notary Public

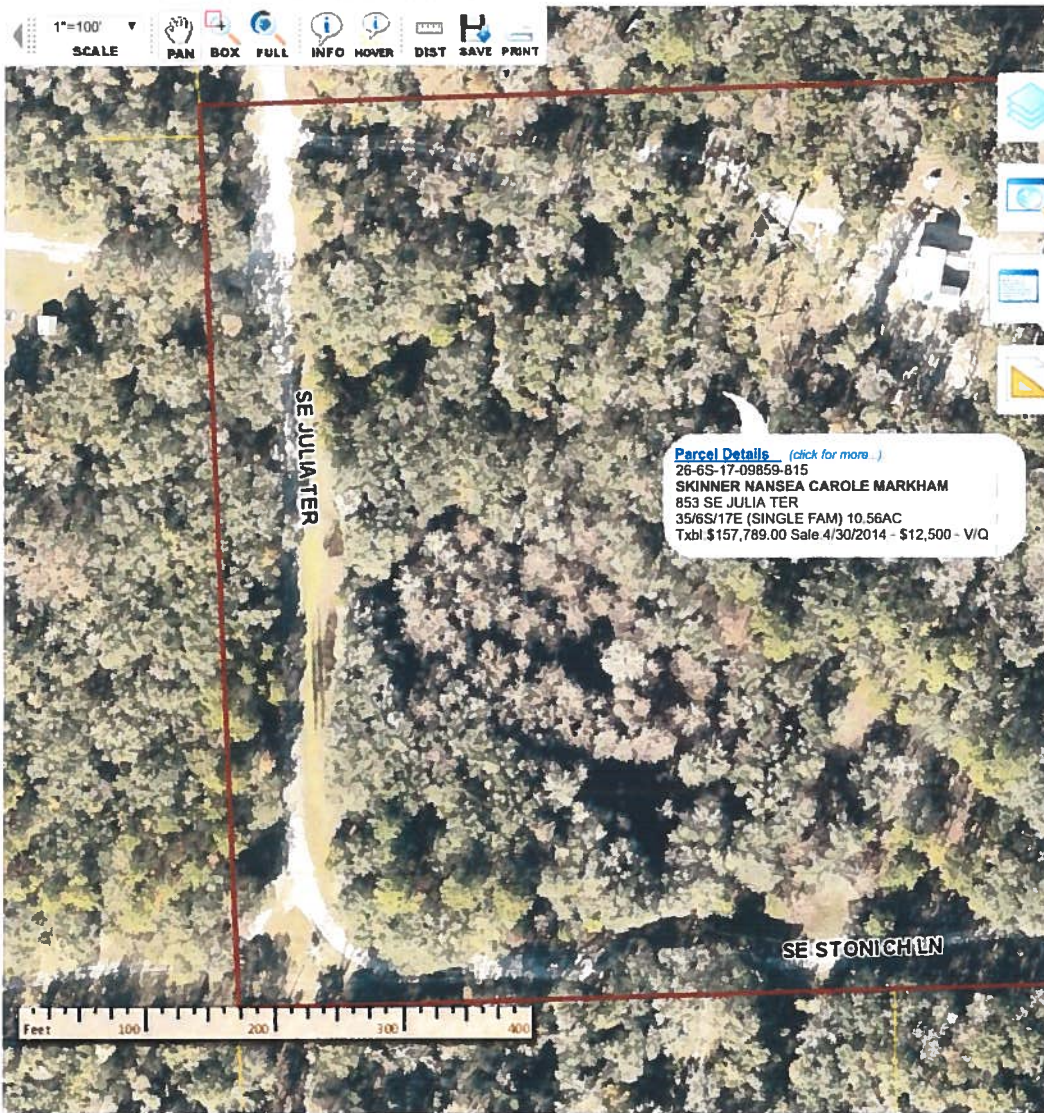
Printed Name: Lisa Knox

My Commission Expires: 4-11-2022



HOME

Record Search Search Results Parcel Details GIS Map



Parcel Details [\(click for more...\)](#)
 26-6S-17-09859-815
SKINNER NANSEA CAROLE MARKHAM
 853 SE JULIA TER
 35/6S/17E (SINGLE FAM) 10.56AC
 Txb1 \$157,789.00 Sale 4/30/2014 - \$12,500 - V/Q

Parcel Details

External Map Links

- Pictometry 3D Oblique Aerials
- GoogleEarth [KML export](#)
- GoogleMaps by Address [Polygon](#)
- Bing Maps 2D Aerial [Bird's eye](#)

Owner Info

[<< zoom](#) 26-6S-17-09859-815 ()
SKINNER NANSEA CAROLE MARKHAM
 853 SE JULIA TER
 LAKE CITY, FL 32024
 Site: 853 JULIA TER, LAKE CITY
 Use: SINGLE FAM (000100) | 10.56 AC
 Desc: 35-6S-17E | AKA LOT 15 HAWKS RIDGE ACRES UNREC.
 BEG NW COR OF SW1/4 OF SW1/4, RUN E 654.04 F

2018 Certified Values

Mkt Lnd (1)	\$13,400	Appraised	\$157,789
Ag Lnd (0)	\$0	Exempt	\$0
Bldg (1)	\$137,981	Assessed	\$157,789
XFOB (3)	\$6,408		county: \$157,789
Just	\$157,789	Total	city: \$157,789
Class	\$0	Taxable	other: \$157,789
			school: \$157,789

Sales

5/15/2019	\$100	1384/2218	WD	I / U
4/30/2014	\$12,500	1274/0650	WD	V / Q
1/26/2001	\$18,500	919/0080	WD	V / Q

Building Characteristics

Item	Desc	Year Blt	Heated SF	Actual SF	Value
Sketch 1	SINGLE FAM (000100)	2018	1552	1760	\$137,981

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0296	SHED METAL	2018	\$2,376.00	264	11 x 24 x 0	(000.00)
0296	SHED METAL	2018	\$2,592.00	288	12 x 24 x 0	(000.00)
0296	SHED METAL	2018	\$1,440.00	160	10 x 16 x 0	(000.00)

Land Breakdown

Land Code	Desc	Units	Adjustments	Eff Ratio	Land Value
000100	SFR (MKT)	10.560 AC	1.00/1.00	0.50/0.80	\$1,269 \$13,400

CAROL CHADWICK, P.E.

Civil Engineer

1208 S.W. Fairfax Glen

Lake City, FL 32025

307.680.1772

ccpewyo@gmail.com

June 10, 2019

ONE FOOT RISE CERTIFICATION

Owner: Larry & Nansea Skinner

Property Address: 853 SE Julia Terrace
Lake City, FL 32024

Property Description: Lot 15, Hawks Ridge Acres Phase 2
Section 26, Township 6 South, Range 17 East
Columbia County, Florida

Structure in Floodway: 288 s.f. cottage

River Mile: RS 33.57

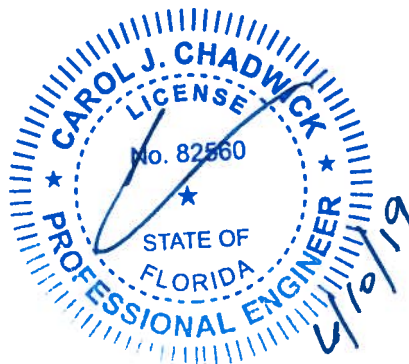
Elevation of 100-year flood: 54.0 feet

Community Panel: I 20070 05 12C

I hereby certify that the construction of the proposed residence will not obstruct flow or cause more than a 1.00 foot rise in the 100-year flood elevation of the Santa Fe River.

Carol Chadwick, P.E.

CC Job FL18008



ONE FOOT RISE REPORT

Prepared for:

LARRY & NANSEA SKINNER

853 S.E. Julia Terrace
Lake City, FL

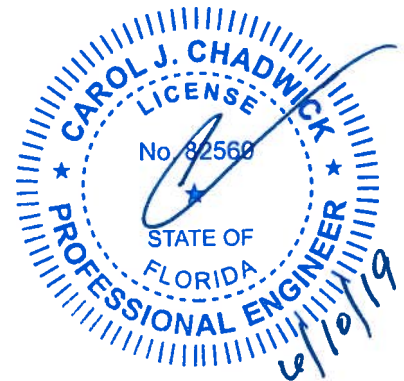
Lot 15, Hawks Ridge Acres Phase 2
Section 26, Township 6 South, Range 17 East

Columbia County, Florida

June 10, 2019

Prepared by:

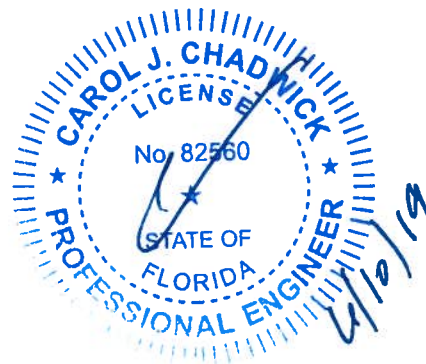
Carol Chadwick, P.E.
307.680.1772
ccpewyo@gmail.com



This document was originally issued and sealed by Carol Chadwick, P.E., registration number 82560 on the date shown and the original document is stored at her office.

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Project Description	2
Analysis	2
Conclusion	3
One Foot Rise Certification	4
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PROJECT DESCRIPTION

Larry and Nansea Skinner would like to permit additional improvements to Lot 15, Hawks Ridge Acres Phase 2 located in Section 26, Township 6 South, Range 157 East, Columbia County, Florida. Property address is 853 S.E. Julia Terrace, Lake City, FL. The parcel number for the property is 26-65-17-09859-815.

A previous One Foot Rise Report, dated April 20, 2018, was for the construction of a new two-story home. See that report for additional information.

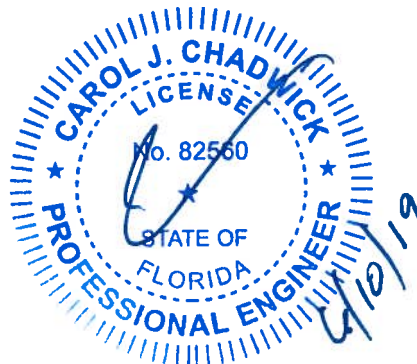
The owners would like to permit the construction of a 288 s.f. cottage. The proposed structure is not located within 75 feet of the Santa Fe River.

The river station (RS) was determined by approximating the river centerline from a combination of the GIS property lines and an aerial image. The stationing was verified by comparing the I-75 bridge at RS 37.165 in the HEC-RAS model obtained from SRWMD to the river station obtained from the estimated river centerline.

The elevation of the proposed building site has an approximate elevation of 57.0. The base flood elevation is 54.0 per the Columbia County Flood map. The structure will automatically have a lowest finished floor elevation that exceeds the minimum of 55.00. In the future, the owners may elect to file a LOMA with FEMA to have the portion of the lot with elevation greater than the BFE removed from the floodplain.

ANALYSIS

A One Foot Rise Certification is attached. Per the previous permit, a HEC-RAS analysis was performed. Calculations verify that the addition of the cottage will not result in a rise of the water surface elevation. Table 1 shows the profile data for pre-development conditions and Table 2 shows the profile data for post-development conditions.



Profile Output Table - Standard Table 1

File Options Std. Tables Locations Help

HEC-RAS Plan: FW Locations: User Defined

River	Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Santa Fe	Main	37.07	100 Year	32569.00	30.94	54.53		54.59	0.000067	2.61	56444.23	4392.82	0.10
Santa Fe	Main	37.07	FW	32569.00	30.94	55.38		55.43	0.000067	2.68	51175.63	3588.00	0.10
Santa Fe	Main	35.58	100 Year	32569.00	29.84	53.92		54.01	0.000117	3.16	46474.15	6110.48	0.13
Santa Fe	Main	35.58	FW	32569.00	29.84	54.78		54.87	0.000108	3.13	43371.51	5126.48	0.13
Santa Fe	Main	35.57	100 Year	32569.00	29.84	53.92		54.01	0.000117	3.16	46459.44	6109.81	0.13
Santa Fe	Main	35.57	FW	32569.00	29.84	54.78		54.87	0.000109	3.13	43360.13	5126.37	0.13

Table 1. Pre-development profile data.

Profile Output Table - Standard Table 1

File Options Std. Tables Locations Help

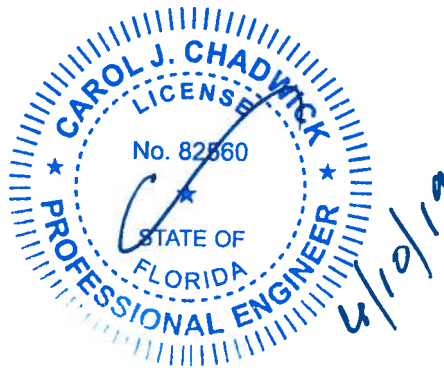
HEC-RAS Plan: FW Locations: User Defined

River	Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Santa Fe	Main	37.07	100 Year	32569.00	30.94	54.53		54.59	0.000067	2.61	56444.28	4392.82	0.10
Santa Fe	Main	37.07	FW	32569.00	30.94	55.38		55.43	0.000067	2.68	51175.63	3588.00	0.10
Santa Fe	Main	35.58	100 Year	32569.00	29.84	53.92		54.01	0.000117	3.16	46474.27	6110.48	0.13
Santa Fe	Main	35.58	FW	32569.00	29.84	54.78		54.87	0.000108	3.13	43371.51	5126.48	0.13
Santa Fe	Main	35.57	100 Year	32569.00	29.84	53.92		54.01	0.000117	3.16	46391.48	6070.58	0.13
Santa Fe	Main	35.57	FW	32569.00	29.84	54.78		54.87	0.000109	3.13	43360.13	5126.37	0.13

Table 2. Post-development profile data.

CONCLUSION

Calculations show no obstruction of flow. The water surface elevations for all three runs show no increase; therefore, there will be no rise in the base flood elevation and a one foot rise is achieved.



ONE FOOT RISE CERTIFICATION

CAROL CHADWICK, P.E.

Civil Engineer

1208 S.W. Fairfax Glen

Lake City, FL 32025

307.680.1772

ccpewyo@gmail.com

June 10, 2019

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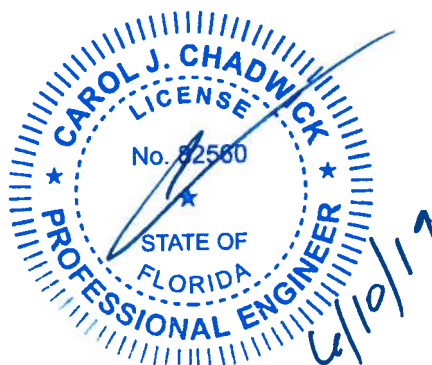
Elevation of 100-year flood: 54.0 feet

Community Panel: 120070 0512C

I hereby certify that the construction of the proposed residence will not obstruct flow or cause more than a 1.00 foot rise in the 100-year flood elevation of the Santa Fe River.

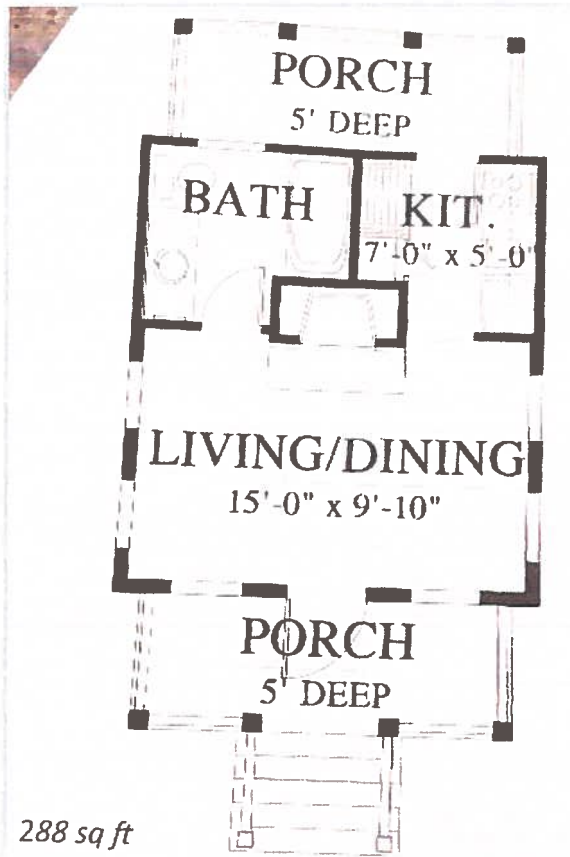
Carol Chadwick, P.E.

CC Job FL18008

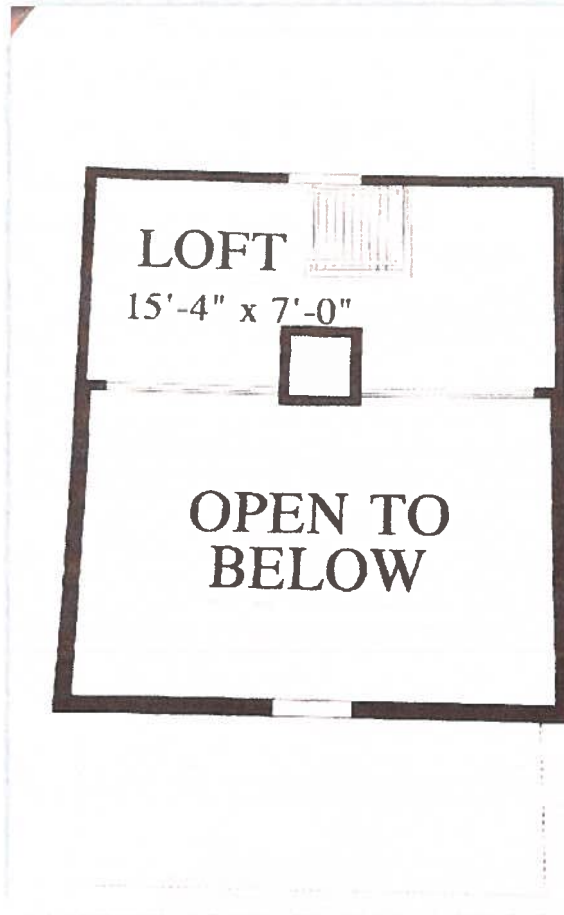


ARCHITECTURAL PLANS





288 sq ft



Legend

- Parcels
- Roads
 - Roads
 - others
 - Dirt
 - Interstate
 - Main
 - Other
 - Paved
 - Private
- 2018Aerials
- DevZones1
 - others
 - A-1
 - A-2
 - A-3
 - CG
 - CHI
 - CI
 - CN
 - CSV
 - ESA-2
 - I
 - ILW
 - MUD-1
 - PRD
 - PRRD
 - RMF-1
 - RMF-2
 - RO
 - RR
 - RSF-1
 - RSF-2
 - RSF-3
 - RSF/MH-1
 - RSF/MH-2
 - RSF/MH-3
 - DEFAULT

Columbia County, FLA - Building & Zoning Property Map

Printed: Mon Aug 05 2019 09:39:49 GMT-0400 (Eastern Daylight Time)



Parcel Information

Parcel No: 26-6S-17-09859-815
 Owner: SKINNER LARRY &
 Subdivision: HAWKS RIDGE ACRES UNR
 Lot:
 Acres: 11.193778
 Deed Acres: 10.56 Ac
 District: District 4 Toby Witt
 Future Land Uses: Environmentally Sensitive Areas -1
 Flood Zones: AE
 Official Zoning Atlas: A-3, ESA-2

All data, information, and maps are provided "as is" without warranty or any representation of accuracy, timeliness or completeness. Columbia County, FL makes no warranties, express or implied, as to the use of the information obtained here. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts all limitations, including the fact that the data, information, and maps are dynamic and in a constant state of maintenance, and update.

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[Skip to content](#)



Columbia County, FL | Permit Details

Search columbiacountyfla.com

search columbia county fla website

New Residential Construction Permit

Permit #:	000036622
Related Permit :	
Issued :	Tuesday, April 24, 2018
Expires :	Wednesday, April 24, 2019
Completed/Closed :	Tuesday, October 30, 2018
Current Status :	Completed
Septic Release? :	Yes
Subdivision:	HAWKS RIDGE UNREC.
Parcel #:	09859-815
Acres:	10.56
Owner:	LARRY & NANSEA SKINNER
Job Address:	853 SE JULIA TERRACE LAKE CITY, FL 32025
Zoning:	AG-3

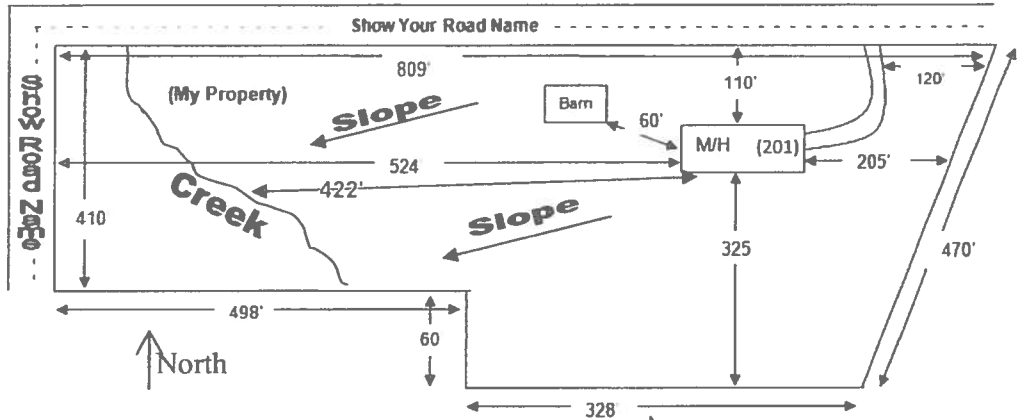
Passed: Plumbing/Gas - Underground Rough-In		TROY CREWS	5/14/2018
Passed: Building - Slab		TOMMY MATTHEWS	5/16/2018
Passed: Building - Ext Strapping/Wall Sheathing		TROY CREWS	5/29/2018
Passed: Building - Framing		TROY CREWS	7/9/2018
Passed: Electrical - Rough In		TROY CREWS	7/9/2018
Passed: Mechanical - Rough In		TROY CREWS	7/9/2018
Passed: Plumbing/Gas - Rough In		TROY CREWS	7/9/2018
Passed: Building - Insulation		TROY CREWS	7/16/2018
Passed: Electrical - Permanent Power	Need health release	TROY CREWS	10/1/2018
Release to power company	NEED FINISHED ELEVATION CERTIFICATE BEFORE CO IS RELEASED. EC REC'D 10/25/18	LAURIE HODSON	10/3/2018
Septic Release Inspection		HEALTH DEPT	10/3/2018
Passed: Building - Final		TROY CREWS	10/26/2018

SITE PLAN CHECKLIST

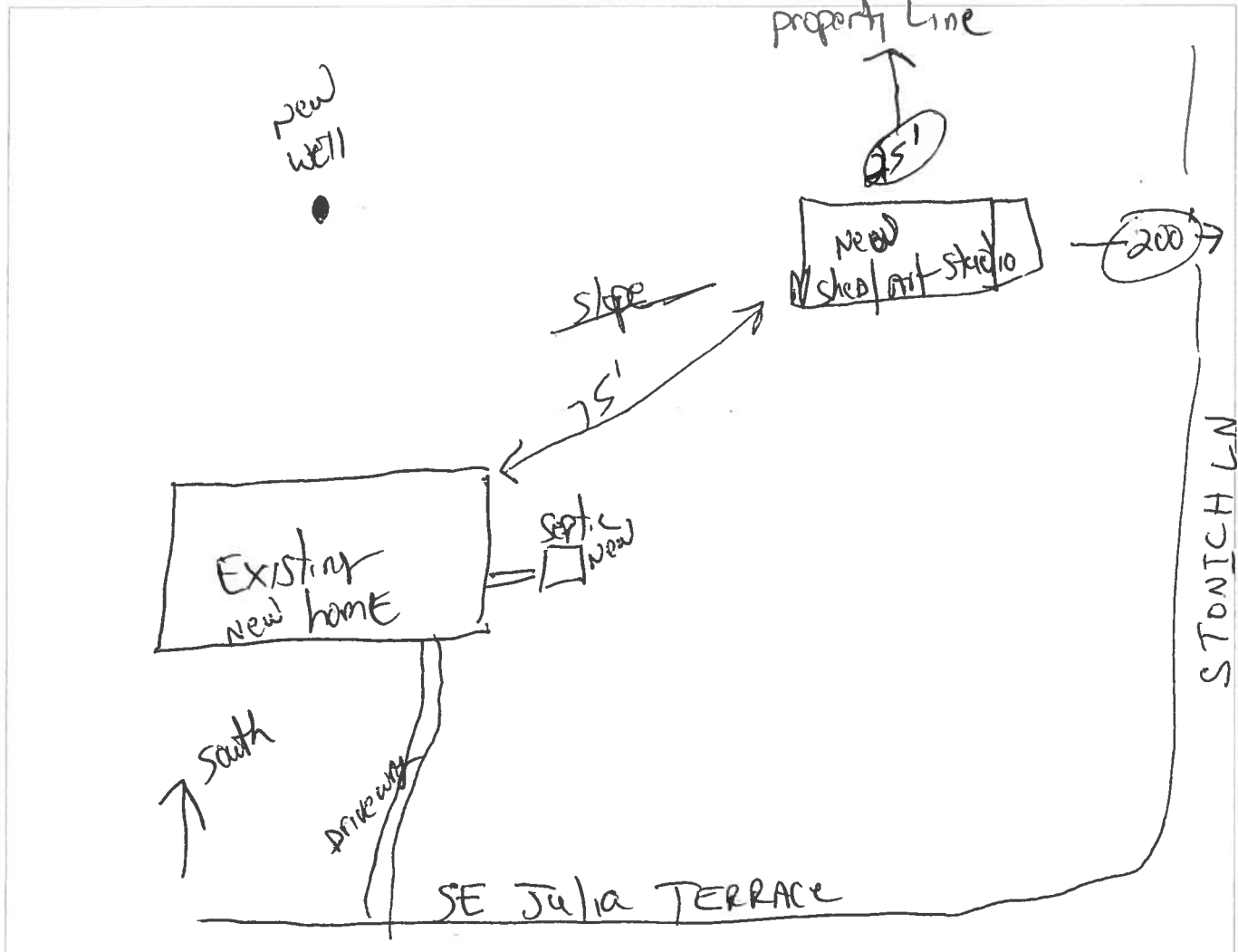
- ___ 1) Property Dimensions
- ___ 2) Footprint of proposed and existing structures (including decks), label these with existing addresses
- ___ 3) Distance from structures to all property lines
- ___ 4) Location and size of easements
- ___ 5) Driveway path and distance at the entrance to the nearest property line
- ___ 6) Location and distance from any waters; sink holes; wetlands; and etc.
- ___ 7) Show slopes and or drainage paths
- ___ 8) Arrow showing North direction

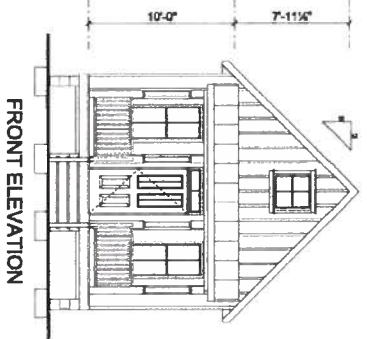
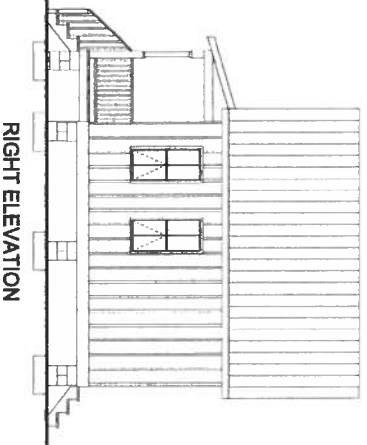
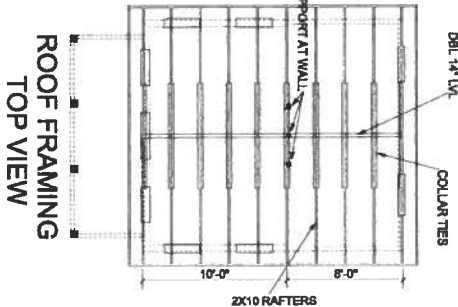
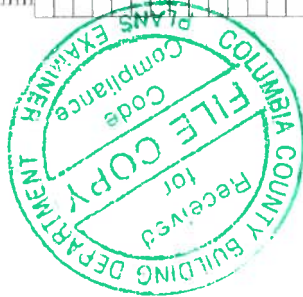
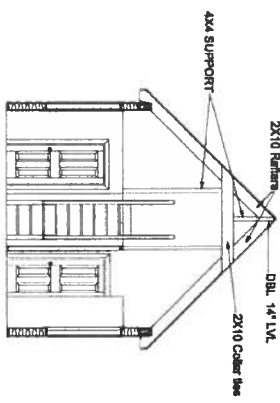
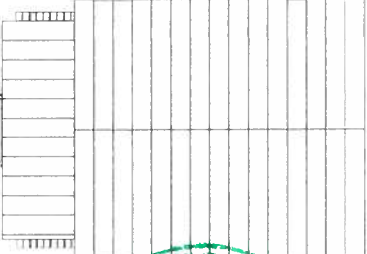
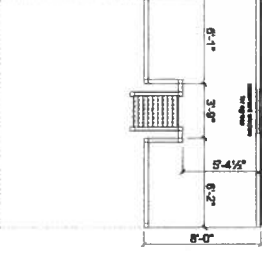
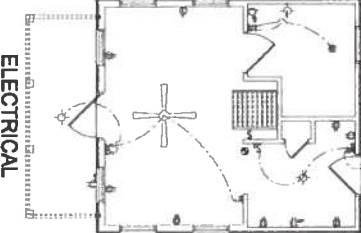
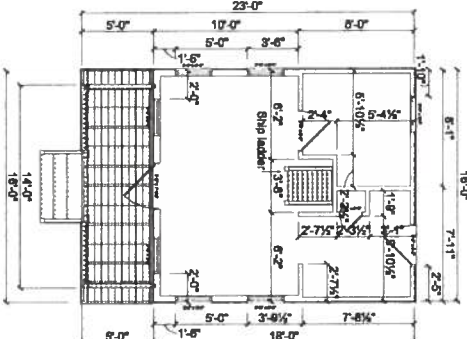
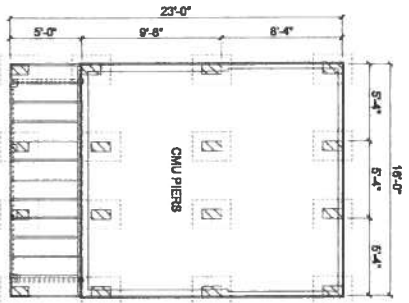
SITE PLAN EXAMPLE

Revised 7/1/15



NOTE:
This site plan can be copied and used with the 911 Addressing Dept. application forms.



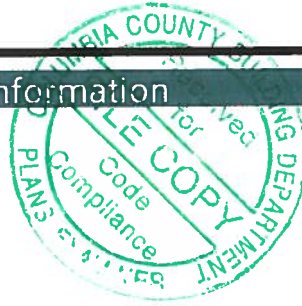


1	1/4" = 1 FOOT	SKINNER STUDIO		DRAWN BY: JASON ELIXSON CONSTRUCTION, LLC 7490 WEST CR. 18 LAKE BUTLER, FL. 32854 (386) 623-1741
		COLUMBIA CO.		

Project Information

For: Skinner

Notes:



Design Information

Weather: Gainesville Regional AP, FL, US

Winter Design Conditions

Outside db 33 °F
Inside db 70 °F
Design TD 37 °F

Summer Design Conditions

Outside db 92 °F
Inside db 75 °F
Design TD 17 °F
Daily range M
Relative humidity 50 %
Moisture difference 47 gr/lb

Heating Summary

Structure 10020 Btuh
Ducts 0 Btuh
Central vent (0 cfm)
(none) 0 Btuh
Humidification 0 Btuh
Piping 0 Btuh
Equipment load 10020 Btuh

Sensible Cooling Equipment Load Sizing

Structure 15532 Btuh
Ducts 0 Btuh
Central vent (0 cfm)
(none) 0 Btuh
Blower 0 Btuh
Use manufacturer's data n
Rate/swing multiplier 0.97
Equipment sensible load 15066 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	416	416
Volume (ft³)	3328	3328
Air changes/hour	0.61	0.32
Equiv. AVF (cfm)	34	18

Latent Cooling Equipment Load Sizing

Structure 969 Btuh
Ducts 0 Btuh
Central vent (0 cfm)
(none) 0 Btuh
Equipment latent load 969 Btuh
Equipment Total Load (Sen+Lat) 16035 Btuh
Req. total capacity at 0.70 SHR 1.8 ton

Heating Equipment Summary

Make Gree
Trade
Model LIVS18HP230V1B0
AHRI ref
Efficiency 9 HSPF
Heating input
Heating output 18000 Btuh @ 47° F
Temperature rise 27 °F
Actual air flow 600 cfm
Air flow factor 0.060 cfm/Btuh
Static pressure 0.53 in H2O
Space thermostat
Capacity balance point = 0 °F
Backup:
Input = 1 kW, Output = 2848 Btuh, 100 AFUE

Cooling Equipment Summary

Make Gree
Trade
Cond LIVS18HP230V1B0
Coil LIVS18HP230V1BH
AHRI ref
Efficiency 16 SEER
Sensible cooling 12600 Btuh
Latent cooling 5400 Btuh
Total cooling 18000 Btuh
Actual air flow 600 cfm
Air flow factor 0.039 cfm/Btuh
Static pressure 0.53 in H2O
Load sensible heat ratio 0.94

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

2017 - AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

TABLE 402.4.1.1
AIR BARRIER AND INSULATION INSPECTION COMPONENT CRITERIA

Project Name: Skinner Street: City, State, Zip: , FL , Owner: Skinner Design Location: FL, Gainesville		Builder Name: Permit Office: Permit Number: Jurisdiction:		CHECK
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		
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.

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 95

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

<p>1. New home or, addition</p> <p>2. Single-family or multiple-family</p> <p>3. No. of units (if multiple-family)</p> <p>4. Number of bedrooms</p> <p>5. Is this a worst case? (yes/no)</p> <p>6. Conditioned floor area (sq. ft.)</p> <p>7. Windows, type and area a) U-factor:(weighted average) b) Solar Heat Gain Coefficient (SHGC) c) Area</p> <p>8. Skylights a) U-factor:(weighted average) b) Solar Heat Gain Coefficient (SHGC)</p> <p>9. Floor type, insulation level: a) Slab-on-grade (R-value) b) Wood, raised (R-value) c) Concrete, raised (R-value)</p> <p>10. Wall type and insulation: A. Exterior: 1. Wood frame (Insulation R-value) 2. Masonry (Insulation R-value) B. Adjacent: 1. Wood frame (Insulation R-value) 2. Masonry (Insulation R-value)</p> <p>11. Ceiling type and insulation level a) Under attic b) Single assembly c) Knee walls/skylight walls d) Radiant barrier installed</p>	<p>1. <u>New (From Plans)</u></p> <p>2. <u>Single-family</u></p> <p>3. <u>1</u></p> <p>4. <u>1</u></p> <p>5. <u>No</u></p> <p>6. <u>416</u></p> <p>7a. <u>0.300</u> 7b. <u>0.200</u> 7c. <u>75.0</u></p> <p>8a. <u>NA</u> 8b. <u>NA</u></p> <p>9a. _____ 9b. <u>18.0</u> 9c. _____</p> <p>10A1. <u>11.0</u> 10A2. _____ 10B1. _____ 10B2. _____</p> <p>11a. <u>30.0</u> 11b. _____ 11c. _____ 11d. <u>No</u></p>	<p>12. Ducts, location & insulation level a) Supply ducts R _____ b) Return ducts R _____ c) AHU location</p> <p>13. Cooling system: Capacity <u>18.0</u> a) Split system SEER <u>16.0</u> b) Single package SEER _____ c) Ground/water source SEER/COP _____ d) Room unit/PTAC EER _____ e) Other _____</p> <p>14. Heating system: Capacity <u>18.0</u> a) Split system heat pump HSPF <u>9.0</u> b) Single package heat pump HSPF _____ c) Electric resistance COP _____ d) Gas furnace, natural gas AFUE _____ e) Gas furnace, LPG AFUE _____ f) Other _____</p> <p>15. Water heating system EF <u>0.94</u> a) Electric resistance EF _____ 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 _____</p> <p>16. HVAC credits claimed (Performance Method) a) Ceiling fans _____ b) Cross ventilation <u>No</u> c) Whole house fan <u>No</u> d) Multizone cooling credit _____ e) Multizone heating credit _____ f) Programmable thermostat <u>Yes</u></p>
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*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: 8-30-19

Address of New Home: _____

City/FL Zip: FL

Florida Building Code, Energy Conservation, 6th Edition (2017)

Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS:

, 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 manufacturer's air 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.

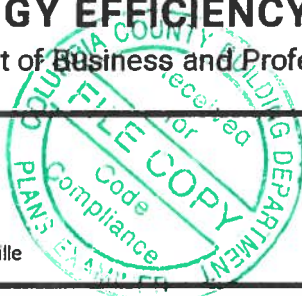
SECTION R404

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.

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method



Project Name: Skinner Street: City, State, Zip: , FL , Owner: Skinner Design Location: FL, Gainesville	Builder Name: Permit Office: Permit Number: Jurisdiction: County: Columbia (Florida Climate Zone 2)
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Glass/Floor Area: 0.180	Total Proposed Modified Loads: 23.47 Total Baseline Loads: 24.71	PASS
-------------------------	---	------

<p>I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code.</p> <p>PREPARED BY: <u>David Marrs</u> DATE: <u>8/28/19</u></p> <p>I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.</p> <p>OWNER/AGENT: <u>[Signature]</u> DATE: <u>8-30-19</u></p>	<p>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.</p> <div style="text-align: center;"> </div> <p>BUILDING OFFICIAL: _____ DATE: _____</p>
---	---

- 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).

INPUT SUMMARY CHECKLIST REPORT

WALLS

✓ #	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	In	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor	Below Grade%
1	N	Exterior	Frame - Wood	Main	11	26	0	8	0	208.0 ft²	0	0.25	0.8	0
2	E	Exterior	Frame - Wood	Main	11	32	0	8	0	256.0 ft²	0	0.25	0.8	0
3	S	Exterior	Frame - Wood	Main	11	26	0	8	0	208.0 ft²	0	0.25	0.8	0
4	W	Exterior	Frame - Wood	Main	11	32	0	8	0	256.0 ft²	0	0.25	0.8	0

DOORS

✓ #	Ornt	Door Type	Space	Storms	U-Value	Width Ft	In	Height Ft	In	Area
1	E	Wood	Main	None	.39	3		7		21 ft²
2	W	Wood	Main	None	.39	3		7		21 ft²

WINDOWS

Orientation shown is the entered, Proposed orientation.

✓ #	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Imp	Area	Overhang Depth	Separation	Int Shade	Screening
1	n	1	Vinyl	Low-E Double	Yes	0.3	0.2	N	12.5 ft²	0 ft 0 in	0 ft 0 in	None	None
2	e	2	Vinyl	Low-E Double	Yes	0.3	0.2	N	25.0 ft²	0 ft 0 in	0 ft 0 in	None	None
3	s	3	Vinyl	Low-E Double	Yes	0.3	0.2	N	25.0 ft²	0 ft 0 in	0 ft 0 in	None	None
4	W	4	Vinyl	Low-E Double	Yes	0.3	0.2	N	12.5 ft²	0 ft 0 in	0 ft 0 in	None	None

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	Wholehouse	Proposed ACH(50)	.000254	277.3	15.23	28.63	.0956	5

HEATING SYSTEM

✓ #	System Type	Subtype	Efficiency	Capacity	Block	Ducts
1	Electric Heat Pump/	Split	HSPF:9	18 kBtu/hr	1	Ductless

COOLING SYSTEM

✓ #	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
1	Central Unit/	Split	SEER: 16	18 kBtu/hr	cfm	0.7	1	Ductless

HOT WATER SYSTEM

✓ #	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
1	Electric	None	Main	0.94	40 gal	40 gal	120 deg	None

INPUT SUMMARY CHECKLIST REPORT

SOLAR HOT WATER SYSTEM

✓	FSEC Cert #	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
-----	None	None			ft ²		

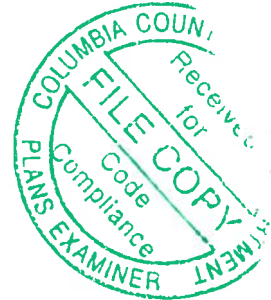
TEMPERATURES

Programable Thermostat: Y		Ceiling Fans:											
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec	
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input type="checkbox"/> Dec	
Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM	78	78	78	78	78	78	78	78	78	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	68	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	68	66

MASS

Mass Type	Area	Thickness	Furniture Fraction	Space
Default(8 lbs/sq.ft.	0 ft ²	0 ft	0.3	Main

E



Prepared for:

JASON ELIXSON CONSTRUCTION
SKINNER STUDIO
COLUMBIA COUNTY, FLORIDA

By:

Schafer Engineering, LLC CA9312

386-462-1340

NO COPIES ARE TO BE PERMITTED

SCHAFFER ENGINEERING, LLC

7104 NW 42ND LANE \ GAINESVILLE FL. 32606
PHONE: 386-462-1340

Rafters: 2 x 10 syp #2 pine rafters @ 24" o.c. max. spacing Simpson H-10 each end of rafter or equal.

Roof Sheathing: Type: OSB Size: 7/16" Fastener type nails: 8d / .113 Ring Shank
Interior zone spacing: Interior: 6" Periphery: 3"
Edge and end zone spacing: Interior: 6" Periphery: 3"

Double Top Plate: Type: Spruce Grade: #2 Size: 2 x 4 Nail Spacing: 8" o.c.

Stud Type: Spruce Grade: #2 Size: 2 x 4
Interior stud spacing: 16" End stud spacing: 16"

Required Shear Wall Siding: Type: OSB Thickness: 7/16"
12 ft Trans: Fastener 8d/131 Spacing: Int: 8 Edge: 3"
12 ft Long: Fastener 8d/131 Spacing: Int: 8 Edge: 3"

Allowable Unit Shear on Shear Walls: 418 pounds per linear foot
Allowable Unit Shear Transferred from Diaphragm: Trans: 337 Long: 192

Wall Tension Transferred by: Siding Nails: 8d/131 @ 4" O.C. Edges

(16) - 24" cmu piers with (2) - #5 rebar in fully grouted cells.
Concrete Pad Footings: (16) 24" wide x 24" x 20" deep with (3) - #5 rebar each way. Simpson PA68 for outboard concrete pads to wall connections.
Simpson PA42 for inboard concrete pads to floor joist connections.
2 x 8 #2 syp floor joist with a max. span of 9'-8". Moisture barrier will be used.

Porch Columns: 6 x 6 x 10' syp #2 pt @ 5'-4" o.c. max. spacing Column Fasteners: Simpson PC66 \ PC66 or equal

Special Comments: Install 2 x 10 syp #2 collar ties at third points with (5) 12d nails at each connection point.
Install 2 ply 2 x 12 syp #2 with 7/16" osb flitch beam over all doors, windows, and covered porches.

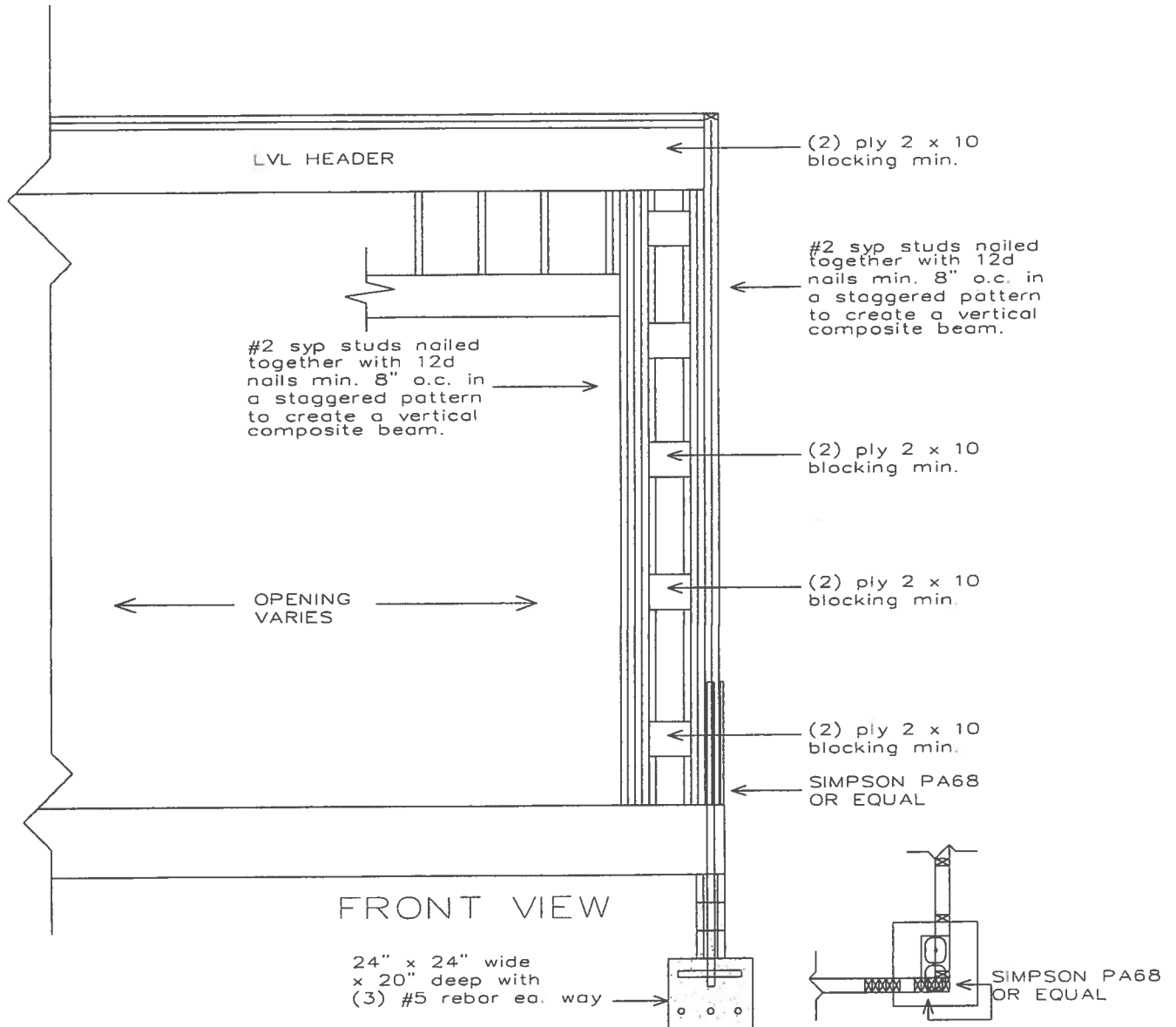
Install a ceiling diaphragm on open porch using the same grade material, nails, and nail pattern as the roof sheathing. *WMM*

Notes:

1. Balloon frame all gable ends unless accompanied by gable end detail
2. All walls to be nailed with same nailing pattern as the shear walls.
3. This wind load is not valid without a raised, embossed seal. (NO COPIES).
4. 1500 psf soil bearing pressure minimum.
5. Fiber mesh or WMM may be used in concrete slab. All steel must be grade 40 min. Install standard 10" ACI hook top and bottom.
6. Trusses must be installed and anchored in accordance to the truss engineering.
7. All headers spanning 12' and over must be pre-engineered.
8. This is a windload only. Not a structural analysis. Schafer Engineering strongly recommends always having a structural analysis.
9. The foundation is for minimum design use, and may be increased.
10. Wind load is for one use only \ FBC-2017 \ No copies permitted
11. Install anchor bolts a 48" o.c., & Simpson SP1 at bottom plate and Simpson SP2 at top plate or equal @ 32" O.C. for all interior bearing walls.
12. Truss company to use all exterior porch walls for bearing when possible.

Bruce Schafer, P. E. #48984 ca 9312
7104 NW 42ND LN
GAINESVILLE, FL. 32606

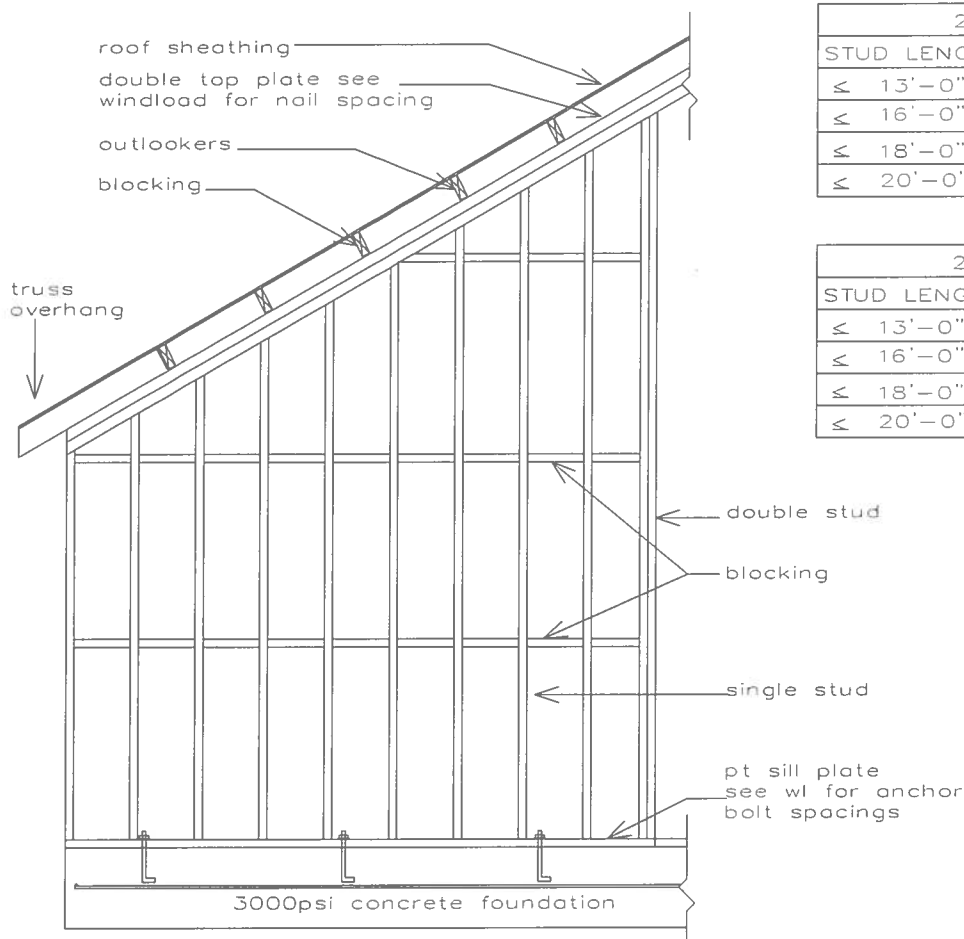
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 PHONE: 386-462-1340



EQUIVALENT 3'-0" SHEAR WALL SEGMENT
 24" MINIMUM WALL SECTION

BJS
 8.2-19

SCHAFFER ENGINEERING, LLC ca 9312
 7104 NW 42ND LANE \ GAINESVILLE FL. 32606
 PHONE: 386-462-1340



2 X 4 FRAMING		
STUD LENGTH	SIZE	GRADE
≤ 13'-0"	SINGLE 2 X 4	SPF
≤ 16'-0"	DOUBLE 2 X 4	SYP
≤ 18'-0"	TRIPLE 2 X 4	SYP
≤ 20'-0"	TRIPLE 2 X 4	SYP

2 X 6 FRAMING		
STUD LENGTH	SIZE	GRADE
≤ 13'-0"	SINGLE 2 X 6	SPF
≤ 16'-0"	SINGLE 2 X 6	SPF
≤ 18'-0"	DOUBLE 2 X 6	SYP
≤ 20'-0"	DOUBLE 2 X 6	SYP

BALLOON FRAMING MINIMUM REQUIREMENTS

NOTES:

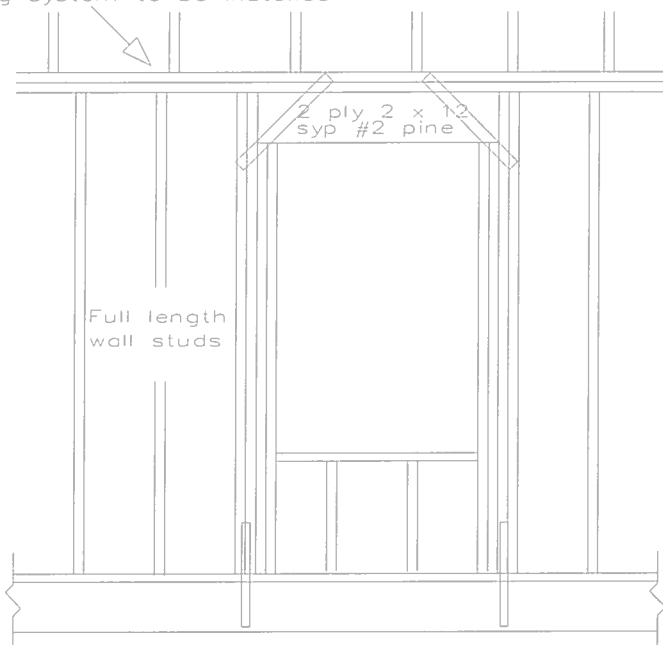
1. STUD SPACING TO BE 16" OC MAXIMUM
2. BLOCKING IS REQUIRED @ 48" OC MAXIMUM THROUGHOUT
3. INSTALL BLOCKING WITH (2) - 16D EACH END OF BLOCKING
4. INSTALL WALL SHEATHING TO STUDS AND BLOCKING AS PER WIND LOAD
5. STUDS ARE TO BE FULL LENGTH WITH NO SPLICES
6. STUD LENGTH GREATER THAN 20'-0" REQUIRE FURTHER ENGINEERING
7. USE EITHER 2 X 4 OR 2 X 6 SPECIFIED IN CHARTS ABOVE


 8-2-19

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7104 NW 42ND LANE \ GAINESVILLE FL. 32606
PHONE: 386-462-1340

see truss engineering for required anchorage from truss to top plate and bracing system to be installed



total each truss uplift on the header and divide by two for header and header stud anchorages
Install Simpson H-6 @ 32" o.c.

Maximum Header Span (ft)						
3'	6'	9'	12'	15'	18'	
Number of Header Studs Supporting End of Header						
1	1	2	2	2	2	
Number of Full Length Studs at Each End of Header						
2	2	3	3	3	3	
2	2	3	3	3	3	
1	2	2	2	2	2	
Greater than 10'-0"						
2	2	3	4	5	5	
2	2	3	3	4	4	
1	2	2	2	3	3	

Unsupported Wall Height	Stud Spacing
10'-0" or less	12"
	16"
	24"
Greater than 10'-0"	12"
	16"
	24"



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PHONE: 386-462-1340

TIE-DOWN TABLES

HEADER STRAPPING				
Uplift Lbs	Top Connector	Rating Lbs	Bottom Connector	Rating Lbs
to 455	LSTA19	635	H3	320
to 910	LSTA12	795	2-H3	640
to 1265	LSTA18	1110	LTT19	1305
to 1750	2-LSTA12	1810	LTT20	1750
to 2530	2-LSTA18	2530	HD2A-2 5	2165
to 2865	3-LSTA18	3255	HD2A-3 5	2865
to 3700	3-LSTA24	3880	HD5A-3	3130

Total the uplift for each truss sitting on the header and divide by 2 to determine the uplift on the header. Use proper bolt anchors sufficient to support required uplift loads.

TRUSSES \ GIRDERS			
Uplift Lbs	Top Connector	Bottom Connector	Rating Lbs
to 535	H2.5A	NA	
to 1015	H10A	NA	
to 1215	TS22	LTT19	1305
to 1750	2-TS22	LTT20	1750
to 2570	2-TS22	HD2A	2775
to 3665	3-TS22	HD5A	4010
to 5420	2-MST37	HTT22	5250
to 9660	2-MST60	HD10A	9540

Two 12d common toenails are required per truss for each bearing point into top plate. It is the contractor's responsibility to provide a continuous load path from truss to foundation.

	TOP CONNECTOR	RATING LBS	BOTTOM CONNECTOR	RATING LBS
BEAM SEATS	LSTA18	1110	LTT19	1305
POSTS	2-LSTA18	2220	ABU44	2300

1. Simpson or equivalent hardware may be used. For nailing into spruce members, multiply table values by .86.
2. See truss engineering for anchor uplift values.
3. This schedule is not meant to be a replacement to the specified values of any manufacturer's values.



User Input Data		
Structure Type	Building	
Basic Wind Speed (V)	135	mph
Structural Category	II	
Exposure	B	
Struc Nat Frequency (n1)	1	Hz
Slope of Roof (Theta)	45	Deg
Type of Roof	Gabled	
Eave Height (Eht)	10.00	ft
Ridge Height (RHt)	18.33	ft
Mean Roof Height (Ht)	14.17	ft
Width Perp. to Wind (B)	16.00	ft
Width Parallel to Wind (L)	23.00	ft
Damping Ratio (beta)	0.01	

Red values should be changed only through "Main Menu"

Calculated Parameters	
Type of Structure	
Height/Least Horizontal Dim	0.89
Flexible Structure	No

Calculated Parameters	
Importance Factor	1
<i>Non-Hurricane, Hurricane (v=85-100 mph) & Alaska</i>	
Table C6-4 Values	
Alpha =	7.000
z _g =	1200.000
At =	0.143
Bt =	0.840
Am =	0.250
Bm =	0.450
Cc =	0.300
l =	320.00 ft
Epsilon =	0.333
Zmin =	30.00 ft

Gust Factor Category I: Rigid Structures - Simplified Method		
Gust1	For rigid structures (Nat Freq > 1 Hz) use 0.85	0.85
Gust Factor Category II: Rigid Structures - Complete Analysis		
Zm	Zmin	30.00 ft
l _{zm}	Cc * (33/z) ^{0.167}	0.3048
L _{zm}	l*(z _m /33) ^{Epsilon}	309.99 ft
Q	(1/(1+0.63*((B+Ht)/L _{zm}) ^{0.63})) ^{0.5}	0.9345
Gust2	0.925*((1+1.7*l _{zm} *3.4*Q)/(1+1.7*3.4*l _{zm}))	0.8863
Gust Factor Category III: Flexible or Dynamically Sensitive Structures		
V _{href}	V*(5280/3600)	198.00 ft/s
V _{zm}	b _m *(z _m /33) ^{Am} *V _{href}	87.00 ft/s
NF1	NatFreq*L _{zm} /V _{zm}	3.56 Hz
R _n	(7.47*NF1)/(1+10.302*NF1) ^{1.667}	0.0627
N _h	4.6*NatFreq*Ht/V _{zm}	0.75
N _b	4.6*NatFreq*B/V _{zm}	0.85
N _d	15.4*NatFreq*Depth/V _{zm}	4.07
R _h	1/N _h -(1/(2*N _h ²)*(1-Exp(-2*N _h)))	0.6430
R _b	1/N _b -(1/(2*N _b ²)*(1-Exp(-2*N _b)))	0.6121
R _d	1/N _d -(1/(2*N _d ²)*(1-Exp(-2*N _d)))	0.2155
RR	((1/Beta)*R _n *R _h *R _b *(0.53+0.47*R _d)) ^{0.5}	1.2485
gg	+(2*LN(3600*n1)) ^{0.5} +0.577/(2*LN(3600*n1)) ^{0.5}	4.19
Gust3	0.925*((1+1.7*l _{zm} *(3.4 ² *Q ² +GG ² *RR ²) ^{0.5})/(1+1.7*3.4*l _{zm}))	1.40

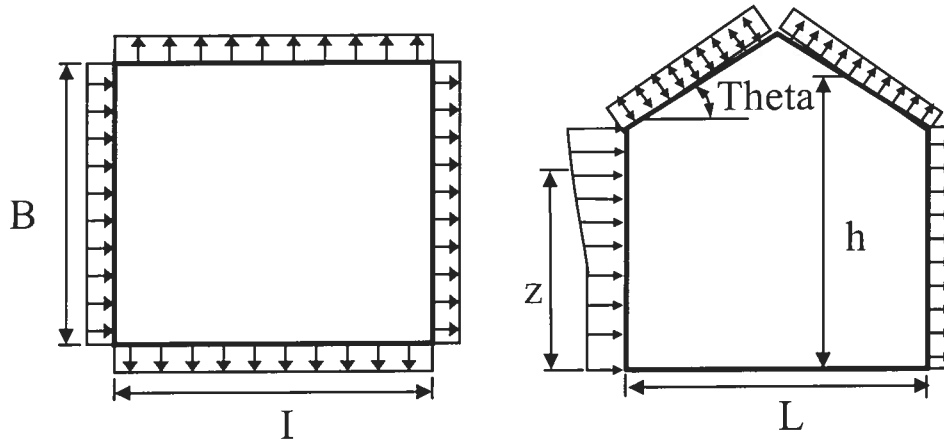
Gust Factor Summary			
Main Wind-force resisting system:		Components and Cladding:	
Gust Factor Category:	I	Gust Factor Category:	I
Gust Factor (G)	0.89	Gust Factor (G)	0.89

6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)

Elev. ft	Kz	Kzt	Kd	qz lb/ft ²	Pressure (lb/ft ²)	
					Windward Wall* +GCpi	-GCpi
18.33	0.70	1.00	1.00	32.69	18.35	28.00
15	0.70	1.00	1.00	32.69	18.35	28.00

Figure 6-3 - External Pressure Coefficients, Cp

Loads on Main Wind-Force Resisting Systems



Variable	Formula	Value	Units
Kh	$2.01 \cdot (15/z_g)^{2/\alpha}$	0.57	
Kht	Topographic factor (Fig 6-2)	1.00	
Qh	$.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d$	26.81	psf

Wall Pressure Coefficients, Cp	
Surface	Cp
Windward Wall (See Figure 6.5.12.2.1 for Pressures)	0.80

Roof Pressure Coefficients, Cp	
Roof Area (sq. ft.)	-
Reduction Factor	1.00

Description	Cp	Pressure (psf)	
		+GCpi	-GCpi
Leeward Walls (Wind Dir Parallel to 16 ft wall)	-0.41	-14.63	-4.98
Leeward Walls (Wind Dir Parallel to 23 ft wall)	-0.50	-16.71	-7.06
Side Walls	-0.70	-21.46	-11.81
Roof - Normal to Ridge (Theta ≥ 10)			
Windward - Max Negative	0.00	0.00	0.00
Windward - Max Positive	0.00	0.00	0.00
Leeward Normal to Ridge	-0.60	-19.09	-9.43
Overhang Top	0.00	0.00	0.00
Overhang Bottom	0.80	0.71	0.71
Roof - Parallel to Ridge (All Theta)			
Dist from Windward Edge: 0 ft to 7.085 ft	-0.99	-28.42	-18.77
Dist from Windward Edge: 7.085 ft to 14.17 ft	-0.85	-25.11	-15.46
Dist from Windward Edge: 14.17 ft to 28.34 ft	-0.55	-17.81	-8.16
	0.00	0.00	0.00

* Horizontal distance from windward edge

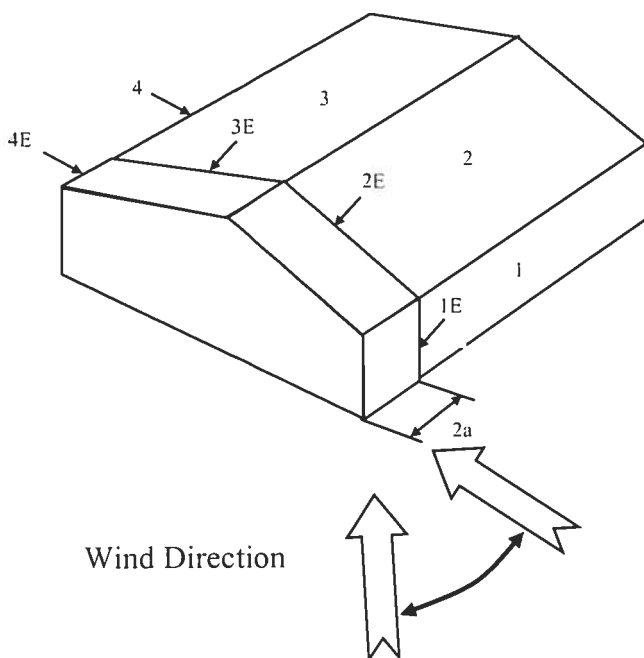
Figure 6-4 - External Pressure Coefficients, GCpf

Loads on Main Wind-Force Resisting Systems w/ Ht ≤ 60 ft

$$\begin{aligned}
 K_h &= 2.01 \cdot (15/z_g)^{2/\alpha} &= & 0.57 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 26.81
 \end{aligned}$$

Case A						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	0.56	0.18	-0.18	32.69	12.42	24.19
2	0.21	0.18	-0.18	32.69	0.98	12.75
3	-0.43	0.18	-0.18	32.69	-19.94	-8.17
4	-0.37	0.18	-0.18	32.69	-17.98	-6.21
5	0.00	0.18	-0.18	32.69	-5.88	5.88
6	0.00	0.18	-0.18	32.69	-5.88	5.88
1E	0.69	0.18	-0.18	32.69	16.67	28.44
2E	0.27	0.18	-0.18	32.69	2.94	14.71
3E	-0.53	0.18	-0.18	32.69	-23.21	-11.44
4E	-0.48	0.18	-0.18	32.69	-21.57	-9.81
5E	0.00	0.18	-0.18	32.69	-5.88	5.88
6E	0.00	0.18	-0.18	32.69	-5.88	5.88

$$* p = q_h \cdot (GC_{pf} - GC_{pi})$$

**Figure 6-4 - External Pressure Coefficients, GCpf**

Loads on Main Wind-Force Resisting Systems w/ Ht ≤ 60 ft

$$\begin{aligned}
 K_h &= 2.01 \cdot (15/z_g)^{2/\alpha} &= & 0.57 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 26.81
 \end{aligned}$$

Case B						
Surface	GCpf	+GCpi	-GCpi	qh (psf)	Min P (psf)	Max P (psf)
1	-0.45	0.18	-0.18	32.69	-20.59	-8.83
2	-0.69	0.18	-0.18	32.69	-28.44	-16.67
3	-0.37	0.18	-0.18	32.69	-17.98	-6.21
4	-0.45	0.18	-0.18	32.69	-20.59	-8.83
5	0.40	0.18	-0.18	32.69	7.19	18.96
6	-0.29	0.18	-0.18	32.69	-15.36	-3.60
1E	-0.48	0.18	-0.18	32.69	-21.57	-9.81
2E	-1.07	0.18	-0.18	32.69	-40.86	-29.09
3E	-0.53	0.18	-0.18	32.69	-23.21	-11.44
4E	-0.48	0.18	-0.18	32.69	-21.57	-9.81
5E	0.61	0.18	-0.18	32.69	14.06	25.82
6E	-0.43	0.18	-0.18	32.69	-19.94	-8.17

* $p = qh * (GCpf - GCpi)$

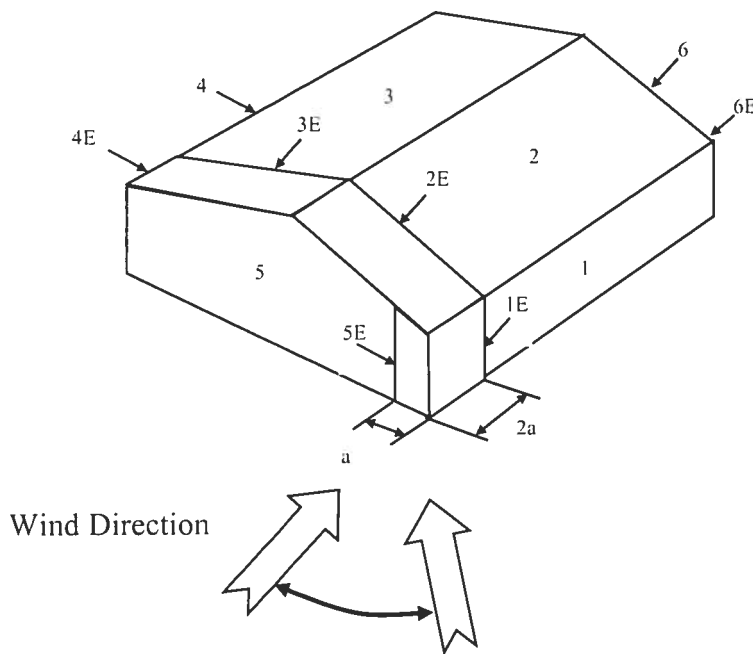
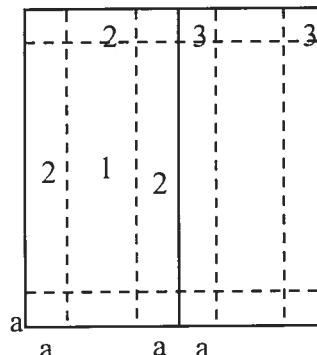
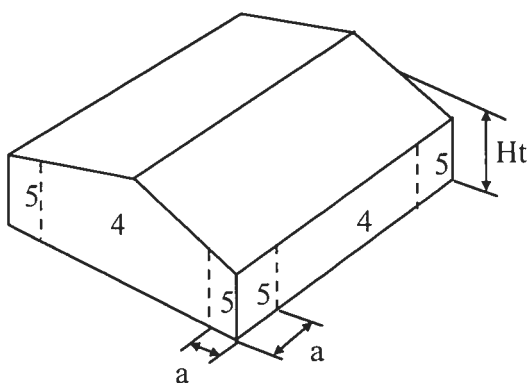


Figure 6-5 - External Pressure Coefficients, GCp
 Loads on Components and Cladding for Buildings w/ Ht ≤ 60 ft



Gabled Roof
 $10 < \text{Theta} \leq 45$

