

DATE 10/16/2009

Columbia County Building Permit

PERMIT 000028147

This Permit Must Be Prominently Posted on Premises During Construction

APPLICANT TED SMITH PHONE 561 723-3075
ADDRESS 350 RESORT LOOP HIGH SPRINGS FL 32643
OWNER TED SMITH PHONE 561 723-3075
ADDRESS 382 SE RIVERVIEW CIRCLE HIGH SPRINGS FL 32643
CONTRACTOR OWNER BUILDER PHONE
LOCATION OF PROPERTY 441S, TL ON RESORT LOOP, TL ON RIVERVIEW CIRCLE (GRAVEL RD)
3RD LOT ON RIGHT
TYPE DEVELOPMENT SFD,UTILITY ESTIMATED COST OF CONSTRUCTION 113000.00
HEATED FLOOR AREA 1500.00 TOTAL AREA 1500.00 HEIGHT STORIES 1
FOUNDATION CONC WALLS FRAMED ROOF PITCH 7/12 FLOOR SLAB
LAND USE & ZONING ESA-2 MAX. HEIGHT 35
Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00
NO. EX.D.U. 0 FLOOD ZONE AE DEVELOPMENT PERMIT NO. 09-008

PARCEL ID 27-7S-17-10055-103 SUBDIVISION RIVER VIEW
LOT 3 BLOCK PHASE UNIT TOTAL ACRES 0.83

000001769
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor
WAIVER 09-492 BK HD Y
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: ZERO FOOT RISE LETTER ON FILE, MFE @ 48', NEED ELEVATION
CERTIFICATION FOR STRUCTURE AND EQUIPMENT BEFORE POWER

Check # or Cash 2673

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power Foundation Monolithic
Under slab rough-in plumbing Slab Sheathing/Nailing
Framing Insulation
Rough-in plumbing above slab and below wood floor Electrical rough-in
Heat & Air Duct Peri. beam (Lintel) Pool
Permanent power C.O. Final Culvert
Pump pole Utility Pole M/H tie downs, blocking, electricity and plumbing
Reconnection RV Re-roof

BUILDING PERMIT FEE \$ 565.00 CERTIFICATION FEE \$ 7.50 SURCHARGE FEE \$ 7.50
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$
FLOOD DEVELOPMENT FEE \$ 50.00 FLOOD ZONE FEE \$ 25.00 CULVERT FEE \$ TOTAL FEE 705.00

INSPECTORS OFFICE CLERKS OFFICE

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

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 THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OF THE PREVIOUS INSPECTION.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permit Application

2673

**For Office Use Only** Application # 0909-48 Date Received 9/30 By JW Permit # 1169/28147

Zoning Official BLK Date 05.10.07 Flood Zone AE Land Use ESA Zoning ESA-2

FEMA Map # 0551 Elevation 47ft MFE 48ft River Santa Fe Plans Examiner HO Date 10-16-09

Comments Elevation certificate for structure and equipment required before permanent power

NOC  EH  Deed or PA  Site Plan  State Road Info  Parent Parcel # \_\_\_\_\_

Dev Permit # 09-008  In Floodway  Letter of Auth. from Contractor  F W Comp. letter

IMPACT FEES: EMS \_\_\_\_\_ Fire \_\_\_\_\_ Corr \_\_\_\_\_ Road/Code  911 sheet

School \_\_\_\_\_ = TOTAL  Suspended  Verification form

Septic Permit No. \_\_\_\_\_ Fax \_\_\_\_\_

Name Authorized Person Signing Permit TED SMITH Phone 561-723-3075

Address 350 Resant Loop N.S. #1 32643

Owners Name TED SMITH Phone 561-723-3075

911 Address 382 SE RIVERVIEW CIRCLE, HIGH SPRINGS, FL 32643

Contractors Name TED SMITH (OWNER BLDG) Phone SAME

Address SAME

Fee Simple Owner Name & Address SAME

Bonding Co. Name & Address \_\_\_\_\_

Architect/Engineer Name & Address GTC Design Gary J. Gill PE 51942 <sup>130 W. Howard</sup> <sub>Lincoln, FL 32064</sub>

Mortgage Lenders Name & Address NONE

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progress Energy

Property ID Number 27-75-17-10055-103 Estimated Cost of Construction \$145,000

Subdivision Name RIVER RISE VIEW S/D Lot 3 Block \_\_\_\_\_ Unit \_\_\_\_\_ Phase \_\_\_\_\_

Driving Directions TRAVEL NORTH OVER SANTA FE RIVER ON 441 HIGH SPRINGS, TURN RIGHT ON RIVER VIEW CIRCLE THEN LEFT ON 1ST GRAVE RD TO #382 3rd lot on right Number of Existing Dwellings on Property 0

Construction of NEW LOG HOME 2674 Total Acreage 1.83 Lot Size 100 X 300 ML

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 35'

Actual Distance of Structure from Property Lines - Front 200 Side 25 Side 25 Rear 116

Number of Stories 1 Heated Floor Area 1500 Total Floor Area 2260 Roof Pitch 7/12

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.

Radon total area 1500  
Spoke to Ted  
10/16/09

**Columbia County Building Permit Application**

**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 such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**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 BUILDING PERMITEE:** 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. It may be to your advantage to check and see if your property is encumbered by any restrictions.

**(Owners Must Sign All Applications Before Permit Issuance.)**

  
\_\_\_\_\_  
Owners Signature

**\*\*OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMIT.**

**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 (Permitee)

Contractor's License Number \_\_\_\_\_  
Columbia County  
Competency Card Number \_\_\_\_\_

Affirmed under penalty of perjury to by the Contractor and subscribed before me this \_\_\_\_ day of \_\_\_\_\_ 20\_\_.  
Personally known \_\_\_\_\_ or Produced Identification \_\_\_\_\_

\_\_\_\_\_  
State of Florida Notary Signature (For the Contractor)

SEAL:

**Columbia County Building Department  
Flood Development Permit**

**Development Permit  
F 023- 09-008**

DATE 10/16/2009 BUILDING PERMIT NUMBER 000028147  
APPLICANT TED SMITH PHONE 561 723-3075  
ADDRESS 350 RESORT LOOP HIGH SPRINGS FL 32643  
OWNER TED SMITH PHONE 561 723-3075  
ADDRESS 382 SE RIVERVIEW CIRCLE HIGH SPRINGS FL 32643  
CONTRACTOR OWNER BUILDER PHONE \_\_\_\_\_  
ADDRESS \_\_\_\_\_ FL \_\_\_\_\_  
SUBDIVISION RIVER VIEW Lot 3 Block \_\_\_\_\_ Unit \_\_\_\_\_ Phase \_\_\_\_\_  
TYPE OF DEVELOPMENT SFD,UTILITY PARCEL ID NO. 27-7S-17-10055-103

FLOOD ZONE AE BY BK \_\_\_\_\_ 1-6-88 FIRM COMMUNITY #. 120070 - PANEL #. 551 B  
FIRM 100 YEAR ELEVATION 47' PLAN INCLUDED YES or NO  
REQUIRED LOWEST HABITABLE FLOOR ELEVATION 48'  
IN THE REGULATORY FLOODWAY YES or NO RIVER Santa Fe  
SURVEYOR / ENGINEER NAME GARY GILL LICENSE NUMBER 51942

\_\_\_\_ ONE FOOT RISE CERTIFICATION INCLUDED

ZERO RISE CERTIFICATION INCLUDED

\_\_\_\_ SRWMD PERMIT NUMBER \_\_\_\_\_  
(INCLUDING THE ONE FOOT RISE CERTIFICATION)

DATE THE FINISHED FLOOR ELEVATION CERTIFICATE WAS PROVIDED \_\_\_\_\_

INSPECTED DATE \_\_\_\_\_ BY \_\_\_\_\_

COMMENTS \_\_\_\_\_

135 NE Hernando Ave., Suite B-21  
Lake City, Florida 32055  
Phone: 386-758-1008  
Fax: 386-758-2160





## **COLUMBIA COUNTY BUILDING DEPARTMENT**

135 NE Hernando Ave., Suite B-21

Lake City, FL 32055

Office: 386-758-1008 Fax: 386-758-2160

### **OWNER BUILDER DISCLOSURE STATEMENT**

I understand that state law requires construction to be done by a licensed contractor and have applied for an owner-builder permit under an exemption from the law. The exemption specifies that I, as the owner of the property listed, may act as my own contractor with certain restrictions even though I do not have a license.

I understand that building permits are not required to be signed by a property owner unless he or she is responsible for the construction and is not hiring a licensed contractor to assume responsibility.

I understand that, as an owner-builder, I am the responsible party of record on a permit. I understand that I may protect myself from potential financial risk by hiring a licensed contractor and having the permit filed in his or her name instead of my own name. I also understand that a contractor is required by law to be licensed and bonded in Florida and to list his or her license numbers on permits and contracts.

I understand that I may build or improve a one-family or two-family residence or farm outbuilding. I may also build or improve a commercial building if the costs do not exceed \$75,000. The building or residence must be for my own use or occupancy. It may not be built or substantially improved for sale or lease. If a building or residence that I have built or substantially improved myself is sold or leased within 1 year after the construction is complete, the law will presume that I built or substantially improved it for sale or lease, which violates the exemption.

I understand that, as the owner-builder, I must provide direct, onsite supervision of the construction.

I understand that I may not hire an unlicensed person to act as my contractor or to supervise persons working on my building or residence. It is my responsibility to ensure that the persons whom I employ have the licenses required by law and by county or municipal ordinance.

I understand that it is frequent practice of unlicensed persons to have the property owner obtain an owner-builder permit that erroneously implies that the property owner is providing his or her own labor and materials. I, as an owner-builder, may be held liable and subjected to serious financial risk for any injuries sustained by an unlicensed person or his or her employees while working on my property. My homeowner's insurance may not provide coverage for those injuries. I am willfully acting as an owner-builder and am aware of the limits of my insurance coverage for injuries to workers on my property.

I understand that I may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on my building who is not licensed must work under my direct supervision and must be employed by me, which means that I must comply with laws requiring the withholding of federal income tax and social security contributions under the Federal Insurance Contributions Act (FICA) and must provide workers' compensation for the employee. I understand that my failure to follow these laws may subject me to serious financial risk.

I agree that, as the party legally and financially responsible for this proposed construction activity, I will abide by all applicable laws and requirements that govern owner-builders as well as employers. I also understand that the construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

I understand that I may obtain more information regarding my obligations as an employer from the Internal Revenue Service, the United States Small Business Administration, the Florida Department of Financial Services, and the Florida Department of Revenue. I also understand that I may contact the Florida Construction Industry Licensing Board at 850-487-1395 or Internet website address <http://www.myflorida.com/dbpr/pro/cilb/index.html> for more information about licensed contractors.

I am aware of, and consent to, an owner-builder building permit applied for in my name and understand that I am the party legally and financially responsible for the proposed construction activity at the following address:

382 SE RIVERVIEW CIRCLE HIGH SPRINGS, FL  
32643

I agree to notify Columbia County Building Department immediately of any additions, deletions, or changes to any of the information that I have provided on this disclosure. Licensed contractors are regulated by laws designed to protect the public. If you contract with a person who does not have a license, the Construction Industry Licensing Board and Department of Business and Professional Regulation may be unable to assist you with any financial loss that you sustain as a result of a complaint. Your only remedy against an unlicensed contractor may be in civil court. It is also important for you to understand that, if an unlicensed contractor or employee of an individual or firm is injured while working on your property, you may be held liable for damages. If you obtain an owner-builder permit and wish to hire a licensed contractor, you will be responsible for verifying whether the contractor is properly licensed and the status of the contractor's workers' compensation coverage.

I understand that if I hire subcontractors they must be licensed for that type of work in Columbia County, ex: framing, stucco, masonry, and state registered builders. Registered Contractors must have a minimum of \$300,000.00 in General Liability insurance coverage and the proper workers' compensation. Specialty Contractors must have a minimum of \$100,000.00 in General Liability insurance coverage and the proper workers' compensation coverage.



# COLUMBIA COUNTY 9-1-1 ADDRESSING

P. O. Box 1787, Lake City, FL 32056-1787

PHONE: (386) 758-1125 \* FAX: (386) 758-1365 \* Email: ron\_croft@columbiacountyfla.com

## Addressing Maintenance

To maintain the Countywide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for assigning and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Service Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County.

**DATE REQUESTED:** 8/21/2009      **DATE ISSUED:** 8/24/2009

### ENHANCED 9-1-1 ADDRESS:

382      SE      RIVERVIEW      CIR

HIGH SPRINGS      FL      32643

### PROPERTY APPRAISER PARCEL NUMBER:

27-7S-17-10055-103

### Remarks:

LOT 3 RIVER VIEW S/D

Address Issued By:



Columbia County 9-1-1 Addressing / GIS Department

**NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION INFORMATION BE FOUND TO BE IN ERROR, THIS ADDRESS IS SUBJECT TO CHANGE.**

**WARRANTY DEED**

This warranty deed, made this 24<sup>TH</sup> day of APRIL, 2009, between Jane E. Blais, an individual, hereinafter referred to as "Grantor", and Ted F. Smith, an individual, hereinafter referred to as "Grantee"

**Witnesseth**, that said Grantor, for and in consideration of the sum of TEN AND 00/100 (\$10.00) Dollars 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 Grantee and Grantee's heirs forever the following described land located in the County of Columbia, State of Florida, to-wit:

Lot 3 , RIVERVIEW SUBDIVISION, as described in Plat Book 5, page 73, 74 of the Recorder of Columbia County, Florida.

**Subject** to covenants, restrictions and easements of record, if any; however, this reference thereto shall not operate to reimpose same.

**Grantor**, for itself and its heirs, hereby covenants with Grantee, its heirs, and assigns, that Grantor is lawfully seized in fee simple of the above-described premises; that it has a good right to convey; that the premises are free from all encumbrances; that Grantor and its heirs, and all persons acquiring any interest in the property granted, through or for Grantor, will, on demand of Grantee, or its heirs or assigns, and at the expense of Grantee, its heirs or assigns, execute and instrument necessary for the further assurance of the title to the premises that may be reasonably required; and that Grantor and its heirs will forever warrant and defend all of the property so granted to Grantee, its heirs, against every person lawfully claiming the same or any part thereof.

**Witness**, the hands and seal of said Grantors this 24 day of April, 2009.

[Signature]  
Grantor

[Signature]  
Witness Sandra Webb

[Signature]  
Grantee

[Signature]  
Witness Sandra Webb

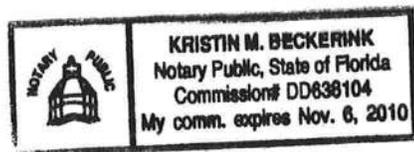
**State of Florida, County of Columbia**

The foregoing instrument was acknowledged before me on April 24, 2009 by Jane E. Blais who is personally known to me or has produced her Driver's License as identification together with Ted. F. Smith, who is personally known to me or has produced his driver's license as identification.

Witness my hand and official seal.

Signature [Signature]

Affiants Known  Unknown ID Produced FZDL



**Columbia County Property Appraiser**

DB Last Updated: 7/22/2009

Parcel: 27-7S-17-10055-103

**2009 Preliminary Values**

Tax Record

Property Card

Interactive GIS Map

Print

**Owner & Property Info**

Search Result: 1 of 1

<b>Owner's Name</b>	SMITH TED F		
<b>Site Address</b>			
<b>Mailing Address</b>	340 SE RESORT LOOP HIGH SPRINGS, FL 32643		
<b>Use Desc. (code)</b>	VACANT (000000)		
<b>Neighborhood</b>	027717.01	<b>Tax District</b>	3
<b>UD Codes</b>	MKTA02	<b>Market Area</b>	02
<b>Total Land Area</b>	0.000 ACRES		
<b>Description</b>	LOT 3 RIVER VIEW S/D. ORB 649-023-026. WD 1047-1689. WD 1171-2542		

**GIS Aerial**



**Property & Assessment Values**

<b>Mkt Land Value</b>	cnt: (1)	\$17,724.00
<b>Ag Land Value</b>	cnt: (0)	\$0.00
<b>Building Value</b>	cnt: (0)	\$0.00
<b>XFOB Value</b>	cnt: (0)	\$0.00
<b>Total Appraised Value</b>		\$17,724.00

<b>Just Value</b>	\$17,724.00
<b>Class Value</b>	\$0.00
<b>Assessed Value</b>	\$17,724.00
<b>Exemptions</b>	\$0.00
<b>Total Taxable Value</b>	County: \$17,724.00   City: \$17,724.00 Other: \$17,724.00   School: \$17,724.00

**Sales History**

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
4/24/2009	1171/2542	WD	V	Q	01	\$40,000.00
5/25/2005	1047/1689	WD	V	U	01	\$185,000.00

**Building Characteristics**

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
NONE						

**Extra Features & Out Buildings**

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

**Land Breakdown**

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000000	VAC RES (MKT)	0000122.240 FF - (0000000.000AC)	1.00/1.00/1.00/1.00	\$145.00	\$17,724.00

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## Disclaimer

This information was derived from data which was compiled by the Columbia County Property Appraiser's Office solely for the government purpose of property assessment. The information shown is a **work in progress** and should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, its use, or its interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's Office. The assessed values are **NOT CERTIFIED** values and therefore are subject to change before finalized for ad-valorem assessment purposes.

### Notice:

Under Florida Law, e-mail addresses are public record. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead contact this office by phone or in writing.

[Scroll to Top](#)

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LOT 3 RIVER VIEW S/D. SMITH TED F Columbia County 2009 R  
 ORB 649-023-026. WD 1047-1689. 340 SE RESORT LOOP 27-7S-17-10055-103  
 WD 1171-2542 HIGH SPRINGS, FL 32643 PRINTED 7/08/2009 9:53 CARD 001 of 001  
 BY JEFF

AE? HTD AREA 27717.01 RIVER VIEW PUSE 000000 VACANT  
 EFF AREA 30.753 E-RATE .000 INDX STR 27-7S-17  
 RCN %GOOD BLDG VAL (PUD1 MKT AREA 02  
 AC NTCD APPR CD 0 BLDG  
 UNITS 17,724 LAND 0 XFOB  
 C-W% 0 AG  
 HGHTR PMTR CNDO SUBD BLK LOT MAP# 0 MKAG  
 STYS ECON FUNC SPCD DEPR UD-1 UD-2 UD-3 UD-4 UD-5 UD-6 UD-7 UD-8 UD-9 17,724 JUST  
 HTTP A/C QVAL FNDN SIZE CEIL ARCH FRME KTCH WNDO CLAS OCC COND 0 CLAS  
 SUB A-AREA % E-AREA SUB VALUE TXDT 003 0 SOHD 0 ASSD 0 EXPT 0 COTXBL

FIELD CK: BLDG TRAVERSE  
 LOC:

NUMBER DESC PERMITS AMT ISSUED  
 BOOK PAGE DATE SALE PRICE  
 1171 2542 4/24/2009 Q V 40000  
 GRANTOR JANE E BLAIS  
 GRANTEE TED F SMITH  
 1047 1689 5/25/2005 U V 185000  
 GRANTOR WILLIAM B SCHEEL  
 GRANTEE JANE E BLAIS

EXTRA FEATURES: ADJ UT PR SPCD % %GOOD XFOB VALUE  
 AE BN CODE LEN WID HGT QTY QL YR ADJ UNITS UT PRICE ADJ UT PR PRICE ADJ UT PR LAND VALUE  
 Y 000000 VAC RES 0002 0003 1.00 1.00 1.00 1.00 1.00 1.00 122.240 FF 145.000 145.000 145.000 17,724

LAND DESC ZONE ROAD UTIL DT ADJUSTMENTS UNITS UT PRICE ADJ UT PR LAND VALUE  
 AE CODE TOPO 0002 0003 1.00 1.00 1.00 1.00 1.00 1.00 122.240 FF 145.000 145.000 145.000 17,724  
 Y 000000 VAC RES 0002 0003

# FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs Residential Performance Method A

Project Name: (invalid) Street: (invalid) City, State, Zip: (invalid), (invalid), (invalid) Owner: (invalid) Design Location: (invalid)	Builder Name: (invalid) <i>Ted Smith</i> Permit Office: (invalid) <i>Columbia</i> Permit Number: (invalid) <i>28147</i> Jurisdiction: (invalid) <i>221000</i>
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Glass/Floor Area: 0.125	Total As-Built Modified Loads: 35.52 Total Baseline Loads: 42.18	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><i>CARY GILL</i></u>                  DATE: <u><i>1/07/09</i></u></p> <p>I hereby certify that this building, as designed, is in compliance with the Florida Energy Code.</p> <p>OWNER/AGENT: _____                  DATE: _____</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>
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**PROJECT**

Title:	(invalid)	Bedrooms:	(invalid)	Adress Type:	
Building Type:	(invalid)	Bathrooms:	(invalid)	Lot #	(invalid)
Owner:	(invalid)	Conditioned Area:	(invalid)	SubDivision:	(invalid)
# of Units:	(invalid)	Total Stories:	(invalid)	PlatBook:	(invalid)
Builder Name:	(invalid)	Worst Case:	(invalid)	Street:	(invalid)
Permit Office:	(invalid)	Rotate Angle:	(invalid)	County:	(invalid)
Jurisdiction:	(invalid)	Cross Ventilation:	(invalid)	City, State, Zip:	(invalid) ,
Family Type:	(invalid)	Whole House Fan:	(invalid)		(invalid)(invalid)
New/Existing:	(invalid)				
Comment:	(invalid)				

**CLIMATE**

<input checked="" type="checkbox"/>	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	2.5 %	Int Design Temp Winter	Summer	Heating Degree Days	Design Moisture	Daily Temp Range
<input type="checkbox"/>	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)

**FLOORS**

<input checked="" type="checkbox"/>	#	Floor Type	R-Value	Area	Tile	Wood	Carpet
<input type="checkbox"/>	1	Raised Floor		1500 ft²	11	0	0 1

**ROOF**

<input checked="" type="checkbox"/>	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
<input type="checkbox"/>	1	Gable or shed	Composition shingles	1737 ft²	438 ft²	Medium	0.96	No	0	30.3 deg

**ATTIC**

<input checked="" type="checkbox"/>	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
<input type="checkbox"/>	1	Full cathedral ceilin	Vented	300	1500 ft²	N	N

**CEILING**

<input checked="" type="checkbox"/>	#	Ceiling Type	R-Value	Area	Framing Frac	Truss Type
<input type="checkbox"/>	1	Cathedral/Single Assembly (Vented)	30	1500 ft²	0.11	Wood

**WALLS**

<input checked="" type="checkbox"/>	#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
<input type="checkbox"/>	1	N	Exterior	Log - 8 inch	13	500 ft²	0	0	0.75
<input type="checkbox"/>	2	E	Exterior	Log - 8 inch	13	300 ft²	0	0	0.75
<input type="checkbox"/>	3	S	Exterior	Log - 8 inch	13	500 ft²	0	0	0.75
<input type="checkbox"/>	4	W	Exterior	Log - 8 inch	13	300 ft²	0	0	0.75

### DOORS

✓	#	Ornt	Door Type	Storms	U-Value	Area
✓	1	N	Wood	None	0.46	20 ft²
✓	2	S	Wood	None	0.46	40 ft²
✓	3	S	Wood	None	0.46	40 ft²

### WINDOWS

Window orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

✓	#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang		Int Shade	Screening
										Depth	Separation		
✓	1	N	Wood	Double (Clear)	Yes	0.55	0.6	N	27 ft²	7 ft 2 in	2 ft 0 in	HERS 2006	None
✓	2	N	Wood	Double (Clear)	Yes	1.05	0.7	N	12.67 ft²	5 ft 10 in	2 ft 0 in	HERS 2006	None
✓	3	N	Wood	Double (Clear)	Yes	0.55	0.7	N	9.5 ft²	5 ft 10 in	2 ft 0 in	HERS 2006	None
✓	4	N	Wood	Double (Clear)	Yes	0.55	0.7	N	27 ft²	7 ft 2 in	9 ft 8 in	HERS 2006	None
✓	5	E	Wood	Double (Clear)	Yes	0.55	0.7	N	13.5 ft²	15 ft 6 in	2 ft 0 in	HERS 2006	None
✓	6	S	Wood	Double (Clear)	Yes	0.55	0.7	N	62 ft²	6 ft 8 in	13 ft 8 in	HERS 2006	None
✓	7	W	Wood	Double (Clear)	Yes	0.55	0.7	N	27 ft²	13 ft 0 in	2 ft 0 in	HERS 2006	None
✓	8	W	Wood	Double (Clear)	Yes	0.55	0.7	N	9.5 ft²	15 ft 0 in	2 ft 0 in	HERS 2006	None

### INFILTRATION & VENTING

✓	Method	SLA	CFM 50	ACH 50	ELA	EqLA	---- Forced Ventilation ----		Run Time	Fan
							Supply CFM	Exhaust CFM	Fraction	Watts
✓	Default	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	0 cfm	0 cfm	0	(invalid)

### COOLING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
✓	1	Central Unit	None	SEER: 13	36 kBtu/hr	1080 cfm	0.75	False

### HEATING SYSTEM

✓	#	System Type	Subtype	Efficiency	Capacity	Ductless
✓	1	Electric Heat Pump	None	HSPF: 7.7	36 kBtu/hr	False

### HOT WATER SYSTEM

✓	#	System Type	EF	Cap	Use	SetPnt	Conservation
✓	1	Electric	0.92	40 gal	40 gal	120 deg	None

### SOLAR HOT WATER SYSTEM

✓	FSEC	Company Name	System Model #	Collector Model #	Collector Area	Storage Volume	FEF
					ft²		
✓	None	None					

**DUCTS**

✓	#	--- Supply ---		--- Return ---		Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
		Location	R-Value	Area	Location						
	1	Exterior	6	300 ft²	Exterior	75 ft²	Default Leakage	(invalid)			

**TEMPERATURES**

Programable Thermostat: None

Ceiling Fans:

Cooling  
Heating  
Venting

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	78	78	78
	PM	78	78	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	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68
Heating (WEH)	AM	68	68	68	68	68	68	68	68	68	68	68	68
	PM	68	68	68	68	68	68	68	68	68	68	68	68

## Code Compliance Checklist

### Residential Whole Building Performance Method A - Details

ADDRESS: (invalid)  
(invalid), (invalid), (invalid)

PERMIT #: (invalid)

#### INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	N1106.AB.1.1	Maximum: .3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	N1106.AB.1.2.1	Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls and floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate.	
Floors	N1106.AB.1.2.2	Penetrations/openings > 1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams.	
Ceilings	N1106.AB.1.2.3	Between walls & ceilings; penetrations of ceiling plane to top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams.	
Recessed Lighting Fixtures	N1106.AB.1.2.4	Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	N1106.AB.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	N1106.AB.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

#### OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	N1112.AB.3	Comply with efficiency requirements in Table N112.ABC.3. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	N1112.AB.2.3	Spas & heated pools must have covers (except solar heated). Non-commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%. Heat pump pool heaters shall have a minimum COP of 4.0.	
Shower heads	N1112.AB.2.4	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	N1110.AB	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated and installed in accordance with the criteria of Section N1110.AB. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	N1107.AB.2	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	N1104.AB.1 N1102.B.1.1	Ceilings-Min. R-19. Common walls-frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

# System Sizing Calculations - Winter

## Residential Load - Room by Room Component Details

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

9/2/2009

Component Loads for Zone #1: Main						
<b>Window</b>	Panes/SHGC/Frame/U	Orientation	Area(sqft)	X	HTM=	Load
1	2, Clear, Wood, 0.57	N	27.0		21.1	569 Btuh
2	2, Clear, Wood, 0.57	N	12.7		21.1	267 Btuh
3	2, Clear, Wood, 0.57	N	9.5		21.1	200 Btuh
4	2, Clear, Wood, 0.57	N	27.0		21.1	569 Btuh
5	2, Clear, Wood, 0.57	E	13.5		21.1	285 Btuh
6	2, Clear, Wood, 0.57	S	62.0		21.1	1308 Btuh
7	2, Clear, Wood, 0.57	W	27.0		21.1	569 Btuh
8	2, Clear, Wood, 0.57	W	9.5		21.1	200 Btuh
	Window Total		188(sqft)			3969 Btuh
<b>Walls</b>	Type	R-Value	Area	X	HTM=	Load
1	Log - 8inch - Ext(0.05)	11.0	1000		1.7	1683 Btuh
2	Log - 8inch - Ext(0.05)	11.0	600		1.7	1010 Btuh
	Wall Total		1600			2692 Btuh
<b>Doors</b>	Type		Area	X	HTM=	Load
1	Wood - Exterior		20		20.0	400 Btuh
2	Wood - Exterior		80		20.0	1598 Btuh
	Door Total		100			1998Btuh
<b>Ceilings</b>	Type/Color/Surface	R-Value	Area	X	HTM=	Load
1	Single Assembly/D/Shin	30.0	1500		1.2	1796 Btuh
	Ceiling Total		1500			1796Btuh
<b>Floors</b>	Type	R-Value	Size	X	HTM=	Load
1	Raised Wood - Open	13	1500.0 sqft		2.5	3694 Btuh
	Floor Total		1500			3694 Btuh
	Zone Envelope Subtotal:					14149 Btuh
<b>Infiltration</b>	Type	ACH	X	Volume(cuft)	walls(sqft)	CFM=
	Natural(Adjusted for ventilation)	0.45		15000	1600	112.5
						4557 Btuh
<b>Ductload</b>	Average sealed, Supply(R6.0-Attic), Return(R6.0-Cond) (DLM of 0.081)					1514 Btuh
<b>Zone #1</b>	<b>Sensible Zone Subtotal</b>					<b>20220 Btuh</b>

# Manual J Winter Calculations

## Residential Load - Component Details (continued)

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

9/2/2009

### WHOLE HOUSE TOTALS

	Subtotal Sensible	20220 Btuh
	Ventilation Sensible	1458 Btuh
	Total Btuh Loss	21678 Btuh

### EQUIPMENT

1. Electric Heat Pump/Package	#	36000 Btuh
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Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
 (Frame types - metal, wood or insulated metal)  
 (U - Window U-Factor or 'DEF' for default)  
 (HTM - ManualJ Heat Transfer Multiplier)  
 Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types )



Version 8  
For Florida residences only

# System Sizing Calculations - Summer

## Residential Load - Whole House Component Details

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

9/2/2009

### Component Loads for Whole House

Window	Type*		Overhang		Window Area(sqft)			HTM		Load
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2, Clear, 0.57, B-M, N,N	N	2ft.	7.16	27.0	0.0	27.0	15	15	415 Btuh
2	2, Clear, 0.57, B-M, N,N	N	2ft.	5.83	12.7	0.0	12.7	15	15	195 Btuh
3	2, Clear, 0.57, B-M, N,N	N	2ft.	5.83	9.5	0.0	9.5	15	15	146 Btuh
4	2, Clear, 0.57, B-M, N,N	N	9.66	7.16	27.0	0.0	27.0	15	15	415 Btuh
5	2, Clear, 0.57, B-M, N,N	E	2ft.	15.5f	13.5	0.0	13.5	15	46	620 Btuh
6	2, Clear, 0.57, B-M, N,N	S	13.6	6.66	62.0	62.0	0.0	15	19	954 Btuh
7	2, Clear, 0.57, B-M, N,N	W	2ft.	13ft.	27.0	0.0	27.0	15	46	1240 Btuh
8	2, Clear, 0.57, B-M, N,N	W	2ft.	15ft.	9.5	0.0	9.5	15	46	436 Btuh
	Excursion									131 Btuh
	Window Total				188 (sqft)					4552 Btuh
<b>Walls</b>	Type		R-Value/U-Value		Area(sqft)			HTM		Load
1	Log - 8inch - Ext		11.0/0.05		1000.0			0.7		696 Btuh
2	Log - 8inch - Ext		11.0/0.05		600.0			0.7		417 Btuh
	Wall Total				1600 (sqft)					1113 Btuh
<b>Doors</b>	Type				Area (sqft)			HTM		Load
1	Wood - Exterior				20.0			15.1		302 Btuh
2	Wood - Exterior				80.0			15.1		1210 Btuh
	Door Total				100 (sqft)					1512 Btuh
<b>Ceilings</b>	Type/Color/Surface		R-Value		Area(sqft)			HTM		Load
1	Single Assembly/DarkShingle		30.0		1500.0			0.9		1311 Btuh
	Ceiling Total				1500 (sqft)					1311 Btuh
<b>Floors</b>	Type		R-Value		Size			HTM		Load
1	Raised Wood - Open		13.0		1500 (sqft)			0.8		1198 Btuh
	Floor Total				1500.0 (sqft)					1198 Btuh
Envelope Subtotal:										9685 Btuh
<b>Infiltration</b>	Type		ACH		Volume(cuft) wall area(sqft)		CFM=		Load	
	SensibleNatural		0.23		15000 1600		112.5		1070 Btuh	
<b>Internal gain</b>			Occupants		Btuh/occupant		Appliance		Load	
			2		X 230 +		2400		2860 Btuh	
Sensible Envelope Load:										13616 Btuh
<b>Duct load</b>	(DGM of 0.134)									1823 Btuh
<b>Sensible Load All Zones</b>										<b>15438 Btuh</b>

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

SRLH - TED SMITH  
 , FL

Project Title:  
 PF09-096

Code Only  
 Professional Version  
 Climate: North

9/2/2009

**WHOLE HOUSE TOTALS**

<b>Whole House Totals for Cooling</b>	<b>Sensible Envelope Load All Zones</b>	<b>13616 Btuh</b>
	Sensible Duct Load	1823 Btuh
	<b>Total Sensible Zone Loads</b>	<b>15438 Btuh</b>
	Sensible ventilation	670 Btuh
	Blower	0 Btuh
	<b>Total sensible gain</b>	<b>16108 Btuh</b>
	Latent infiltration gain (for 54 gr. humidity difference)	2101 Btuh
	Latent ventilation gain	1316 Btuh
	Latent duct gain	296 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	<b>Latent total gain</b>	<b>4113 Btuh</b>
	<b>TOTAL GAIN</b>	<b>20222 Btuh</b>

**EQUIPMENT**

1. Central Unit/Pkg	#	36000 Btuh
---------------------	---	------------

\*Key: Window types (Pn - Number of panes of glass)  
 (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
 (U - Window U-Factor or 'DEF' for default)  
 (InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))  
 (ExSh - Exterior shading device: none(N) or numerical value)  
 (BS - Insect screen: none(N), Full(F) or Half(H))  
 (Ornt - compass orientation)



Version 8  
 For Florida residences only

# System Sizing Calculations - Winter

## Residential Load - Whole House Component Details

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

Reference City: Gainesville (Defaults) Winter Temperature Difference: 37.0 F

9/2/2009

### Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Wood, 0.57	N	27.0	21.1	569 Btuh
2	2, Clear, Wood, 0.57	N	12.7	21.1	267 Btuh
3	2, Clear, Wood, 0.57	N	9.5	21.1	200 Btuh
4	2, Clear, Wood, 0.57	N	27.0	21.1	569 Btuh
5	2, Clear, Wood, 0.57	E	13.5	21.1	285 Btuh
6	2, Clear, Wood, 0.57	S	62.0	21.1	1308 Btuh
7	2, Clear, Wood, 0.57	W	27.0	21.1	569 Btuh
8	2, Clear, Wood, 0.57	W	9.5	21.1	200 Btuh
Window Total			188(sqft)		3969 Btuh
<b>Walls</b>	Type	R-Value	Area X	HTM=	Load
1	Log - 8inch - Ext(0.05)	11.0	1000	1.7	1683 Btuh
2	Log - 8inch - Ext(0.05)	11.0	600	1.7	1010 Btuh
Wall Total			1600		2692 Btuh
<b>Doors</b>	Type		Area X	HTM=	Load
1	Wood - Exterior		20	20.0	400 Btuh
2	Wood - Exterior		80	20.0	1598 Btuh
Door Total			100		1998Btuh
<b>Ceilings</b>	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Single Assembly/D/Shin	30.0	1500	1.2	1796 Btuh
Ceiling Total			1500		1796Btuh
<b>Floors</b>	Type	R-Value	Size X	HTM=	Load
1	Raised Wood - Open	13	1500.0 sqft	2.5	3694 Btuh
Floor Total			1500		3694 Btuh
Envelope Subtotal:					14149 Btuh
<b>Infiltration</b>	Type	ACH X	Volume(cuft)	walls(sqft)	CFM=
Natural(Adjusted for ventilation)		0.45	15000	1600	112.5
					4557 Btuh
<b>Ductload</b>	(DLM of 0.081)				1514 Btuh
<b>All Zones</b>	<b>Sensible Subtotal All Zones</b>				<b>20220 Btuh</b>

# Manual J Winter Calculations

## Residential Load - Component Details (continued)

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

9/2/2009

### WHOLE HOUSE TOTALS

	Subtotal Sensible	20220 Btuh
	Ventilation Sensible	1458 Btuh
	Total Btuh Loss	21678 Btuh

### EQUIPMENT

1. Electric Heat Pump/Package	#	36000 Btuh
-------------------------------	---	------------

Key: Window types (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
(Frame types - metal, wood or insulated metal)  
(U - Window U-Factor or 'DEF' for default)  
(HTM - ManualJ Heat Transfer Multiplier)

Key: Floor size (perimeter(p) for slab-on-grade or area for all other floor types )



Version 8  
For Florida residences only

# Residential System Sizing Calculation

## Summary

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

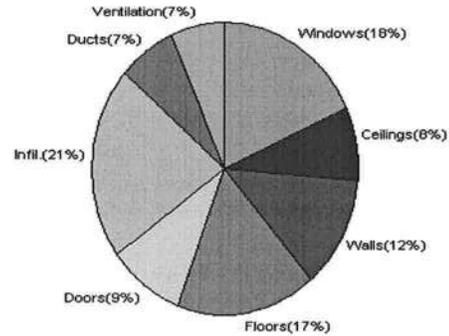
9/2/2009

Location for weather data: Gainesville - Defaults: Latitude(29) Altitude(152 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)			
Winter design temperature	33 F	Summer design temperature	92 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	37 F	Summer temperature difference	17 F
<b>Total heating load calculation</b>	<b>21678 Btuh</b>	<b>Total cooling load calculation</b>	<b>20222 Btuh</b>
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	166.1 36000	Sensible (SHR = 0.75)	167.6 27000
Heat Pump + Auxiliary(0.0kW)	166.1 36000	Latent	218.8 9000
		Total (Electric Heat Pump)	178.0 36000

## WINTER CALCULATIONS

Winter Heating Load (for 1500 sqft)

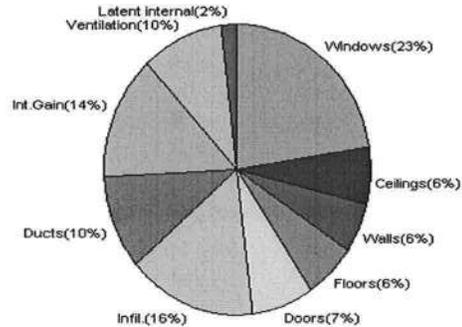
Load component	Load		
Window total	188 sqft	3969	Btuh
Wall total	1600 sqft	2692	Btuh
Door total	100 sqft	1998	Btuh
Ceiling total	1500 sqft	1796	Btuh
Floor total	1500 sqft	3694	Btuh
Infiltration	113 cfm	4557	Btuh
Duct loss		1514	Btuh
<b>Subtotal</b>		<b>20220</b>	<b>Btuh</b>
Ventilation	36 cfm	1458	Btuh
<b>TOTAL HEAT LOSS</b>		<b>21678</b>	<b>Btuh</b>



## SUMMER CALCULATIONS

Summer Cooling Load (for 1500 sqft)

Load component	Load		
Window total	188 sqft	4552	Btuh
Wall total	1600 sqft	1113	Btuh
Door total	100 sqft	1512	Btuh
Ceiling total	1500 sqft	1311	Btuh
Floor total		1198	Btuh
Infiltration	58 cfm	1070	Btuh
Internal gain		2860	Btuh
Duct gain		1823	Btuh
Sens. Ventilation	36 cfm	670	Btuh
<b>Total sensible gain</b>		<b>16108</b>	<b>Btuh</b>
Latent gain(ducts)		296	Btuh
Latent gain(infiltration)		2101	Btuh
Latent gain(ventilation)		1316	Btuh
Latent gain(internal/occupants/other)		400	Btuh
<b>Total latent gain</b>		<b>4113</b>	<b>Btuh</b>
<b>TOTAL HEAT GAIN</b>		<b>20222</b>	<b>Btuh</b>



Version 8  
For Florida residences only

EnergyGauge® System Sizing

PREPARED BY: WAT GJLL  
DATE: 9/19/09

# Building Input Summary Report

## PROJECT

Title: (invalid)	Bedrooms: (invalid)	Adress Type:
Building Type: (invalid)	Bathrooms: (invalid)	Lot #: (invalid)
Owner: (invalid)	Conditioned Area: (invalid)	SubDivision: (invalid)
# of Units: (invalid)	Total Stories: (invalid)	PlatBook: (invalid)
Builder Name: (invalid)	Worst Case: (invalid)	Street: (invalid)
Permit Office: (invalid)	Rotate Angle: (invalid)	County: (invalid)
Jurisdiction: (invalid)	Cross Ventilation: (invalid)	City, State, Zip: (invalid) , (invalid)
Family Type: (invalid)	Whole House Fan: (invalid)	
New/Existing: (invalid)		
Comment: (invalid)		

## CLIMATE

Design Location	Tmy Site	Design Temp 97.5 % 2.5 %	Int Design Temp Winter Summer	Heating Degree Days	Design Moisture	Daily Temp Range
(invalid)	(invalid)	(invalid) (invalid)	(invalid) (invalid)	(invalid)	(invalid)	(invalid)

## UTILITY RATES

Fuel	Unit	Utility Name	Monthly Fixed Cost	\$/Unit
Electricity	kWh	(invalid)	(invalid)	(invalid)
Natural Gas	Therm	(invalid)	(invalid)	(invalid)
Fuel Oil	Gallon	(invalid)	(invalid)	(invalid)
Propane	Gallon	(invalid)	(invalid)	(invalid)

## SURROUNDINGS

Ornt	Type	Shade Trees			Adjacent Buildings			
		Height	Width	Distance	Exist	Height	Width	Distance
N	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
NE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
E	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
SE	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
S	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
SW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
W	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft
NW	None	0 ft	0 ft	0 ft		0 ft	0 ft	0 ft

## FLOORS

#	Floor Type	R-Value	Area	Tile	Wood	Carpet
1	Raised Floor	11	1500 ft²	0	0	1

## ROOF

#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	Tested	Deck Insul.	Pitch
1	Gable or shed	Composition shingles	1737 ft²	438 ft²	Medium	0.96	No	0	30.3 deg

## ATTIC

#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
1	Full cathedral ceiling	Vented	300	1500 ft²	N	N

# Building Input Summary Report

## CEILING

#	Ceiling Type	R-Value	Area	Framing Fraction	Truss Type
1	Cathedral/Single Assembly (Vented)	30	1500 ft <sup>2</sup>	0.11	Wood

## WALLS

Wall orientation below is as entered. Actual orientation is modified by rotate angle shown in "Project" section above.

#	Ornt	Adjacent To	Wall Type	Cavity R-Value	Width Ft	Height Ft	In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.
1	N	Exterior	Log - 8 inch	13	50	10		500 ft <sup>2</sup>	0	0	0.75
2	E	Exterior	Log - 8 inch	13	30	10		300 ft <sup>2</sup>	0	0	0.75
3	S	Exterior	Log - 8 inch	13	50	10		500 ft <sup>2</sup>	0	0	0.75
4	W	Exterior	Log - 8 inch	13	30	10		300 ft <sup>2</sup>	0	0	0.75

## DOORS

#	Ornt	Door Type	Storms	U-Value	Width Ft	Height Ft	In	Area
1	N	Wood	None	0.46	3	6	8	20 ft <sup>2</sup>
2	S	Wood	None	0.46	6	6	8	40 ft <sup>2</sup>
3	S	Wood	None	0.46	6	6	8	40 ft <sup>2</sup>

## WINDOWS

#	Ornt	Frame	Panes	NFRC	U-Factor	SHGC	Storm	Area	Overhang			Screening
									Depth	Separation	Interior Shade	
1	N	Wood	Double (Clear)	Yes	0.55	0.6	N	27 ft <sup>2</sup>	7 ft 2 in	2 ft 0 in	Drapes/blinds	None
2	N	Wood	Double (Clear)	Yes	1.05	0.7	N	12.67 ft <sup>2</sup>	5 ft 10 in	2 ft 0 in	Drapes/blinds	None
3	N	Wood	Double (Clear)	Yes	0.55	0.7	N	9.5 ft <sup>2</sup>	5 ft 10 in	2 ft 0 in	Drapes/blinds	None
4	N	Wood	Double (Clear)	Yes	0.55	0.7	N	27 ft <sup>2</sup>	7 ft 2 in	9 ft 8 in	Drapes/blinds	None
5	E	Wood	Double (Clear)	Yes	0.55	0.7	N	13.5 ft <sup>2</sup>	15 ft 6 in	2 ft 0 in	Drapes/blinds	None
6	S	Wood	Double (Clear)	Yes	0.55	0.7	N	62 ft <sup>2</sup>	6 ft 8 in	13 ft 8 in	Drapes/blinds	None
7	W	Wood	Double (Clear)	Yes	0.55	0.7	N	27 ft <sup>2</sup>	13 ft 0 in	2 ft 0 in	Drapes/blinds	None
8	W	Wood	Double (Clear)	Yes	0.55	0.7	N	9.5 ft <sup>2</sup>	15 ft 0 in	2 ft 0 in	Drapes/blinds	None

## INFILTRATION & VENTING

Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50	--- Forced Ventilation ---			Terrain/Wind Shielding
							Supply	Exhaust	Run Time	
Best Guess	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	(invalid)	0	0	0	(invalid) / (invalid)

## MASS

Mass Type	Area	Thickness	Furniture Fraction
(invalid)	(invalid) ft <sup>2</sup>	(invalid) ft	(invalid)

## COOLING SYSTEM

#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Ductless
1	Central Unit	None	SEER: 13	36 kBtu/hr	1080 cfm	0.75	False

# Building Input Summary Report

## HEATING SYSTEM

#	System Type	Subtype	Efficiency	Capacity	Ductless
1	Electric Heat Pump	None	HSPF: 7.7	36 kBtu/hr	False

## HOT WATER SYSTEM

#	System Type	EF	Cap	Use	SetPnt	Credits
1	Electric	0.92	40 gal	40 gal	120 deg	None

## SOLAR HOT WATER

Collector Type	Collector Tilt	Surface Azimuth	Area	Loss Coef.	Absorp. Prod.	Trans Corr.	Tank Volume	Tank U-Value	Tank Surf Area	Heat Exch Eff	PV Pumped	Pump Energy

## DUCTS

#	---- Supply ----			---- Return ----			Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF
	Location	R-Value	Area	Location	Area	Number						
1	Exterior	6	300 ft²	Exterior	75 ft²	(invalid)	Default Leakage	(invalid)				

## TEMPERATURES

Programable Thermostat: None		Ceiling Fans: N											
Cooling Heating Venting													
Thermostat Schedule: HERS 2006 Reference		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Cooling (WEH)	AM PM	78 80	78 80	78 80	78 80	78 78	78 78	78 78	78 78	80 78	80 78	80 78	80 78
Heating (WD)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68
Heating (WEH)	AM PM	65 68	65 68	65 68	65 68	65 68	65 68	65 68	68 68	68 68	68 68	68 68	68 68

# Building Input Summary Report

APPLIANCES & LIGHTING													
Appliance Schedule: HERS 2006 Reference		Hours											
Schedule Type		1	2	3	4	5	6	7	8	9	10	11	12
Ceiling Fans (Summer)	AM	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.33	0.33	0.33	0.33	0.33
% Released: 100	PM	0.33	0.33	0.33	0.33	0.33	1	0.9	0.9	0.9	0.9	0.9	0.65
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Clothes Washer	AM	0.105	0.081	0.047	0.047	0.081	0.128	0.256	0.57	0.849	1	0.977	0.872
% Released: 60	PM	0.779	0.698	0.605	0.57	0.581	0.57	0.57	0.57	0.57	0.488	0.43	0.198
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dishwasher	AM	0.139	0.05	0.028	0.024	0.029	0.09	0.169	0.303	0.541	0.594	0.502	0.443
% Released: 60	PM	0.377	0.396	0.335	0.323	0.344	0.448	0.791	1	0.8	0.597	0.383	0.281
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Dryer	AM	0.2	0.1	0.05	0.05	0.05	0.075	0.2	0.375	0.5	0.8	0.95	1
% Released: 10	PM	0.875	0.85	0.8	0.625	0.625	0.6	0.575	0.55	0.625	0.7	0.65	0.375
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Lighting	AM	0.16	0.15	0.16	0.18	0.23	0.45	0.4	0.26	0.19	0.16	0.12	0.11
% Released: 90	PM	0.16	0.17	0.25	0.27	0.34	0.55	0.55	0.88	1	0.86	0.51	0.28
Annual Use: 455 kWh/Yr		Peak Value: 149 Watts											
Miscellaneous	AM	0.48	0.47	0.47	0.47	0.47	0.47	0.64	0.71	0.67	0.61	0.55	0.53
% Released: 90	PM	0.52	0.5	0.5	0.5	0.59	0.73	0.79	0.99	1	0.96	0.77	0.55
Annual Use: 760 kWh/Yr		Peak Value: 139 Watts											
Pool Pump	AM	0	0	0	0	0	0	0	0	0	1	1	1
% Released: 0	PM	1	1	1	1	0	0	0	0	0	0	0	0
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Range	AM	0.057	0.057	0.057	0.057	0.057	0.114	0.171	0.286	0.343	0.343	0.343	0.4
% Released: 100	PM	0.457	0.343	0.286	0.4	0.571	1	0.857	0.429	0.286	0.229	0.171	0.114
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											
Refrigeration	AM	0.85	0.78	0.75	0.73	0.73	0.73	0.75	0.75	0.8	0.8	0.8	0.8
% Released: 100	PM	0.88	0.85	0.85	0.83	0.88	0.95	1	0.98	0.95	0.93	0.9	0.85
Annual Use: 775 kWh/Yr		Peak Value: 106 Watts											
Well Pump	AM	0.05	0.05	0.05	0.05	0.05	0.05	0.1	0.1	0.1	0.1	0.1	0.1
% Released: 0	PM	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Annual Use: 0 kWh/Yr		Peak Value: 0 Watts											

# Florida Code Summary Report

(invalid)  
 (invalid)  
 (invalid), (invalid), (invalid)  
 Registration #: (invalid)

Title: (invalid)  
 (invalid)  
  
 (invalid)

TMY City: (invalid)  
 Elec Util: (invalid)  
 Gas Util: (invalid)  
 Run Date:

Energy Uses	Baseline Home	As-Built Home	e-Ratio
Heating	4.87 MBtu	3.64 MBtu	0.75
Cooling	12.35 MBtu	10.40 MBtu	0.84
Hot Water	6.18 MBtu	6.18 MBtu	1.00
<b>Total</b>	<b>23.41 MBtu</b>	<b>20.22 MBtu</b>	<b>0.86</b>

Building Loads	Baseline Home	As-Built Home	e-Ratio
Heating	9.04 MBtu	6.75 MBtu*	0.75
Cooling	27.58 MBtu	23.21 MBtu*	0.84
Hot Water	5.56 MBtu	5.56 MBtu*	1.00
<b>Total</b>	<b>42.18 MBtu</b>	<b>35.52 MBtu</b>	<b>0.84</b>

\* normalized modified loads

Glass/Floor Area: 0.125	Total As-Built Modified Loads: 35.52	<b>PASS</b>
	Total Baseline Loads: 42.18	

# System Sizing Calculations - Summer

## Residential Load - Room by Room Component Details

SRLH - TED SMITH

Project Title:  
PF09-096

Code Only  
Professional Version  
Climate: North

, FL

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F

9/2/2009

### Component Loads for Zone #1: Main

Window	Type*		Overhang		Window Area(sqft)			HTM		Load	
	Pn/SHGC/U/InSh/ExSh/IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2, Clear, 0.57, B-M, N,N	N	2ft.	7.16	27.0	0.0	27.0	15	15	415 Btuh	
2	2, Clear, 0.57, B-M, N,N	N	2ft.	5.83	12.7	0.0	12.7	15	15	195 Btuh	
3	2, Clear, 0.57, B-M, N,N	N	2ft.	5.83	9.5	0.0	9.5	15	15	146 Btuh	
4	2, Clear, 0.57, B-M, N,N	N	9.66	7.16	27.0	0.0	27.0	15	15	415 Btuh	
5	2, Clear, 0.57, B-M, N,N	E	2ft.	15.5f	13.5	0.0	13.5	15	46	620 Btuh	
6	2, Clear, 0.57, B-M, N,N	S	13.6	6.66	62.0	62.0	0.0	15	19	954 Btuh	
7	2, Clear, 0.57, B-M, N,N	W	2ft.	13ft.	27.0	0.0	27.0	15	46	1240 Btuh	
8	2, Clear, 0.57, B-M, N,N	W	2ft.	15ft.	9.5	0.0	9.5	15	46	436 Btuh	
	Window Total				188 (sqft)					4420 Btuh	
<b>Walls</b>	Type		R-Value/U-Value		Area(sqft)		HTM		Load		
1	Log - 8inch - Ext		11.0/0.05		1000.0		0.7		696 Btuh		
2	Log - 8inch - Ext		11.0/0.05		600.0		0.7		417 Btuh		
	Wall Total				1600 (sqft)				1113 Btuh		
<b>Doors</b>	Type		R-Value		Area (sqft)		HTM		Load		
1	Wood - Exterior		13.0		20.0		15.1		302 Btuh		
2	Wood - Exterior		13.0		80.0		15.1		1210 Btuh		
	Door Total				100 (sqft)				1512 Btuh		
<b>Ceilings</b>	Type/Color/Surface		R-Value		Area(sqft)		HTM		Load		
1	Single Assembly/DarkShingle		30.0		1500.0		0.9		1311 Btuh		
	Ceiling Total				1500 (sqft)				1311 Btuh		
<b>Floors</b>	Type		R-Value		Size		HTM		Load		
1	Raised Wood - Open		13.0		1500 (sqft)		0.8		1198 Btuh		
	Floor Total				1500.0 (sqft)				1198 Btuh		
Zone Envelope Subtotal:									9554 Btuh		
<b>Infiltration</b>	Type		ACH		Volume(cuft)		wall area(sqft)		CFM=		
	SensibleNatural		0.23		15000		1600		57.5		
<b>Internal gain</b>			Occupants		Btuh/occupant		Appliance		Load		
			2		X 230		+		2400		
	Sensible Envelope Load:									13484 Btuh	
<b>Duct load</b>	Average sealed, Supply(R6.0-Attic), Return(R6.0-Cond)							(DGM of 0.134)		1805 Btuh	
<b>Sensible Zone Load</b>									<b>15290 Btuh</b>		

The following window Excursion will be assigned to the system loads.

<b>Windows</b>	July excursion for System 1	131 Btuh
	Excursion Subtotal:	131 Btuh
<b>Duct load</b>		18 Btuh
	<b>Sensible Excursion Load</b>	<b>149 Btuh</b>

# Manual J Summer Calculations

## Residential Load - Component Details (continued)

SRLH - TED SMITH  
 , FL

Project Title:  
 PF09-096

Code Only  
 Professional Version  
 Climate: North

9/2/2009

### WHOLE HOUSE TOTALS

<b>Whole House Totals for Cooling</b>	<b>Sensible Envelope Load All Zones</b>	<b>13616 Btuh</b>
	Sensible Duct Load	1823 Btuh
	<b>Total Sensible Zone Loads</b>	<b>15438 Btuh</b>
	Sensible ventilation	670 Btuh
	Blower	0 Btuh
	<b>Total sensible gain</b>	<b>16108 Btuh</b>
	Latent infiltration gain (for 54 gr. humidity difference)	2101 Btuh
	Latent ventilation gain	1316 Btuh
	Latent duct gain	296 Btuh
	Latent occupant gain (2 people @ 200 Btuh per person)	400 Btuh
	Latent other gain	0 Btuh
	<b>Latent total gain</b>	<b>4113 Btuh</b>
	<b>TOTAL GAIN</b>	<b>20222 Btuh</b>

### EQUIPMENT

1. Central Unit/Pkg	#	36000 Btuh
---------------------	---	------------

\*Key: Window types (Pn - Number of panes of glass)  
 (SHGC - Shading coefficient of glass as SHGC numerical value or as clear or tint)  
 (U - Window U-Factor or 'DEF' for default)  
 (InSh - Interior shading device: none(N), Blinds(B), Draperies(D) or Roller Shades(R))  
 (ExSh - Exterior shading device: none(N) or numerical value)  
 (BS - Insect screen: none(N), Full(F) or Half(H))  
 (Ornt - compass orientation)



Version 8  
 For Florida residences only

## PRODUCT APPROVAL SPECIFICATION SHEET

**Location:** 382 SE RIVERVIEW CIRCLE **Project Name:** \_\_\_\_\_

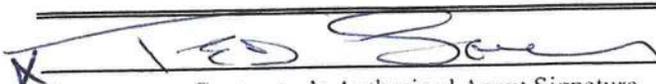
As required by Florida Statute 553.842 and Florida Administrative Code 9B-72, please provide the information and the product approval number(s) on the building components listed below if they will be utilized on the construction project for which you are **applying for a building permit on or after April 1, 2004**. We recommend you contact your local product supplier should you not know the product approval number for any of the applicable listed products. More information about statewide product approval can be obtained at [www.floridabuilding.org](http://www.floridabuilding.org)

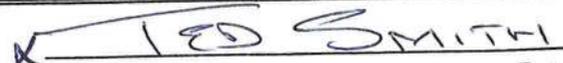
Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
<b>A. EXTERIOR DOORS</b>			
1. Swinging	Simpson	Exterior Door	FL12434
2. Sliding	<del>Ward</del> Hurd	Exterior Door	<del>FL050196</del> FL10875
3. Sectional			
4. Roll up			
5. Automatic			
6. Other			
<b>B. WINDOWS</b>			
1. Single hung			
2. Horizontal Slider			
3. Casement			
4. Double Hung	Hurd	Aluminum Clad Window	<del>FL10820</del> FL11587
5. Fixed			
6. Awning			
7. Pass-through			
8. Projected			
9. Mullion			
10. Wind Breaker			
11. Dual Action			
12. Other			
<b>C. PANEL WALL</b>			
1. Siding			
2. Soffits			
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7. Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
<b>D. ROOFING PRODUCTS</b>			
1. Asphalt Shingles	<del>Owens Corning</del>	30 year A/C	FL10674-R2
2. Underlayments			
3. Roofing Fasteners			
4. Non-structural Metal Rf			
5. Built-Up Roofing			
6. Modified Bitumen			
7. Single Ply Roofing Sys			
8. Roofing Tiles			
9. Roofing Insulation			
10. Waterproofing			
11. Wood shingles /shakes			
12. Roofing Slate			

Category/Subcategory (cont.)	Manufacturer	Product Description	Approval Number(s)
13. Liquid Applied Roof Sys			
14. Cements-Adhesives – Coatings			
15. Roof Tile Adhesive			
16. Spray Applied Polyurethane Roof			
17. Other			
<b>E. SHUTTERS</b>			
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
<b>F. SKYLIGHTS</b>			
1. Skylight			
2. Other			
<b>G. STRUCTURAL COMPONENTS</b>			
1. Wood connector/anchor			
2. Truss plates			
3. Engineered lumber			
4. Railing			
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			
8. Insulation Forms			
9. Plastics			
10. Deck-Roof			
11. Wall			
12. Sheds			
13. Other			
<b>H. NEW EXTERIOR ENVELOPE PRODUCTS</b>			
1.			
2.			

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

I understand these products may have to be removed if approval cannot be demonstrated during inspection.

  
 Contractor or Contractor's Authorized Agent Signature

  
 Print Name Date



**COLUMBIA COUNTY BUILDING DEPARTMENT  
RESIDENTIAL CHECK LIST REQUIREMENTS**

**MINIMUM PLAN REQUIREMENTS FOR THE  
FLORIDA BUILDING CODE RESIDENTIAL 2007  
ONE (1) AND TWO (2) FAMILY DWELLINGS**

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

**ALL BUILDING PLANS MUST INDICATE COMPLIANCE with the Current 2007 FLORIDA BUILDING CODES RESIDENTIAL. ALL PLANS OR DRAWINGS SHALL PROVIDE CALCULATIONS AND DETAILS THAT HAVE THE SEAL AND SIGNATURE OF A CERTIFIED ARCHITECT OR ENGINEER REGISTERED IN THE STATE OF FLORIDA, OR ALTERNATE METHODOLOGIES, APPROVED BY THE STATE OF FLORIDA BUILDING COMMISSION FOR ONE-AND-TWO FAMILY DWELLINGS.**

**FOR DESIGN PURPOSES THE FOLLOWING BASIC WIND SPEEDS ARE PER FIGURE R301.2(4) of the FLORIDA BUILDING CODES RESIDENTIAL (Florida Wind speed map) SHALL BE USED.**

WIND SPEED LINE SHALL BE DEFINED AS FOLLOWS: THE CENTERLINE OF INTERSTATE 75.

ALL BUILDINGS CONSTRUCTED EAST OF SAID LINE SHALL BE ----- 100 MPH  
 ALL BUILDINGS CONSTRUCTED WEST OF SAID LINE SHALL BE -----110 MPH  
 NO AREA IN COLUMBIA COUNTY IS IN A WIND BORNE DEBRIS REGION

**GENERAL REQUIREMENTS:  
 APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL**

Items to Include-  
 Each Box shall be  
 Circled as  
 Applicable

		Yes	No	N/A
<b>1</b>	Two (2) complete sets of plans containing the following:			
<b>2</b>	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			
<b>3</b>	Condition space (Sq. Ft.)			
	Total (Sq. Ft.) under roof			1560

Designers name and signature shall be on all documents and a licensed architect or engineer, signature and official embossed seal shall be affixed to the plans and documents as per the FLORIDA BUILDING CODES RESIDENTIAL R101.2.1

**Site Plan information including:**

<b>4</b>	Dimensions of lot or parcel of land	✓		
<b>5</b>	Dimensions of all building set backs	✓		
<b>6</b>	Location of all other structures (include square footage of structures) on parcel, existing or proposed well and septic tank and all utility easements.	✓		
<b>7</b>	Provide a full legal description of property.	✓		

**Wind-load Engineering Summary, calculations and any details required**

<b>GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL</b>		<b>Items to Include- Each Box shall be Circled as Applicable</b>		
8	Plans or specifications must show compliance with FBCR Chapter 3	IIIII	IIII	IIIII
		YES	NO	N/A
9	Basic wind speed (3-second gust), miles per hour	✓		
10	(Wind exposure – if more than one wind exposure is used, the wind exposure and applicable wind direction shall be indicated)	✓		
11	Wind importance factor and nature of occupancy	✓		
12	The applicable internal pressure coefficient, Components and Cladding	✓		
13	The design wind pressure in terms of psf (kN/m <sup>2</sup> ), to be used for the design of exterior component, cladding materials not specifically designed by the registered design professional.	✓		

**Elevations Drawing including:**

14	All side views of the structure	✓		
15	Roof pitch	✓		
16	Overhang dimensions and detail with attic ventilation	✓		
17	Location, size and height above roof of chimneys	✓		
18	Location and size of skylights with Florida Product Approval	✓		
18	Number of stories	✓		
20A	Building height from the established grade to the roofs highest peak	✓		

**Floor Plan including:**

20	Dimensioned area plan showing rooms, attached garage, breeze ways, covered porches, deck, balconies	✓		
21	Raised floor surfaces located more than 30 inches above the floor or grade	✓		
22	All exterior and interior shear walls indicated	✓		
23	Shear wall opening shown (Windows, Doors and Garage doors)	✓		
24	Emergency escape and rescue opening shown in each bedroom (net clear opening shown)	✓		
25	Safety glazing of glass where needed			
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 of FBCR)	✓		
27	Stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails (see FBCR SECTION 311)	✓		
28	Identify accessibility of bathroom (see FBCR SECTION 322)	✓		

**All materials placed within opening or onto/into exterior walls, soffits or roofs shall have Florida product approval number and mfg. installation information submitted with the plan (see Florida product approval form)**

<b>GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL</b>	<b>Items to Include- Each Box shall be Circled as Applicable</b>
-------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------

**FBCR 403: Foundation Plans**

		YES	NO	N/A
29	Location of all load-bearing walls footings indicated as standard, monolithic, dimensions, size and type of reinforcing.	✓		
30	All posts and/or column footing including size and reinforcing	✓		
31	Any special support required by soil analysis such as piling.	✓		
32	Assumed load-bearing value of soil _____ Pound Per Square Foot	✓		
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type)	✓		

**FBCR 506: CONCRETE SLAB ON GRADE**

34	Show Vapor retarder (6mil. Polyethylene with joints lapped 6 inches and sealed)	✓		
35	Show control joints, synthetic fiber reinforcement or welded fire fabric reinforcement and Supports	✓		

**FBCR 320: PROTECTION AGAINST TERMITES**

36	Indicate on the foundation plan if soil treatment is used for subterranean termite prevention or submit other approved termite protection methods. <b>Protection shall be provided by registered termiticides</b>	TBD		
----	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	--	--

**FBCR 606: Masonry Walls and Stem walls (load bearing & shear Walls)**

37	Show all materials making up walls, wall height, and Block size, mortar type	✓		
38	Show all Lintel sizes, type, spans and tie-beam sizes and spacing of reinforcement	✓		

**Metal frame shear wall and roof systems shall be designed, signed and sealed by Florida Prof. Engineer or Architect**

**Floor Framing System: First and/or second story**

39	Floor truss package shall including layout and details, signed and sealed by Florida Registered Professional Engineer	✓		
40	Show conventional floor joist type, size, span, spacing and attachment to load bearing walls, stem walls and/or piers	✓		
41	Girder type, size and spacing to load bearing walls, stem wall and/or piers	✓		
42	Attachment of joist to girder	✓		
43	Wind load requirements where applicable	✓		
44	Show required under-floor crawl space			✓
45	Show required amount of ventilation opening for under-floor spaces			
46	Show required covering of ventilation opening	✓		
47	Show the required access opening to access to under-floor spaces	✓		
	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges &	✓		

48	intermediate of the areas structural panel sheathing			<input checked="" type="checkbox"/>
49	Show Draftstopping, Fire caulking and Fire blocking			<input checked="" type="checkbox"/>
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 309			<input checked="" type="checkbox"/>
51	Provide live and dead load rating of floor framing systems (psf).	<input checked="" type="checkbox"/>		

**FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION**

<b>GENERAL REQUIREMENTS: APPLICANT - PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL</b>		<b>Items to Include- Each Box shall be Circled as Applicable</b>		
		<b>YES</b>	<b>NO</b>	<b>N/A</b>

52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	<input checked="" type="checkbox"/>		
53	Fastener schedule for structural members per table FBCR 602.3 are to be shown	<input checked="" type="checkbox"/>		
54	Show Wood structural panel's sheathing attachment to studs, joist, trusses, rafters and structural members, showing fastener schedule attachment on the edges & intermediate of the areas structural panel sheathing	<input checked="" type="checkbox"/>		
55	Show all required connectors with a max uplift rating and required number of connectors and oc spacing for continuous connection of structural walls to foundation and roof trusses or rafter systems	<input checked="" type="checkbox"/>		
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per FBCR Table 502.5 (1)	<input checked="" type="checkbox"/>		
57	Indicate where pressure treated wood will be placed	<input checked="" type="checkbox"/>		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	<input checked="" type="checkbox"/>		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail			<input checked="" type="checkbox"/>

**FBCR :ROOF SYSTEMS:**

60	Truss design drawing shall meet section FBCR 802.10 Wood trusses			<input checked="" type="checkbox"/>
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer			<input checked="" type="checkbox"/>
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters			<input checked="" type="checkbox"/>
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	<input checked="" type="checkbox"/>		
64	Provide dead load rating of trusses			<input checked="" type="checkbox"/>

**FBCR 802:Conventional Roof Framing Layout**

65	Rafter and ridge beams sizes, span, species and spacing			<input checked="" type="checkbox"/>
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating			<input checked="" type="checkbox"/>
67	Valley framing and support details			<input checked="" type="checkbox"/>
68	Provide dead load rating of rafter system			<input checked="" type="checkbox"/>

**FBCR Table 602,3(2) & FBCR 803 ROOF SHEATHING**

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	<input checked="" type="checkbox"/>		
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas	<input checked="" type="checkbox"/>		

**FBCR ROOF ASSEMBLIES FRC Chapter 9**

71	Include all materials which will make up the roof assembles covering	<input checked="" type="checkbox"/>		
72	Submit Florida Product Approval numbers for each component of the roof assembles covering	<input checked="" type="checkbox"/>		

**FBCR Chapter 11 Energy Efficiency Code for residential building**

Residential construction shall comply with this code by using the following compliance methods in the FBCR chapter 11 Residential buildings compliance methods. *Two of the required forms are to be submitted, showing dimensions condition area equal to the total condition living space area*

<b>GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL</b>		<b>Items to Include- Each Box shall be Circled as Applicable</b>		
		YES	NO	N/A
73	Show the insulation R value for the following areas of the structure	<input checked="" type="checkbox"/>		
74	Attic space			<input checked="" type="checkbox"/>
75	Exterior wall cavity			<input checked="" type="checkbox"/>
76	Crawl space			<input checked="" type="checkbox"/>

**HVAC information**

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	<input checked="" type="checkbox"/>		
78	Exhaust fans locations in bathrooms	<input checked="" type="checkbox"/>		
79	Show clothes dryer route and total run of exhaust duct	<input checked="" type="checkbox"/>		

**Plumbing Fixture layout shown**

80	All fixtures waste water lines shall be shown on the foundation plan	<input checked="" type="checkbox"/>		
81	Show the location of water heater	<input checked="" type="checkbox"/>		

**Private Potable Water**

82	Pump motor horse power	<input checked="" type="checkbox"/>		
83	Reservoir pressure tank gallon capacity	<input checked="" type="checkbox"/>		
84	Rating of cycle stop valve if used	<input checked="" type="checkbox"/>		

**Electrical layout shown including**

85	Switches, outlets receptacles, lighting and all required GFCI outlets identified	<input checked="" type="checkbox"/>		
86	Ceiling fans	<input checked="" type="checkbox"/>		
87	Smoke detectors & Carbon dioxide detectors	<input checked="" type="checkbox"/>		
88	Service panel, sub-panel, location(s) and total ampere ratings	<input checked="" type="checkbox"/>		
89	On the electrical plans identify the electrical service overcurrent protection device for the main electrical service. This device shall be installed on the exterior of structures to serve as a disconnecting means for the utility company electrical service. Conductors used from the exterior disconnecting means to a panel or sub panel shall have four-wire conductors, of which one conductor shall be used as an equipment ground. Indicate if the utility company service entrance cable will be of the overhead or underground type.	<input checked="" type="checkbox"/>		

90	Appliances and HVAC equipment and disconnects	✓		
91	Arc Fault Circuits (AFCI) in bedrooms	✓		

**Disclosure Statement for Owner Builders** If you as the applicant will be acting as an owner builder under section 489.103(7) of the Florida Statutes, submit the required owner builder disclosure statement form.

**Notice Of Commencement**

A notice of commencement form **recorded** in the Columbia County Clerk Office is required to be filed with the building department Before Any Inspections can be preformed.

<b>GENERAL REQUIREMENTS:</b> <b>APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL</b>	<b>Items to Include-</b> <b>Each Box shall be</b> <b>Circled as</b> <b>Applicable</b>
-------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------

**THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS**

		YES	NO	N/A
92	<b>Building Permit Application</b> A current Building Permit Application form is to be completed and submitted for all residential projects	✓		
93	<b>Parcel Number</b> The parcel number (Tax ID number) from the Property Appraiser (386) 758-1084 is required. A copy of property deed is also requested	✓		
94	<b>Environmental Health Permit or Sewer Tap Approval</b> A copy of a approved Columbia County Environmental Health (386) 758-1058	✓		
95	<b>City of Lake City</b> A permit showing an approved waste water sewer tap	✓		
96	<b>Toilet facilities shall be provided for all construction sites</b>	✓		
97	<b>Town of Fort White</b> (386) 497-2321 If the parcel in the application for building permit is within the Corporate city limits of Fort White an approval land use development letter issued by the Town of Fort is required to be submitted with the application for a building permit.			✓
98	<b>Flood Information:</b> All projects within the Floodway of the Suwannee or Santa Fe Rivers shall require permitting through the Suwannee River Water Management District, before submitting a application to this office. Any project located within a flood zone where the base flood elevation (100 year flood) has been established shall meet the requirements of Section 8.5.2 of the Columbia County Land Development Regulations. Any project located within a flood zone where the base flood elevation has not been established (Zone A) shall meet the requirements of Section 8.5.3 of the Columbia County Land Development Regulations	✓		
99	<b>CERTIFIED FINISHED FLOOR ELEVATIONS</b> will be required on any project where the base flood elevation (100 year flood) has been established	✓		
100	A development permit will also be required. Development permit cost is <b>\$50.00</b>			
101	<b>Driveway Connection:</b> If the property does not have an existing access to a public road, then an application for a culvert permit ( <b>\$25.00</b> ) must be made. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver ( <b>\$50.00</b> ). All culvert waivers are sent to the Columbia County Public Works Department for approval or denial.			waiver
102	<b>911 Address:</b> If the project is located in an area where a 911 address has not been issued, then application for a 911 address must be applied for and <b>received</b> through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125	✓		

**Section R101.2.1 of the Florida Building Code Residential:**

The provisions of Chapter 1, Florida Building Code, Building shall govern the administration and enforcement of the Florida Building Code, Residential.

Section 105 of the Florida Building Code defines the:

**Time limitation 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 such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**Single-family residential dwelling.**

Section 105.3.4 A building permit for a single-family residential dwelling must be issued within 30 working days of application therefor unless unusual circumstances require a longer time for processing the application or unless the permit application fails to satisfy the Florida Building Code or the enforcing agency's laws or ordinances.

**Permit intent.**

Section 105.4.1: A permit issued shall be constructed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code. Every permit issued shall become invalid unless the work authorized by such permit is commenced within six months after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of six months after the time the work is commenced.

**If work has commenced.**

Section 105.4.1.1: If work has commenced and the permit is revoked, becomes null and void, or expires because of lack of progress or abandonment, a new permit covering the proposed construction shall be obtained before proceeding with the work.

**New Permit.**

Section 105.4.1.2: If a new permit is not obtained within 180 days from the date the initial permit became null and void, the building official is authorized to require that any work which has been commenced or completed be removed from the building site. Alternately, a new permit may be issued on application, providing the work in place and required to complete the structure meets all applicable regulations in effect at the time the initial permit became null and void and any regulations which may have become effective between the date of expiration and the date of issuance of the new permit.

**Work Shall Be:**

**Section 105.4.1.3: Work shall be considered to be in active progress when the permit has received an approved inspection within 180 days. This provision shall not be applicable in case of civil commotion or strike or when the building work is halted due directly to judicial injunction, order or similar process.**

**The Fee:**

**Section 105.4.1.4: The fee for renewal reissuance and extension of a permit shall be set forth by the administrative authority.**

**When the submitted application is approved for permitting the applicant will be notified by phone as to the date and time a building permit will be prepared and issued by the Columbia County Building & Zoning Department**



GTC DESIGN GROUP

GTC Design Group, LLC  
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Live Oak, FL 32064  
(Phone) 386.362.3678  
(Fax) 386.362.6133  
cwilliams@gtcdesigngroup.com

September 16, 2009

**ZERO RISE CERTIFICATION**

Client/Owner: **Ted Smith**

Property Description: **Lot 3,  
River View  
Section 27, Township 7 South, Range 17 East  
Columbia County, Florida**

Structure in Floodway: **50' x 30' Residence on piers**

River Mile: **28**

Elevation of 100yr flood: **47**  
Community Panel: **12023C0551C**

I hereby certify that construction of the proposed residence will not increase flood elevations of the Sante Fe River.

  
Gary J. Gill  
PE# 51942

September 16, 2009



GTC Design Group, LLC  
P.O. Box 187  
Live Oak, FL 32064  
(Phone) 386.362.3678  
(Fax) 386.362.6133  
cwilliams@gtcdesigngroup.com

September 16, 2009

Leroy Marshall II  
c/o Suwannee River Water Management District  
9225 County Road 49  
Live Oak, FL 32060

**SUBJECT: Zero Rise- Tim Smith**

Mr. Marshall,

Mr. Tim Smith proposes to build a residence in Section 27, Township 7 South, Range 17 East, Lot 3, Columbia County, Florida. The structure will include a 50x30 residence with attached 12 ft x 50 ft front porch and an 8 ft x 20 ft back porch. The structure will be located in the floodway of the Santa Fe River.

A new cross section was added at the site location. A site plan is attached locating the property, and existing cross sections.

**All elevations per NAV D1998 Datum.**

The following steps were executed in doing the zero rise calculations.

- (1) Run the model with SRWMD existing cross sections. Verify that the model matches the original flood study results.

**The output from the run using the existing cross sections matches the original flood study.**

- (2) Interpolate between existing cross sections and add a new cross section at the site location.

**The new section, RS 28.33, was interpolated from river posts 27.68 and 28.93. The elevations from the interpolated cross sections were adjusted accordingly.**

- (3) Verify that the run using the additional cross section matches the original output.

**The output from the run using the interpolated cross sections matches the original flood study.**

- (4) Add obstacles along the new cross section to model the piers under the house.

**An obstacle width of 62 feet was added at cross section RS 12.90. RS 12.90 is located at the center of the building. An obstacle height of 60 feet was input to insure the structure would be modeled correctly.**

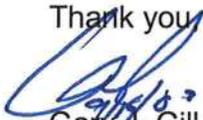
- (5) Verify the run including the obstacles matches the original model run.

**The water surface elevations for all three runs match and a zero rise is achieved.**

- (6) Print out cross sections.

**See attachments.**

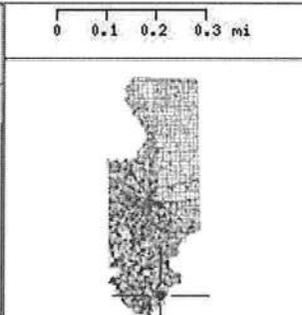
Thank you



Gary J. Gill  
P.E. #51942



<b>Columbia County Property Appraiser</b>		
J. Doyle Crews, CFA - Lake City, Florida - 386-758-1083		
<b>PARCEL: 27-7S-17-10055-103 - VACANT (000000)</b>		
Name: SMITH TED F	LandVal	\$17,724.00
Site:	BldgVal	\$0.00
Mail: 340 SE RESORT LOOP	ApprVal	\$17,724.00
HIGH SPRINGS, FL 32643	JustVal	\$17,724.00
Sales	Assd	\$17,724.00
Info	Exmpt	\$0.00
	Taxable	County: \$17,724.00   City: \$17,724.00 Other: \$17,724.00   School: \$17,724.00



This information, GIS Map Updated: 7/22/2009, was derived from data which was compiled by the Columbia County Property Appraiser Office solely for the governmental purpose of property assessment. This information should not be relied upon by anyone as a determination of the ownership of property or market value. No warranties, expressed or implied, are provided for the accuracy of the data herein, it's use, or it's interpretation. Although it is periodically updated, this information may not reflect the data currently on file in the Property Appraiser's office. The assessed values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

HEC-RAS River: Santa Fe Reach: Main Profile: 100 Year

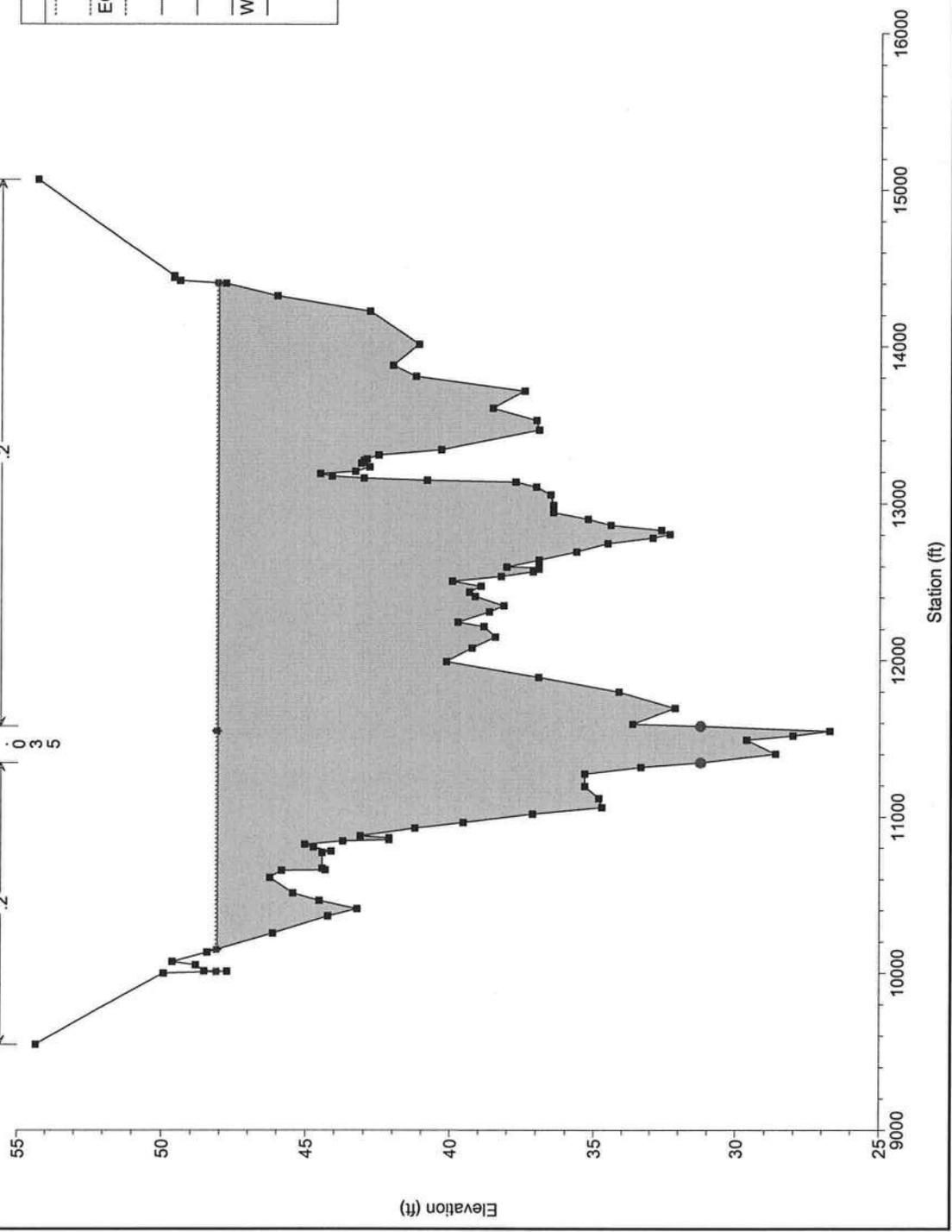
Reach	River Sta	Profile	Plan	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Main	30.42	100 Year	org	24427.00	32.34	50.43		50.44	0.000259	1.44	41178.09	5042.10	0.07
Main	30.42	100 Year	x-sections	24427.00	32.34	50.43		50.44	0.000259	1.44	41193.36	5043.19	0.07
Main	30.42	100 Year	piers	24427.00	32.34	50.43		50.44	0.000259	1.44	41194.29	5043.25	0.07
Main	28.94	100 Year	org	23206.00	26.74	48.72		48.86	0.000213	4.17	28843.28	3721.38	0.17
Main	28.94	100 Year	x-sections	23206.00	26.74	48.72		48.87	0.000213	4.17	28862.86	3722.50	0.17
Main	28.94	100 Year	piers	23206.00	26.74	48.72		48.87	0.000213	4.17	28864.02	3722.56	0.17
Main	28.3313*	100 Year	x-sections	23206.00	26.04	48.32		48.42	0.000124	3.37	37915.83	5557.33	0.14
Main	28.3313*	100 Year	piers	23206.00	25.99	48.32		48.42	0.000124	3.38	37768.89	5537.98	0.14
Main	27.82	100 Year	org	23206.00	26.74	48.09		48.16	0.000093	2.91	38561.85	4256.10	0.12
Main	27.82	100 Year	x-sections	23206.00	26.74	48.09		48.16	0.000093	2.91	38561.85	4256.10	0.12
Main	27.82	100 Year	piers	23206.00	26.74	48.09		48.16	0.000093	2.91	38561.85	4256.10	0.12
Main	27.79	100 Year	org	20910.00	26.74	48.08		48.14	0.000075	2.62	38536.31	4255.66	0.11
Main	27.79	100 Year	x-sections	20910.00	26.74	48.08		48.14	0.000075	2.62	38536.31	4255.66	0.11
Main	27.79	100 Year	piers	20910.00	26.74	48.08		48.14	0.000075	2.62	38536.31	4255.66	0.11
Main	27.77	100 Year	org	20910.00	25.54	47.61	35.30	48.02	0.000367	5.16	5020.53	2079.57	0.22
Main	27.77	100 Year	x-sections	20910.00	25.54	47.61	35.30	48.02	0.000367	5.16	5020.53	2079.57	0.22
Main	27.77	100 Year	piers	20910.00	25.54	47.61	35.30	48.02	0.000367	5.16	5020.53	2079.57	0.22

Ted Smith zero rise Plan: 1) org 9/15/2009 2) x-sections 9/15/2009 3) piers 9/16/2009

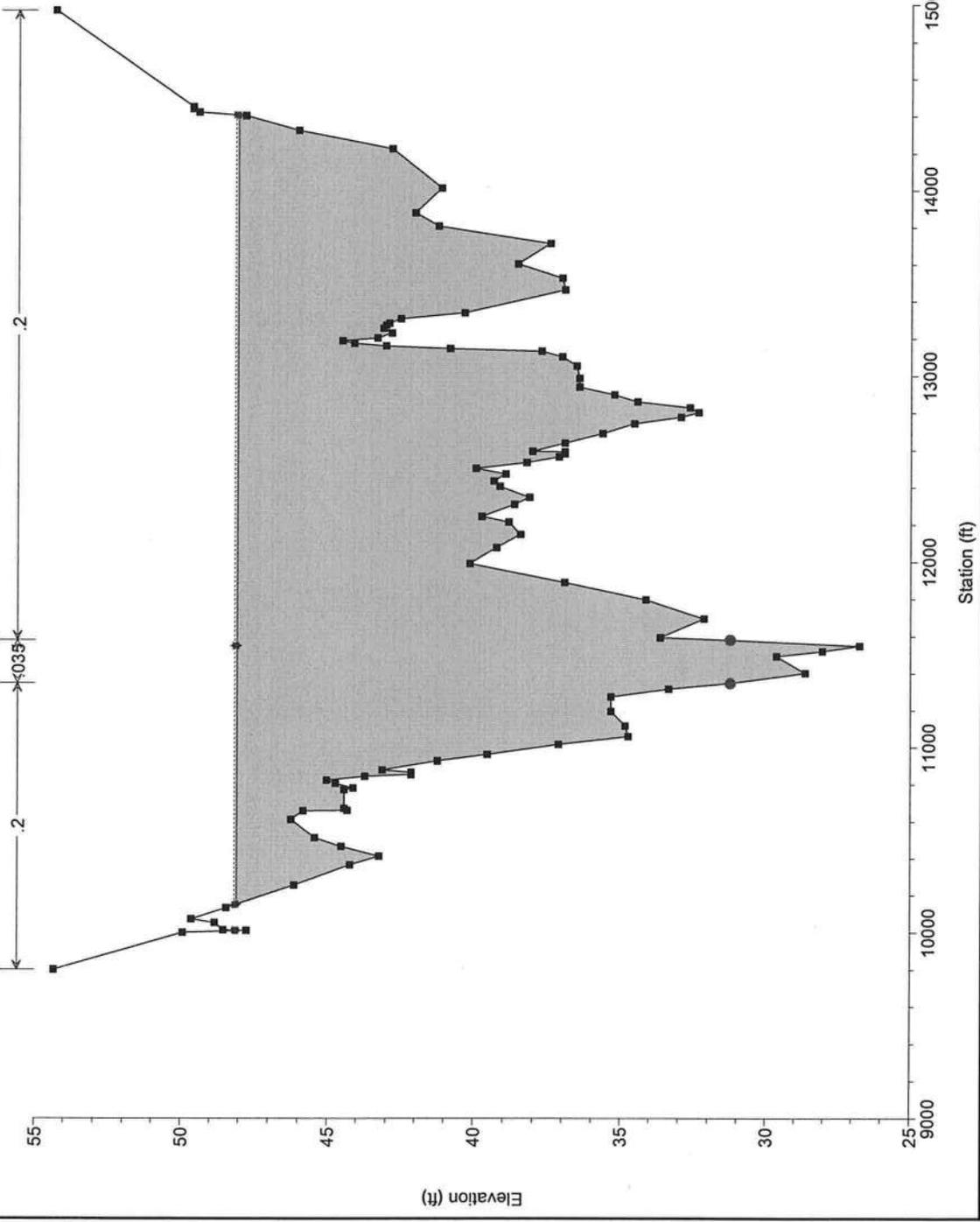
RS = 27.79



Legend	
—	EG 100 Year - org
---	EG 100 Year - x-sections
---	EG 100 Year - piers
---	WS 100 Year - org
---	WS 100 Year - piers
---	WS 100 Year - x-sections
■	Ground
●	Bank Sta

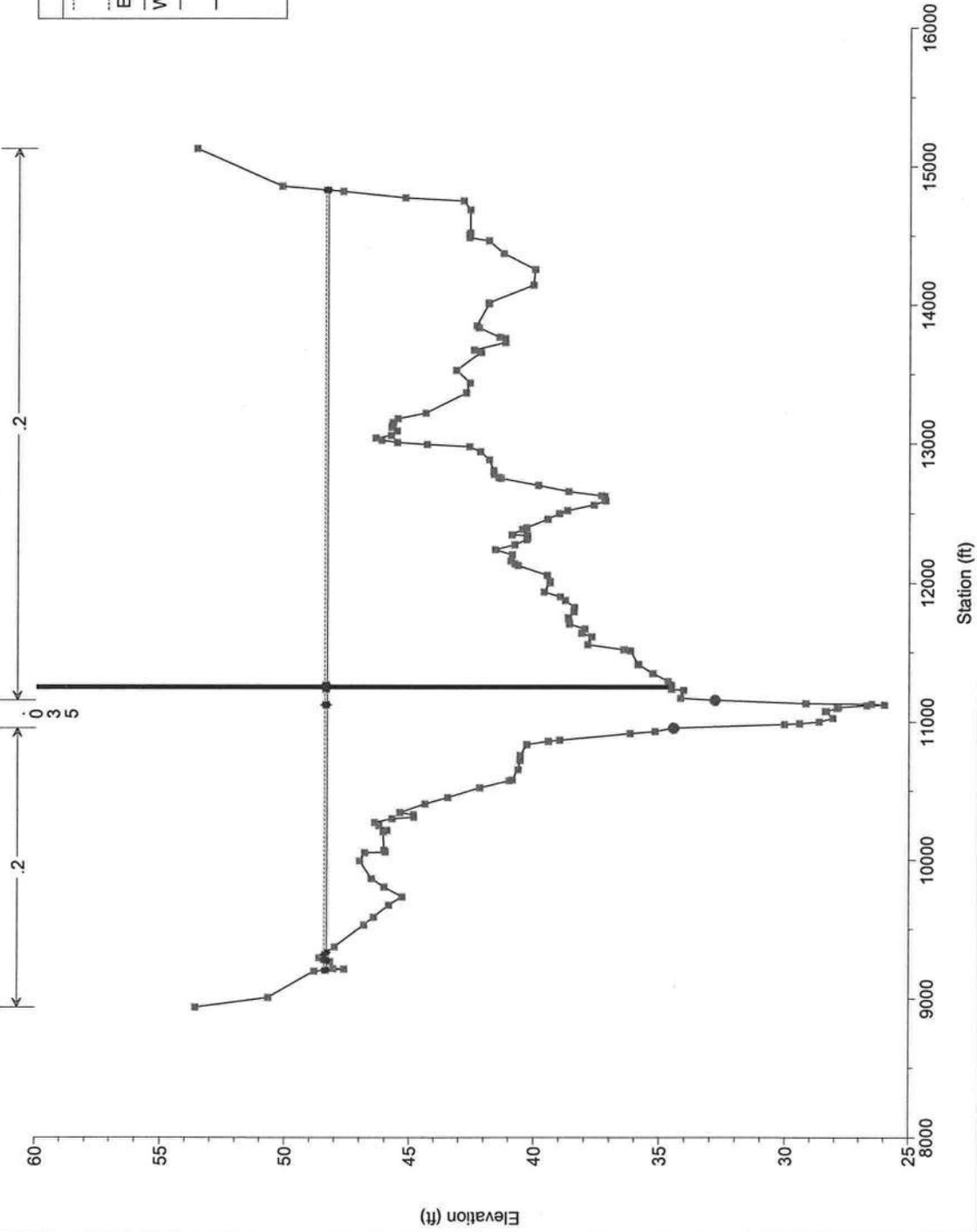


Ted Smith zero rise Plan: 1) org 9/15/2009 2) x-sections 9/15/2009 3) piers 9/16/2009  
 RS = 27.82



Legend	
EG 100 Year - org	●
EG 100 Year - x-sections	○
EG 100 Year - piers	■
WS 100 Year - org	●
WS 100 Year - piers	○
WS 100 Year - x-sections	■
Ground	■
Bank Sta	●

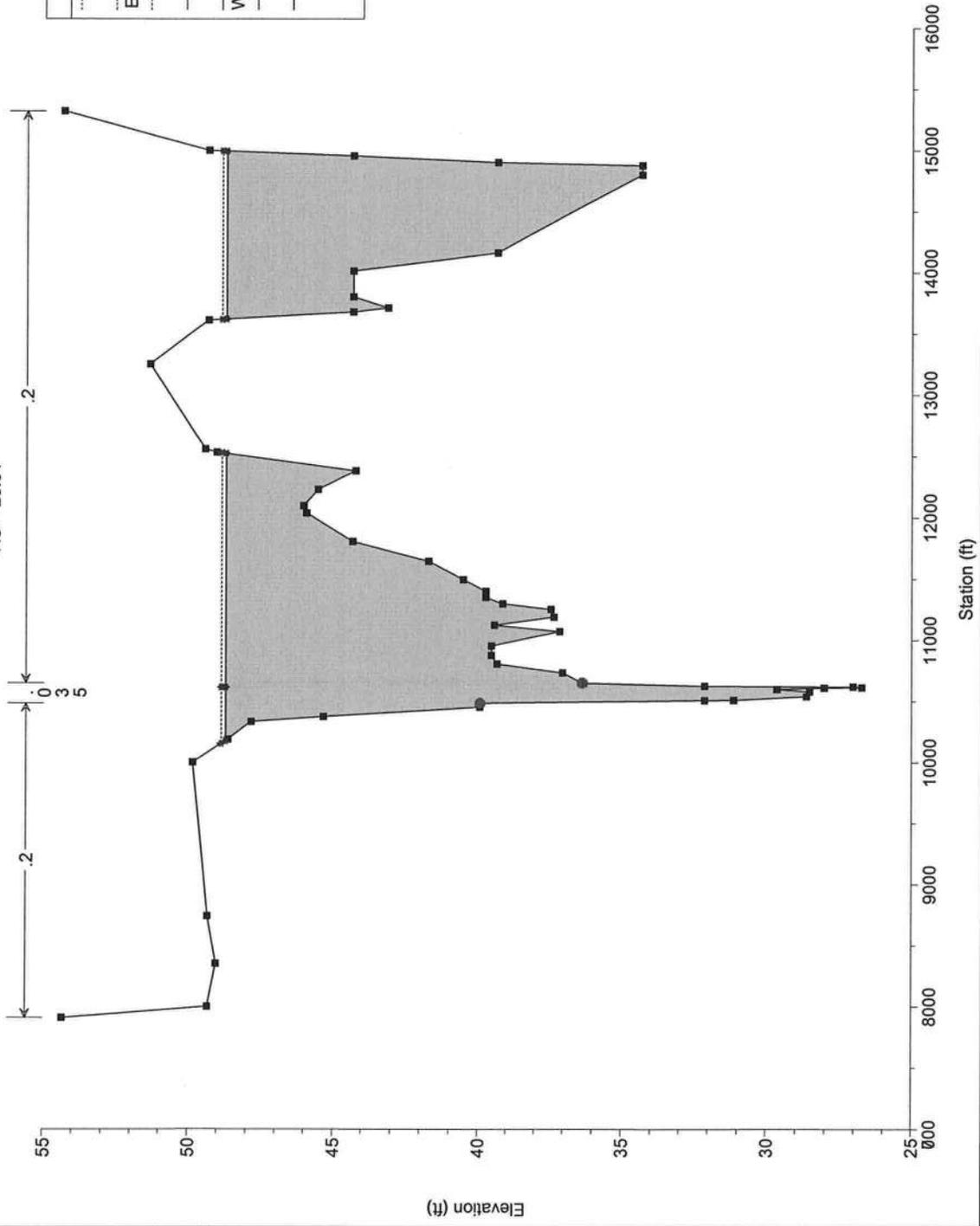
Ted Smith zero rise Plan: 1) org 9/15/2009 2) x-sections 9/15/2009 3) piers 9/16/2009  
 RS = 28.3313\*



Legend	
—●—	EG 100 Year - piers
—○—	EG 100 Year - x-sections
—△—	WS 100 Year - x-sections
—●—	WS 100 Year - piers
■	Ground
●	Bank Sta

Ted Smith zero rise Plan: 1) org 9/15/2009 2) x-sections 9/15/2009 3) piers 9/16/2009  
 RS = 28.94

Legend	
.....	EG 100 Year - piers
.....	EG 100 Year - x-sections
.....	EG 100 Year - org
.....	WS 100 Year - piers
.....	WS 100 Year - x-sections
.....	WS 100 Year - org
■	Ground
●	Bank Sta

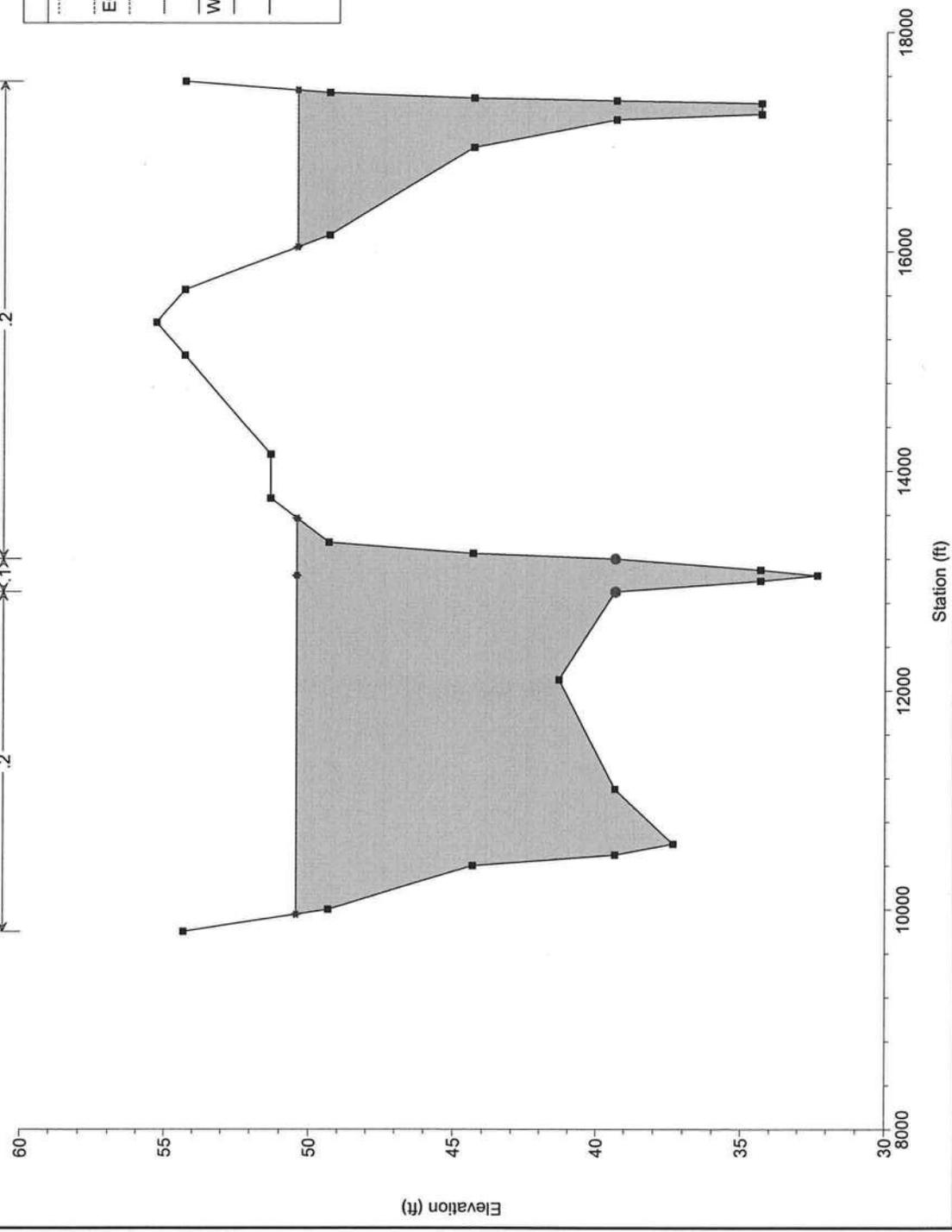


Ted Smith zero rise Plan: 1) org 9/15/2009 2) x-sections 9/15/2009 3) piers 9/16/2009

RS = 30.42



Legend	
EG 100 Year - piers	—
EG 100 Year - x-sections	—
EG 100 Year - org	—
WS 100 Year - piers	—
WS 100 Year - x-sections	—
WS 100 Year - org	—
Ground	■
Bank Sta	●



09-04-09



STATE OF FLORIDA  
 DEPARTMENT OF HEALTH  
 ONSITE SEWAGE DISPOSAL SYSTEM  
 APPLICATION FOR CONSTRUCTION PERMIT  
 Authority: Chapter 381, FS & Chapter 10D-6, FAC

PERMIT # 937295  
 DATE PAID 9/25/09  
 FEE PAID \$ 1310.00  
 RECEIPT # 1786259

APPLICATION FOR:

- New System     Existing System     Holding Tank     Temporary/Experimental  
 Repair     Abandonment     Other(Specify) \_\_\_\_\_

APPLICANT: Ted F Smith

TELEPHONE: 755-6372

AGENT: Robert Ford NFST inc

MAILING ADDRESS: 580 NW Guerdon Rd Lake City FLA 32055

=====

TO BE COMPLETED BY APPLICANT OR APPLICANT'S AUTHORIZED AGENT. ATTACH BUILDING PLAN AND TO-SCALE SITE PLAN SHOWING PERTINENT FEATURES REQUIRED BY CHAPTER 10D-6, FLORIDA ADMINISTRATIVE CODE.

=====

PROPERTY INFORMATION [IF LOT IS NOT IN A RECORDED SUBDIVISION, ATTACH LEGAL DESCRIPTION OR DEED]

LOT: 3    BLOCK: —    SUBDIVISION: Riverview    DATE OF SUBDIVISION: 4/1986

PROPERTY ID #: 27-75-17-10055-103 [Section/Township/Range/Parcel No.] ZONING: Res.

PROPERTY SIZE: 0.84 ACRES [Sqft/43560]    PROPERTY WATER SUPPLY:  PRIVATE     PUBLIC

PROPERTY STREET ADDRESS: 340 SE RESORT LOOP

DIRECTIONS TO PROPERTY: Hwy 441 South to River view circle to left  
Follow to Lot 3

BUILDING INFORMATION     RESIDENTIAL     COMMERCIAL

Unit No	Type of Establishment	No. of Bedrooms	Building Area Sqft	# Persons Served	Business Activity For Commercial Only
1	<u>Log CABIN</u>	<u>3</u>	<u>1500</u>	<u>1</u>	
2					
3					
4	<u>Held for 2nd level review, complete 10-7-09</u>				

- Garbage Grinders/Disposals     Spas/Hot Tubs     Floor/Equipment Drains  
 Ultra-low Volume Flush Toilets     Other (Specify) \_\_\_\_\_

APPLICANT'S SIGNATURE: Robert Ford

DATE: 9/27/09



# STATE OF FLORIDA DEPARTMENT OF HEALTH

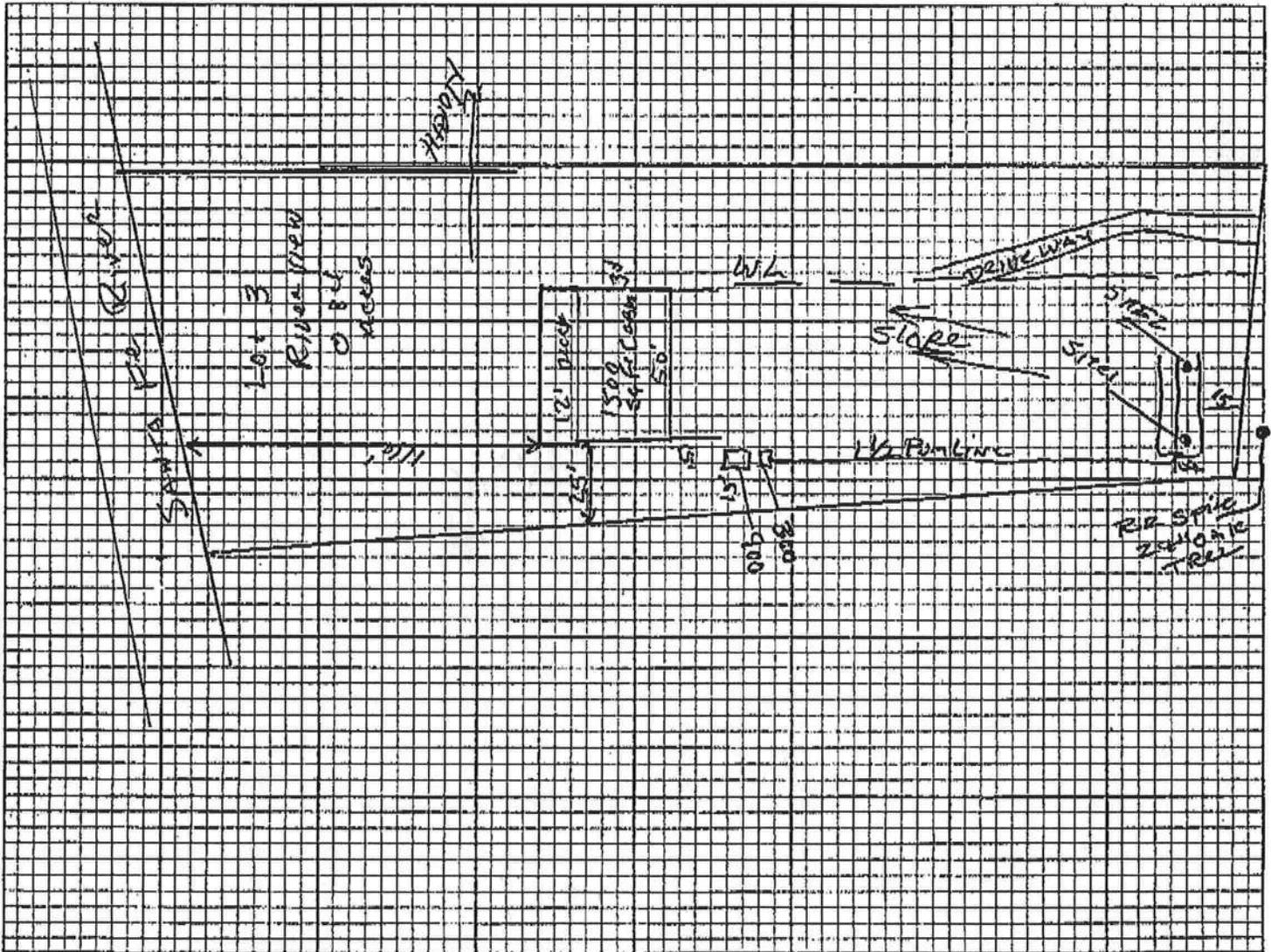
## APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number

09-0492

### PART II - SITE PLAN

Scale: Each block represents 5 feet and 1 inch = 50 feet.



Notes: Ted Smith  
Lot 3 River View 0.84 Acres  
27-75-17-10055-103

Site Plan submitted by: Robert W. [Signature] Signature  
 Plan Approved  Not Approved   
 By Salbi Ford - Columbia - EM Director County Health Department  
 Date 10-8-09 Title Agua

**ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT**



# SUWANNEE RIVER WATER MANAGEMENT DISTRICT

September 17, 2009

Ted Smith  
350 Resort Loop  
High Springs, FL 32643

Subject: Receipt of Environmental Resource Permit Application for  
Ted Smith District Floodway Project - ERP09-0222 - Columbia  
County

Dear Mr. Smith:

The Suwannee River Water Management District (SRWMD) received your application package on September 17, 2009, for Ted Smith District Floodway Project. Your proposed project has been assigned permit number ERP09-0222, and is currently under review by Resource Management staff. You will receive a response from staff within 30 days after receipt of the application package. This is pursuant to Chapter 120.60(1), Florida Statutes.

Please be advised that it is a violation of SRWMD rules to begin any work before a permit is issued, unless you have applied for a General Permit After Notice for Construction, Operation, Maintenance, Alteration, Abandonment or Removal of Minor Silvicultural Surface Water Management Systems under section 40B-400.500, Florida Administrative Code. Your submitted application package does not alleviate you from having to obtain all other clearances, permits, or authorization required by any other unit of local, state, or federal government.

Florida Statutes 373.419 states, "Within 30 days after the completion of construction or alteration of any stormwater management system, dam, impoundment, reservoir, appurtenant work, or works, the permittee shall file a written statement of completion with the governing board..." We will enclose the appropriate forms upon issuance of the permit to satisfy the requirement.

If you have any further questions, please contact Vince Robinson at 386.362.1001, or toll free at 800.226.1066. In order to better serve you, please include the permit number in all correspondence.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Dinges", is written over a horizontal line.

Jon Dinges  
Director, Resource Management

DON QUINCEY  
Chairman  
Chiefland, Florida

N. DAVID FLAGG  
Vice Chairman  
Gainesville, Florida

GEORGIA C. JONES  
Secretary/Treasurer  
Lake City, Florida

LOUIS C. SHIVER  
Mayo, Florida

J.P. MAULTSBY  
Madison, Florida

C. LINDEN DAVIDSON  
Lamont, Florida

OLIVER J. LAKE  
Lake City, Florida

HEATH DAVIS  
Cedar Key, Florida

DAVID A. STILL  
Executive Director  
Lake City, Florida

**SUBCONTRACTOR VERIFICATION FORM**

APPLICATION NUMBER \_\_\_\_\_ CONTRACTOR owner builder PHONE \_\_\_\_\_

**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.**

<b>ELECTRICAL</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____
<b>MECHANICAL/ A/C _____</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____
<b>PLUMBING/ GAS</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____
<b>ROOFING</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____
<b>SHEET METAL</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____
<b>FIRE SYSTEM/ SPRINKLER</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____
<b>SOLAR</b>	Print Name _____ License #: _____	Signature _____ Phone #: _____

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON	CBC1255824	Suwannee River Construction Co.	<i>[Signature]</i>
CONCRETE FINISHER	CBC1255824	Suwannee River Construction Co.	<i>[Signature]</i>
FRAMING	CBC1255824	Suwannee River Construction Co.	<i>[Signature]</i>
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

**F. S. 440.103 Building permits; identification of minimum premium policy.**--Every employer shall, as a condition to applying for and receiving a building permit, show proof and certify to the permit issuer that it has secured compensation for its employees under this chapter as provided in ss. 440.10 and 440.38, and shall be presented each time the employer applies for a building permit.

**NOTICE OF COMMENCEMENT**

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number 27-75-17-10655-163

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): RIVERVIEW LOT 3  
a) Street (job) Address: \_\_\_\_\_

2. General description of improvements: NEW HOME

3. Owner Information  
a) Name and address: LEDSBETH  
b) Name and address of fee simple titleholder (if other than owner) \_\_\_\_\_  
c) Interest in property \_\_\_\_\_

4. Contractor Information  
a) Name and address: SAM  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_

5. Surety Information  
a) Name and address: WA  
b) Amount of Bond: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_  
c) Telephone No.: \_\_\_\_\_

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

7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:  
a) Name and address: \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_

8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes:  
a) Name and address: \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_

9. Expiration date of Notice of Commencement (the expiration date is one 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]  
Signature of Owner or Owner's Authorized Office/Director/Partner/Manager

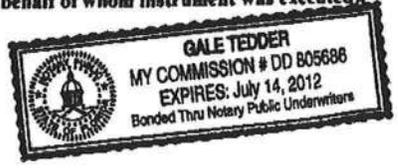
Print Name \_\_\_\_\_

The foregoing instrument was acknowledged before me, a Florida Notary, this 16th day of Oct, 2009, by:  
owner as \_\_\_\_\_ (type of authority, e.g. officer, trustee, attorney

fact) for \_\_\_\_\_ (name of party on behalf of whom instrument was executed)

Personally Known  OR Produced Identification \_\_\_\_\_ Type \_\_\_\_\_

Notary Signature [Signature] Notary Stamp or Seal: \_\_\_\_\_



-AND-

11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

[Signature]  
Signature of Natural Person Signing (in line #10 above.)



**SUWANNEE  
RIVER  
WATER  
MANAGEMENT  
DISTRICT**

0225 CR 49  
LIVE OAK, FLORIDA 32080  
TELEPHONE: (386) 382-1001  
TELEPHONE: 800-228-1068  
FAX (386) 382-1068

**GENERAL PERMIT**

**PERMITTEE:**  
TED SMITH  
350 RESORT LOOP  
HIGH SPRINGS, FL 32643

**PERMIT NUMBER:** ERP09-0222  
**DATE ISSUED:** 10/06/2009  
**DATE EXPIRES:** 10/06/2012  
**COUNTY:** COLUMBIA  
**TRS:** S27/T7S/R17E

**PROJECT:** TED SMITH DISTRICT FLOODWAY PROJECT

Approved entity to whom operation and maintenance may be transferred pursuant to rule 40B-4.1130, Florida Administrative Code (F.A.C.):

TED SMITH  
350 RESORT LOOP  
HIGH SPRINGS, FL 32643

Based on information provided, the Suwannee River Water Management District's (District) rules have been adhered to and an environmental resource general permit is in effect for the permitted activity description below:

**This permit authorizes the construction of a 2,260 square-foot single family home within the regulatory floodway of the Suwannee River. The project will be completed in a manner consistent with the application package received by the District from Ted Smith and plans certified on September 18, 2009, by Gary J. Gill, P.E., and subject to conditions of District rule 40B-4.3030, F.A.C.**

It is your responsibility to ensure that adverse off-site impacts do not occur either during or after construction. Any additional construction or alterations not authorized by this permit may result in flood control or water quality problems both on and off site and will be a violation of District rule.

You or any other substantially affected persons are entitled to request an administrative hearing or mediation. Please refer to enclosed notice of rights.

This permit is issued under the provisions of chapter 373, F.S., chapter 40B-4, and chapter 40B-400,

Permit No.: ERP09-0222

Project: TED SMITH DISTRICT FLOODWAY PROJECT

Page 2 of 10

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F.A.C. A general permit authorizes the construction, operation, maintenance, alteration, abandonment, or removal of certain minor surface water management systems. This permit authorizes the permittee to perform the work necessary to construct, operate, and maintain the surface water management system shown on the application and other documents included in the application. This is to notify you of District's agency action concerning Notice Of Intent. This action is taken pursuant to rule 40B-4 and 40B-400, F.A.C.

**Standard Conditions for All General Permits:**

1. The permittee shall perform all construction authorized in a manner so as to minimize adverse impacts to fish, wildlife, natural environmental values, and water quality. The permittee shall institute necessary measures during construction including riprap, reinforcement, or compaction of any fill materials placed around newly installed structures, to minimize erosion, turbidity, nutrient loading, and sedimentation in the receiving waters.

2. Water quality data representative of the water discharged from the permitted system, including, but not limited to, the parameters in chapter 62-302, F.A.C., shall be submitted to the District as required. If water quality data are required, the permittee shall provide data as required on the volume and rate of discharge including the total volume discharged during the sampling period. All water quality data shall be in accordance with and reference the specific method of analysis in "Standard Methods for the Examination of Water and Wastewater" by the American Public Health Association or "Methods for Chemical Analysis of Water and Wastes" by the U.S. Environmental Protection Agency.

3. The operational and maintenance phase of an environmental resource permit will not become effective until the owner or his authorized agent certifies that all facilities have been constructed in accordance with the design permitted by the District. If required by the District, such as-built certification shall be made by an engineer or surveyor. Within 30 days after the completion of construction of the system, the permittee shall notify the District that the facilities are complete. If appropriate, the permittee shall request transfer of the permit to the responsible entity approved by the District for operation and maintenance. The District may inspect the system and, as necessary, require remedial measures as a condition of transfer of the permit or release for operation and maintenance of the system.

4. Off-site discharges during and after construction shall be made only through the facilities authorized by the permit. Water discharged from the project shall be through structures suitable for regulating upstream stage if so required by the District. Such discharges may be subject to operating schedules established by the District.

5. The permit does not convey to the permittee any property right nor any rights or privileges other

Permit No.: ERP09-0222

Project: TED SMITH DISTRICT FLOODWAY PROJECT

Page 3 of 10

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than those specified in the permit and chapter 40B-1, F.A.C.

6. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance, alteration, abandonment, or development in a Works of the District which is authorized by the permit.
7. The permit is issued based on the information submitted by the applicant which reasonably demonstrates that adverse off-site water resource impacts will not be caused by the permitted activity. It is the responsibility of the permittee to insure that such adverse impacts do not in fact occur either during or after construction.
8. It is the responsibility of the permittee to obtain all other clearances, permits, or authorizations required by any unit of local, state, or federal government.
9. The surfacewater management system shall be constructed prior to or concurrent with the development that the system is intended to serve and the system shall be completed within 30 days of substantial completion of the development which the system is intended to serve.
10. Except for General Permits After Notice or permits issued to a unit of government, or unless a different schedule is specified in the permit, the system shall be inspected at least once every third year after transfer of a permit to operation and maintenance by the permittee or his agent to ascertain that the system is being operated and maintained in a manner consistent with the permit. A report of inspection is to be sent to the District within 30 days of the inspection date. If required by chapter 471, F.S., such inspection and report shall be made by an engineer.
11. The permittee shall allow reasonable access to District personnel or agents for the purpose of inspecting the system to insure compliance with the permit. The permittee shall allow the District, at its expense, to install equipment or devices to monitor performance of the system authorized by their permit.
12. The surfacewater management system shall be operated and maintained in a manner which is consistent with the conditions of the permit and chapter 40B-4.2040, F.A.C.
13. The permittee is responsible for the perpetual operation and maintenance of the system unless the operation and maintenance is transferred pursuant to chapter 40B-4.1130, F.A.C., or the permit is modified to authorize a new operation and maintenance entity pursuant to chapter 40B-4.1110, F.A.C.
14. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for

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Project: TED SMITH DISTRICT FLOODWAY PROJECT

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undertaking that activity shall constitute a violation of this permit.

15. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

16. Activities approved by this permit shall be conducted in a manner which do not cause violations of state water quality standards.

17. Prior to and during construction, the permittee shall implement and maintain all erosion and sediment control measures (best management practices) required to retain sediment on-site and to prevent violations of state water quality standards. All practices must be in accordance with the guidelines and specifications in the Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual unless a project specific erosion and sediment control plan is approved as part of the permit, in which case the practices must be in accordance with the plan. If site-specific conditions require additional measures during any phase of construction or operation to prevent erosion or control sediment, beyond those specified in the erosion and sediment control plan, the permittee shall implement additional best management practices as necessary, in accordance with the Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

18. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than seven days after the construction activity in that portion of the site has temporarily or permanently ceased.

19. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a Construction Commencement Notice Form No. 40B-1.901(14) indicating the actual start date and the expected completion date.

20. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an Annual Status Report Form No. 40B-1.901(15). These forms shall be submitted during June of each following year.

21. For those systems which will be operated or maintained by an entity requiring an easement or deed restriction in order to provide that entity with the authority necessary to operate or maintain the system, such easement or deed restriction, together with any other final operation or maintenance documents as are required by Paragraph 40B-4.2030(2)(g), F.A.C., and Rule 40B-4.2035, F.A.C.,

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authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

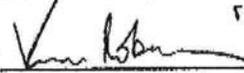
28. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered specifically approved unless a specific condition of this permit or a formal determination under 40B-400.046, F.A.C., provides otherwise.

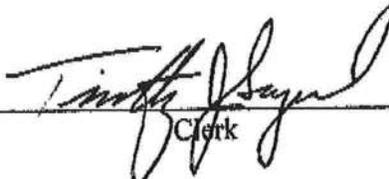
29. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 40B-4.1130, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.

30. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District.

31. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

WITHIN 30 DAYS AFTER COMPLETION OF THE PROJECT, THE PERMITTEE SHALL NOTIFY THE DISTRICT, IN WRITING, THAT THE FACILITIES ARE COMPLETE.

Approved by  Date Approved 10/08/09  
District Staff

  
Clerk

  
Executive Director



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c. Dimensions, elevations, contours, or cross-sections of all treatment storage areas sufficient to determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems, when appropriate;

d. Dimensions, elevations, contours, final grades, or cross-sections of the system to determine flow directions and conveyance of runoff to the treatment system;

e. Dimensions, elevations, contours, final grades, or cross-sections of all conveyance systems utilized to convey off-site runoff around the system;

f. Existing water elevation(s) and the date determined; and

g. Elevation and location of benchmark(s) for the survey.

24. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the condition in paragraph 23 above, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District in accordance with Rule 40B-4.2035, F.A.C., accepts responsibility for operation and maintenance of the system. The permit may not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the approved responsible operation and maintenance operating entity if different from the permittee. Until the permit is transferred pursuant to Rule 40B-4.1130, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

25. Should any other regulatory agency require changes to the permitted system, the permittee shall provide written notification to the District of the changes prior to implementation so that a determination can be made whether a permit modification is required.

26. This permit does not eliminate the necessity to obtain any required federal, state, local and special District authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and in this chapter and Chapter 40B-4, F.A.C.

27. The permittee is hereby advised that Section 253.77, F.S., states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent

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#### NOTICE OF RIGHTS

1. A person whose substantial interests are or may be determined has the right to request an administrative hearing by filing a written petition with the Suwannee River Water Management District (District), or may choose to pursue mediation as an alternative remedy under Section 120.569 and 120.573, Florida Statutes, before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for pursuing mediation are set forth in Sections 120.569 and 120.57 Florida Statutes. Pursuant to Rule 28-106.111, Florida Administrative Code, the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). A petition must comply with Chapter 28-106, Florida Administrative Code.
2. If the Governing Board takes action which substantially differs from the notice of District decision to grant or deny the permit application, a person whose substantial interests are or may be determined has the right to request an administrative hearing or may chose to pursue mediation as an alternative remedy as described above. Pursuant to Rule 28-106.111, Florida Administrative Code, the petition must be filed at the office of the District Clerk at District Headquarters, 9225 C.R. 49, Live Oak, Florida 32060 within twenty-one (21) days of receipt of written notice of the decision or within twenty-one (21) days of newspaper publication of the notice of District decision (for those persons to whom the District does not mail actual notice). Such a petition must comply with Chapter 28-106, Florida Administrative Code.
3. A substantially interested person has the right to a formal administrative hearing pursuant to Section 120.569 and 120.57(1), Florida Statutes, where there is a dispute between the District and the party regarding an issue of material fact. A petition for formal hearing must comply with the requirements set forth in Rule 28-106.201, Florida Administrative Code.
4. A substantially interested person has the right to an informal hearing pursuant to Section 120.569 and 120.57(2), Florida Statutes, where no material facts are in dispute. A petition for an informal hearing must comply with the requirements set forth in Rule 28-106.301, Florida Administrative Code.
5. A petition for an administrative hearing is deemed filed upon receipt of the petition by the Office of the District Clerk at the District Headquarters in Live Oak, Florida.
6. Failure to file a petition for an administrative hearing within the requisite time frame shall constitute a waiver of the right to an administrative hearing pursuant to Rule 28-106.111, Florida Administrative Code.

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7. The right to an administrative hearing and the relevant procedures to be followed is governed by Chapter 120, Florida Statutes, and Chapter 28-106, Florida Administrative Code.

8. Pursuant to Section 120.68, Florida Statutes, a person who is adversely affected by final District action may seek review of the action in the District Court of Appeal by filing a notice of appeal pursuant to the Florida Rules of Appellate Procedure, within 30 days of the rendering of the final District action.

9. A party to the proceeding before the District who claims that a District order is inconsistent with the provisions and purposes of Chapter 373, Florida Statutes, may seek review of the order pursuant to Section 373.114, Florida Statutes, by the Florida Land and Water Adjudicatory Commission, by filing a request for review with the Commission and serving a copy of the Department of Environmental Protection and any person named in the order within 20 days of adoption of a rule or the rendering of the District order.

10. For appeals to the District Courts of Appeal, a District action is considered rendered after it is signed on behalf of the District, and is filed by the District Clerk.

11. Failure to observe the relevant time frames for filing a petition for judicial review, or for Commission review, will result in waiver of the right to review.

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing Notice of Rights has been sent by U.S. Mail to:

TED SMITH  
350 RESORT LOOP  
HIGH SPRINGS, FL 32643

At 4:00 p.m. this 9 day of Oct., 2009.



Jon M. Dinges  
Deputy Clerk  
Suwannee River Water Management District  
9225 C.R. 49  
Live Oak, Florida 32060

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Project: TED SMITH DISTRICT FLOODWAY PROJECT

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386.362.1001 or 800.226.1066 (Florida only)

cc: File Number: ERP09-0222

# ELEVATION CERTIFICATE

OMB No. 1660-0008  
Expires March 31, 2012

Important: Read the instructions on pages 1-9.

SECTION A - PROPERTY INFORMATION		For Insurance Company Use:
A1. Building Owner's Name Theodore F. Smith		Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle		Company NAIC Number
City High Springs State FL ZIP Code 32643		
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 3, Riverview - Plat Bk 5, Pages 73-74		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>		
A5. Latitude/Longitude: Lat. <u>29°51.379</u> Long. <u>82°36.232</u>		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number <u>5</u>		
A8. For a building with a crawlspace or enclosure(s):		A9. For a building with an attached garage:
a) Square footage of crawlspace or enclosure(s) <u>N/A</u> sq ft		a) Square footage of attached garage <u>N/A</u> sq ft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>N/A</u>		b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>N/A</u>
c) Total net area of flood openings in A8.b <u>N/A</u> sq in		c) Total net area of flood openings in A9.b <u>N/A</u> sq in
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number Columbia County, Florida 120070		B2. County Name Columbia		B3. State Florida	
B4. Map/Panel Number 12023C0551	B5. Suffix C	B6. FIRM Index Date 2/4/2009	B7. FIRM Panel Effective/Revised Date 2/4/2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 47
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9. <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on:  Construction Drawings\*  Building Under Construction\*  Finished Construction  
\*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. Use the same datum as the BFE.  
Benchmark Utilized Florida DOT Vertical Datum NAVD1988  
Conversion/Comments N/A

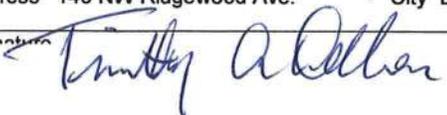
Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor) <u>50.20</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
b) Top of the next higher floor <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
d) Attached garage (top of slab) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <u>50.10</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
f) Lowest adjacent (finished) grade next to building (LAG) <u>35.3</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
g) Highest adjacent (finished) grade next to building (HAG) <u>36.5</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No

Certifier's Name Timothy A. Delbene	License Number LS 5594
Title Land Surveyor & Mapper	Company Name Donald F. Lee & Associates, Inc.
Address 140 NW Ridgewood Ave.	City Lake City State FL ZIP Code 32055
Signature 	Date 3/17/2010 Telephone 386 755 6166

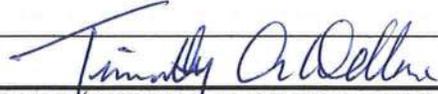


<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	Policy Number
City High Springs State FL ZIP Code 32643	Company NAIC Number

**SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)**

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments Mechanical equipment is Air Conditioner on house deck.

Signature  Date 3/17/2010  Check here if attachments

**SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)**

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

- E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).  
 a) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_\_\_  feet  meters  above or  below the HAG.  
 b) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_\_\_  feet  meters  above or  below the LAG.
- E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8-9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?  Yes  No  Unknown. The local official must certify this information in Section G.

**SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION**

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, and E are correct to the best of my knowledge.*

Property Owner's or Owner's Authorized Representative's Name  
Timothy Delbene

Address 140 NW Ridgewood Ave City Lake City State FL ZIP Code 32055

Signature  Date 3/17/2010 Telephone 386-755-6166

Comments Donald F. Lee & Associates, Inc. - Land Surveyors

Check here if attachments

**SECTION G - COMMUNITY INFORMATION (OPTIONAL)**

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8 and G9.

- G1.  The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued
-------------------	------------------------	-----------------------------------------------------

- G7. This permit has been issued for:  New Construction  Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_
- G9. BFE or (in Zone AO) depth of flooding at the building site: \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_
- G10. Community's design flood elevation \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_

Local Official's Name \_\_\_\_\_ Title \_\_\_\_\_

Community Name \_\_\_\_\_ Telephone \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Comments \_\_\_\_\_

# Building Photographs

See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	For Insurance Company Use: Policy Number
City High Springs State FL ZIP Code 32643	Company NAIC Number
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.	



FRONT VIEW OF HOUSE



REAR VIEW OF HOUSE



GTC DESIGN GROUP

GTC Design Group, LLC  
P.O. Box 187  
Live Oak, FL 32064  
(Phone) 386.362.3678  
(Fax) 386.362.6133  
ggill@gtcdesigngroup.com

October 23, 2009

Harry Dicks  
Building Official  
Columbia County Building Department  
135 NE Hernando Ave.  
Lake City, FL

28147

**SUBJECT: Ted Smith Residence  
Soil and Footing Inspection**

Mr. Dick

On October 22, 2009, I was contacted by the contractor, Suwannee River Construction Company (SRCC), to do a visual inspection of the excavated footings and soil condition at the building site. The following items were noted,

*Soils*

- In general, the site conditions consist of a top layer of 6 to 8 inches of black organic looking soil. Below this level is a layer of sand with some traces of clay. The layer of sand extended to at least 12" below the bottom of the footing.
- (2) test samples were taken at the site. Two 12" deep hole were excavated the bottom of the footing. The tests revealed a layer of sand with small amounts of clay. The clay amount is small and does not have enough plasticity to be a problem.
- The SRCC achieved good soil compaction in the footings. There is no evidence of any organic or unsuitable soils.
- It appears that the contractor stockpiled some of excavated black top soil at the back end of the property away from the building footprint.

*Footing and grade beams*

- The footings and grade beams appeared to be excavated to their proper depths.
- The footings and grade beam's size appeared to be correct.
- The bottom of the footings and grade beam is on average 12" below the bottom the top layer. Toward the back of the property, the black organic is somewhat thicker. However, it is not located under the building footprint. The bottom of the excavated holes for the back porch support post is in sand and appears to have proper compaction.

GTC Design Group, LLC

It is in my conclusion, that SRCC have prepared the site properly. The footing and grade beams are bearing on a suitable compacted sand layer.

In addition, the perimeter piers are interconnected with a grade beam. This type of construction will help minimized any differential settling that might occur.

Thank you,  
Gary Gill

Project Manager



*Substance Log Homes*

# Noling Pest Control • GRAPH AND SPECIFICATIONS

Cory Noling, Owner  
Phone (386)454-3888  
(386) 935-2007  
P.O. Box 949

High Springs, Florida 32655-0949

28147

BUYER'S NAME Ted Smith SELLER'S NAME \_\_\_\_\_ DATE 10-27-09  
 INSPECTION ADDRESS 382 BE River View CR CITY High Springs STATE FLA ZIP 32643  
 BUSINESS PHONE \_\_\_\_\_ HOME PHONE \_\_\_\_\_ INSPECTED BY: Cory

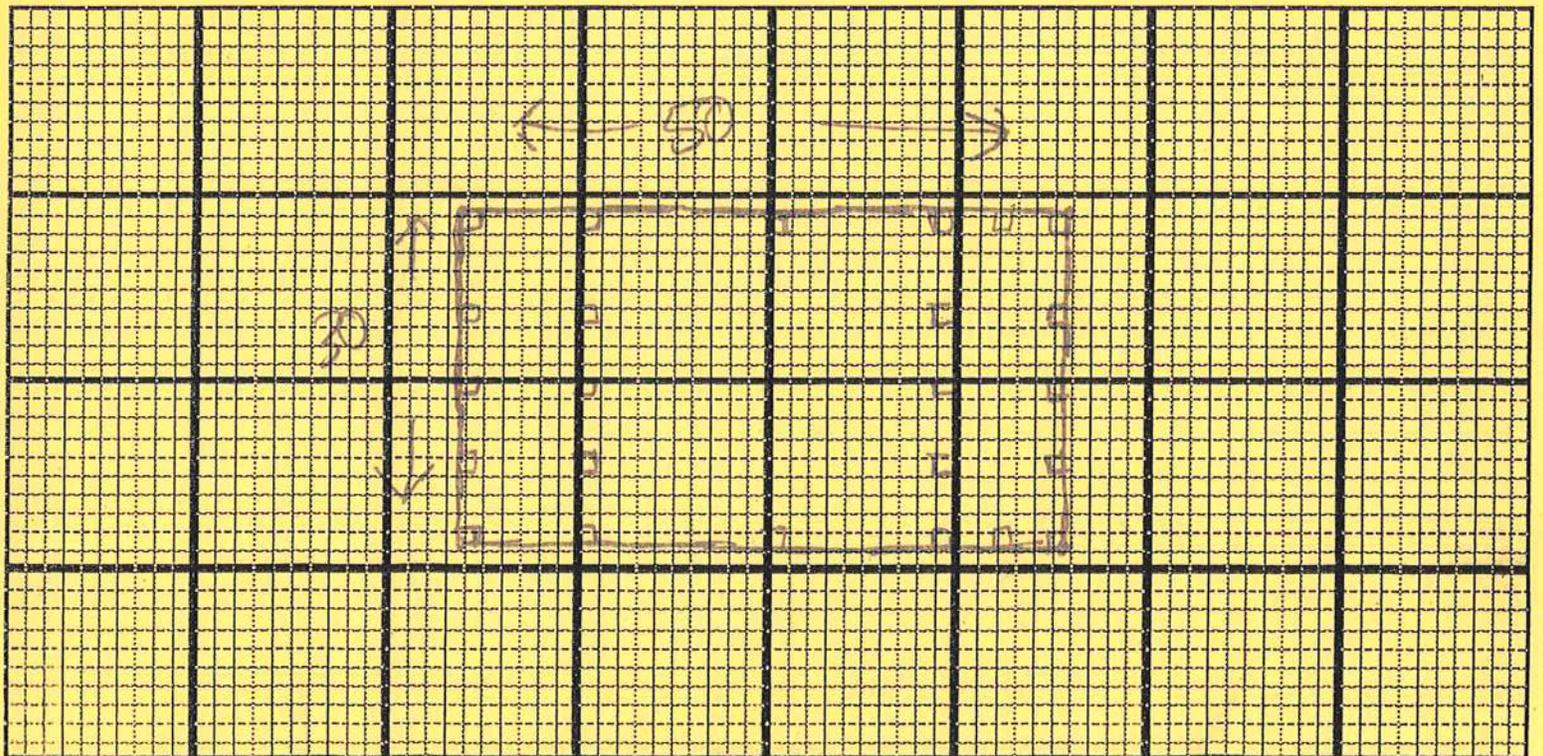
Scale Used: \_\_\_\_\_ Well:  Yes  No How close to house? \_\_\_\_\_ ft. Additions?  Yes  No Access? \_\_\_\_\_

Additional specifications and comments: Log Home on Stilts Graph not to Sq Ft  
Premise Pro. 50 gallon Spray Job 11-3-09 150 g

Lineal Footage: \_\_\_\_\_ Square Footage: 1500 Contract Price: \_\_\_\_\_  
 Type Foundation:  Floating Slab  Supported Slab  Monolithic Slab  Crawl  Basement Type Construction:  CBS  Woodframe  Brick

Type Infestation Key	Location Key	General Conditions																																	
	F - Front R - Right L - Left RE - Rear C - Center																																		
T - Subterranean Termite Activity	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">Infested Area</th> <th style="width: 10%;">Type</th> <th style="width: 60%;">Location</th> </tr> <tr> <td><input type="checkbox"/> Sills / Joists</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Sub Floor</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Finished Floor</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Walls, Studs, Plates</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Interior Trim</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Paneled Wall</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Door/Window Frame</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Furniture/Cabinets</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Attic</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Roof</td> <td></td> <td></td> </tr> </table>	Infested Area	Type	Location	<input type="checkbox"/> Sills / Joists			<input type="checkbox"/> Sub Floor			<input type="checkbox"/> Finished Floor			<input type="checkbox"/> Walls, Studs, Plates			<input type="checkbox"/> Interior Trim			<input type="checkbox"/> Paneled Wall			<input type="checkbox"/> Door/Window Frame			<input type="checkbox"/> Furniture/Cabinets			<input type="checkbox"/> Attic			<input type="checkbox"/> Roof			Stucco below grade? Yes <input type="checkbox"/> No <input type="checkbox"/> Are Termites swarming? Yes <input type="checkbox"/> No <input type="checkbox"/> Wood supports on ground? Yes <input type="checkbox"/> No <input type="checkbox"/> Proper clearance for treating? Yes <input type="checkbox"/> No <input type="checkbox"/> Make A3 access opening? Yes <input type="checkbox"/> No <input type="checkbox"/> Electricity available? Yes <input type="checkbox"/> No <input type="checkbox"/> Bath trap opening? Yes <input type="checkbox"/> No <input type="checkbox"/> Shrubby Light <input type="checkbox"/> Heavy <input type="checkbox"/> Type Floor Covering: _____ Other: _____
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D - Drywood Termite Activity																																			
ST - Suspected Termite Activity																																			
P - Powder Post Beetles																																			
W - Wood Borers																																			
M - Moisture Condition																																			
F - Wood Decaying Fungi																																			
X - Damage Present																																			
... - Vertical Drill Location																																			

VISIBLE DAMAGE WHICH EXISTS AT THE TIME OF THE INSPECTION IS DESIGNATED BY AN "X"





28147  
GTC Design Group, LLC  
P.O. Box 187  
Live Oak, FL 32064  
(Phone) 386.362.3678  
(Fax) 386.362.6133  
ggill@gtcdesigngroup.com

October 23, 2009

Harry Dicks  
Building Official  
Columbia County Building Department  
135 NE Hernando Ave.  
Lake City, FL

**SUBJECT: Ted Smith Residence  
Soil and Footing Inspection**

Mr. Dick,

On October 22, 2009, I was contacted by the contractor, Suwannee River Construction Company (SRCC), to do a visual inspection of the excavated footings and soil condition at the building site. The following items were noted,

*Soils*

- In general, the site conditions consist of a top layer of 6 to 8 inches of black organic looking soil. Below this level is a layer of sand with some traces of clay. The layer of sand extended to at least 12" below the bottom of the footing.
- (2) test samples were taken at the site. Two 12" deep hole were excavated the bottom of the footing. The tests revealed a layer of sand with small amounts of clay. The clay amount is small and does not have enough plasticity to be a problem.
- The SRCC achieved good soil compaction in the footings. There is no evidence of any organic or unsuitable soils.
- It appears that the contractor stockpiled some of excavated black top soil at the back end of the property away from the building footprint.

*Footing and grade beams*

- The footings and grade beams appeared to be excavated to their proper depths.
- The footings and grade beam's size appeared to be correct.
- The bottom of the footings and grade beam is on average 12" below the bottom the top layer. Toward the back of the property, the black organic is somewhat thicker. However, it is not located under the building footprint. The bottom of the excavated holes for the back porch support post is in sand and appears to have proper compaction.

GTC Design Group, LLC

It is in my conclusion, that SRCC have prepared the site properly. The footing and grade beams are bearing on a suitable compacted sand layer.

In addition, the perimeter piers are interconnected with a grade beam. This type of construction will help minimized any differential settling that might occur.

Thank you,  
Gary Gill

Project Manager



GTC DESIGN GROUP

28147

GTC Design Group, LLC  
P.O. Box 187  
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*Footing and grade beams*

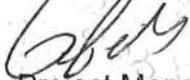
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Thank you,  
Gary Gill



Project Manager

10/23/09

# DEPARTMENT OF GENERAL CONSERVATION

## OCCUPANCY

COLUMBIA COUNTY, FLORIDA

### Department of Building and Zoning Inspection

*This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.*

Parcel Number 27-7S-17-10055-103

Building permit No. 000028147

Use Classification SFD, UTILITY

Fire: 44.94

Permit Holder OWNER BUILDER

Waste: 117.25

Owner of Building TED SMITH

Total: 162.19

Location: 382 SE RIVERVIEW CIRCLE, HIGH SPRINGS, FL

Date: 03/31/2010

*Fany Dick*

Building Inspector

POST IN A CONSPICUOUS PLACE  
(Business Places Only)



BOARD OF COUNTY COMMISSIONERS  
OFFICE OF  
**BUILDING & ZONING**  
COLUMBIA COUNTY, FLORIDA

**CERTIFICATE OF OCCUPANCY RECEIPT**

RECEIPT NUMBER / PERMIT NUMBER 000028147 DATE 03/31/2010

APPLICANT TED SMITH

OWNER TED SMITH

CONTRACTOR OWNER BUILDER

PARCEL ID NUMBER 27-7S-17-10055-103 NUMBER OF EXISTING DWELLINGS 0

TYPE OF DEVELOPMENT SFD, UTILITY

HEATED FLOOR AREA 1500.00 TOTAL AREA 1500.00

**FEES:**

FIRE FEE (5 ACRES OR LESS) 44.94

FIRE FEE (MORE THAN 5 ACRES) \_\_\_\_\_

WASTE ASSESSMENT FEE 117.25

TOTAL ASSESSMENT FEES CHARGED 162.19

CHECK NUMBER \_\_\_\_\_

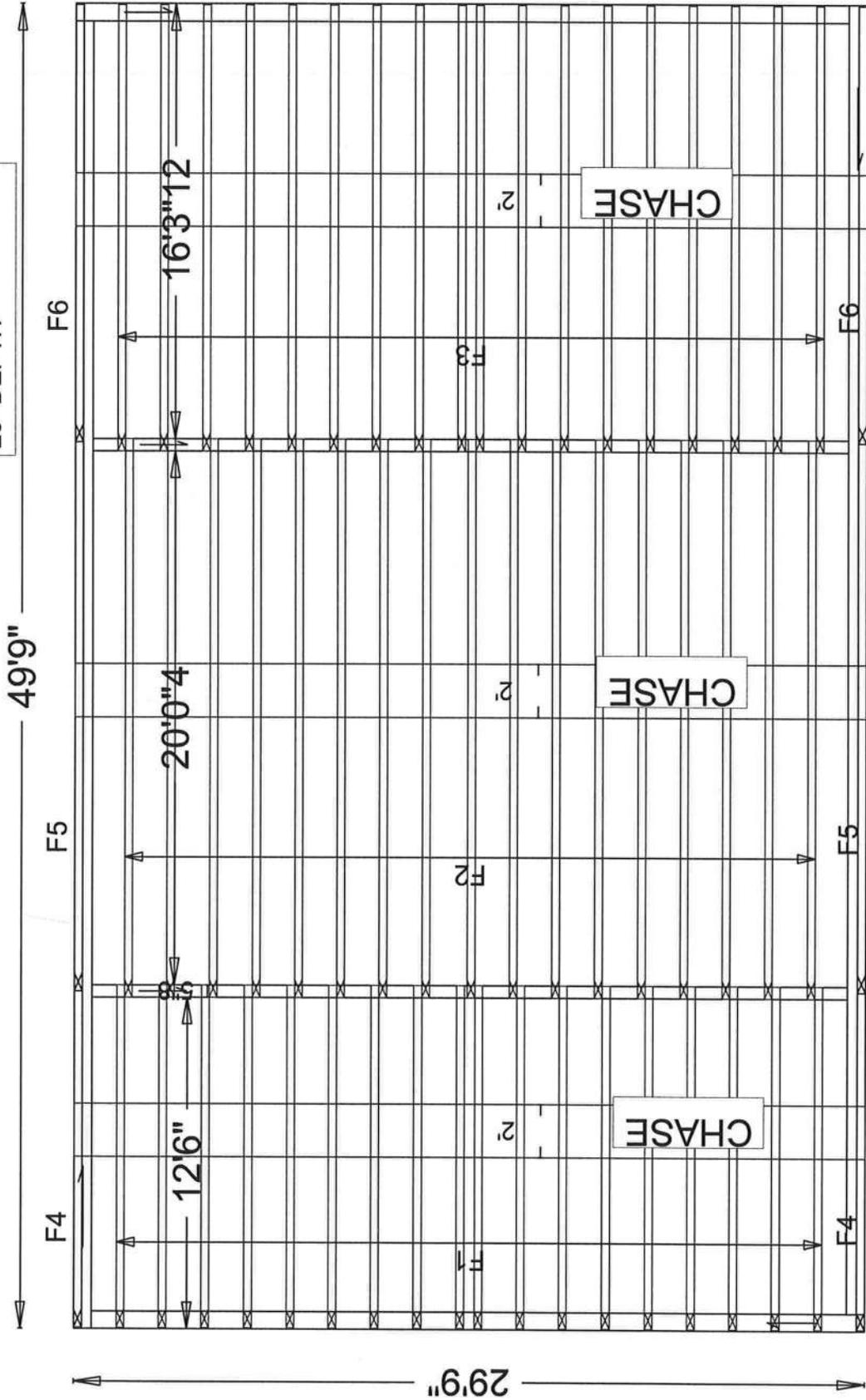
MAKE CHECKS PAYABLE TO: BCC (Board of County Commissioners)

135 NE Hernando Ave., Suite B-21  
Lake City, Florida 32055  
Phone: 386-758-1008  
Fax: 386-758-2160



*Never PAID - Sent to Tax office  
9/3/10*

SY42 FLOOR TRUSSES  
19.2" O.C.  
20" DEPTH



Job Name: TED SMITH  
Customer: SUWANNEE RIVER LOG HOMES  
Designer: Cynthia Gude-Newsome

JOB NO:  
6461F

PAGE NO:  
1 OF 1

# ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844  
Florida Engineering Certificate of Authorization Number: 0 278  
Florida Certificate of Product Approval # FL1999  
Page 1 of 1 Document ID:1TVV215-Z0113084627

Truss Fabricator: W.B. Howland  
Job Identification: 6461F-/TED SMITH /SUWANNEE RIVER LOG HOMES -- , \*\*  
Truss Count: 6  
Model Code: Florida Building Code 2007 and 2009 Supplement  
Truss Criteria: FBC2007Res/TPI-2002(STD)  
Engineering Software: Alpine Software, Version 9.02.  
Structural Engineer of Record: The identity of the structural EOR did not exist as of  
Address: the seal date per section 61G15-31.003(5a) of the FAC  
Minimum Design Loads: Roof - N/A  
Floor - 55.0 PSF @ 1.00 Duration  
Wind - No Wind

#### Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR215

Details: STRBRI8R-

#	Ref	Description	Drawing#	Date
1	60681--F1		09286001	10/13/09
2	60682--F4		09286002	10/13/09
3	60683--F5		09286003	10/13/09
4	60684--F6		09286004	10/13/09
5	60685--F2		09286005	10/13/09
6	60686--F3		09286006	10/13/09



Seal Date: 10/13/2009

-Truss Design Engineer-  
James F. Collins Jr.  
Florida License Number: 52212  
1950 Marley Drive  
Haines City, FL 33844





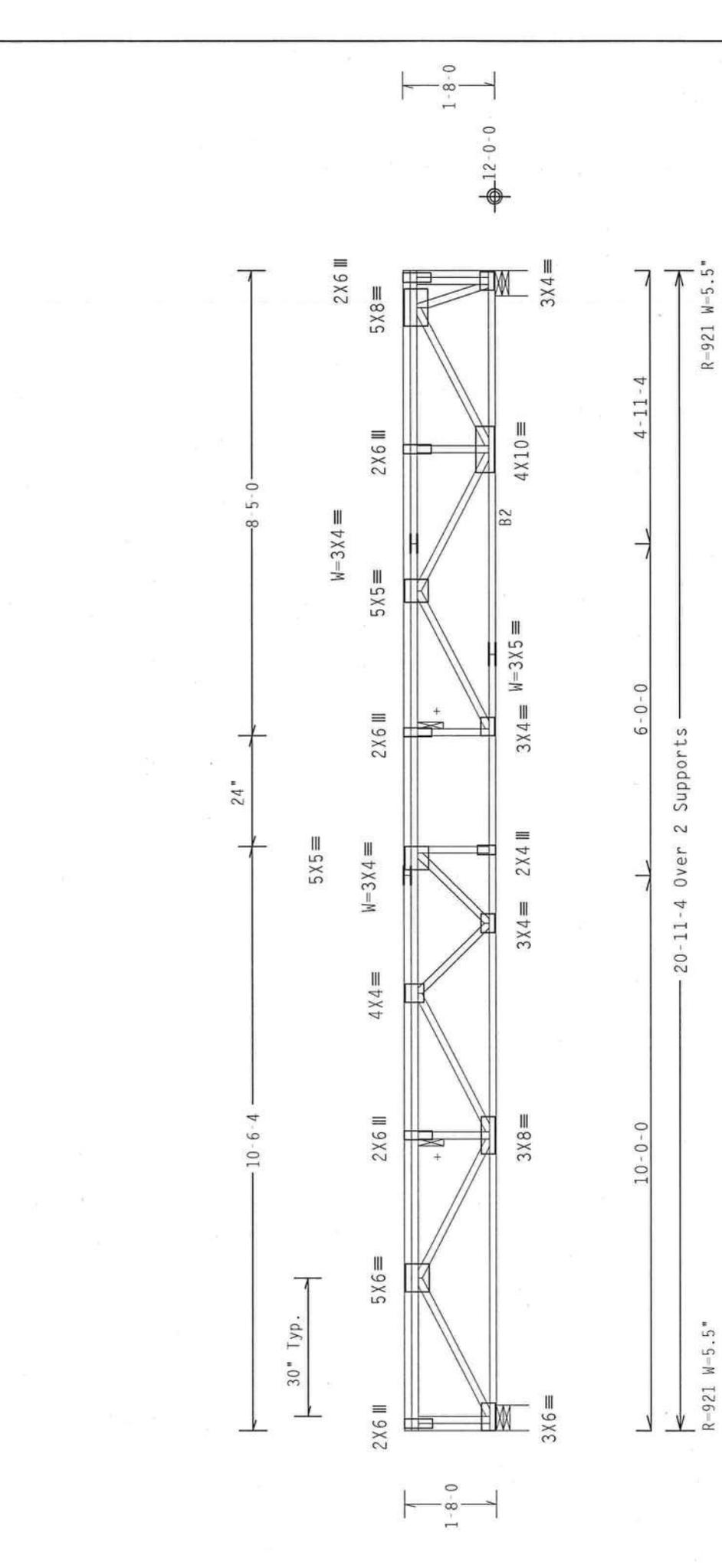






(6461F-)/TED SMITH /SUWANNEE RIVER LOG HOMES --, \*\* -F2)  
 Top chord 4x2 SP #2 N  
 Bot chord 4x2 SP #2 Dense :82 4x2 SP #2 N  
 Webs 4x2 SP #2 N

+ 2x6 continuous strongback. See detail STBRIBR0409 for bracing and bridging recommendations.  
 Maximum panel length exceeds 30". TPI allows non-bearing partition walls to be supported at any point when panels are 30" or less.  
 Trusses to be spaced at 19.2" OC maximum.  
 Deflection meets L/360 live and L/240 total load.  
 The overall height of this truss excluding overhang is 1-8-0.



PLT TYP. Wave  
 Design Crit: FBC2007Res/TPI-2002 (STD)  
 FT/RT=12%(0%)/10(0) 9.02.00  
 QTY: 17 FL/-/5/-/-/R/- Scale = .375"/Ft.  
 REF R215-- 60685  
 DATE 10/13/09  
 DRW HCUSR215 09286005  
 HC-ENG WHK/WHK  
 SEQN- 230450  
 FROM LRB  
 JREF- ITVV215\_Z01

**DAMIAN COLLINS JR.**  
 No. 52212  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 Oct 13 2009

**ALPINE**  
 ITW Building Components Group Inc.  
 Haines City, FL 33844  
 FL COA #0 278

**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BC51 (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND MICA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

**\*\*IMPORTANT\*\*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BEG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AIA/PFA) AND TPI. ITW BEG CONNECTOR PLATES ARE MADE OF 20/18/16GA (A-M/SS2X) ASTM A653 GRADE 40/60 (A, E/14.55) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 100A, 2. ANY INSPECTION OF PLATES FOLLOWED BY (C) SHALL BE PER AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) DESIGN MANUAL FOR STEEL CONSTRUCTION, 13TH EDITION, PART 10, SECTION 10.3.1. FOR THE TRUSS COMPONENTS DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN AND USE OF THIS COMPONENT. THE RESPONSIBILITY OF THE BUILDING DESIGNER PER A051/TPI 1 SEC. 7.



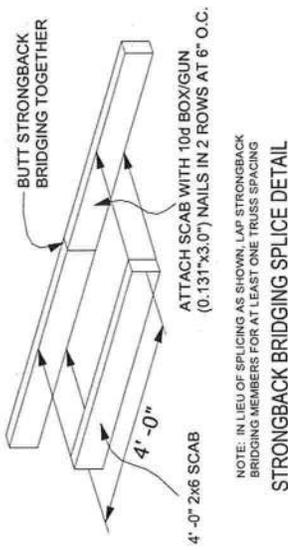
# STRONGBACK BRIDGING AND BRACING REQUIREMENTS

- ▶ All vertical scabs, bracing, and strongback bridging material to be grade marked same species and grade of webs.
- ▶ The purpose of strongback bridging is to develop load sharing between individual trusses, resulting in an overall increase in the stiffness of the floor system. 2x6 strongback bridging, positioned as shown in details, is required at 10' -0" o.c. (max.)
- ▶ The purpose of lateral bracing is to provide lateral stability of the member. 2x4 continuous lateral bracing is required at intervals not to exceed 10' -0" o.c. NOTE: when positioned at the upper side of the bottom chord, strongback bridging also satisfies the lateral bracing requirements for the bottom chord of the truss.

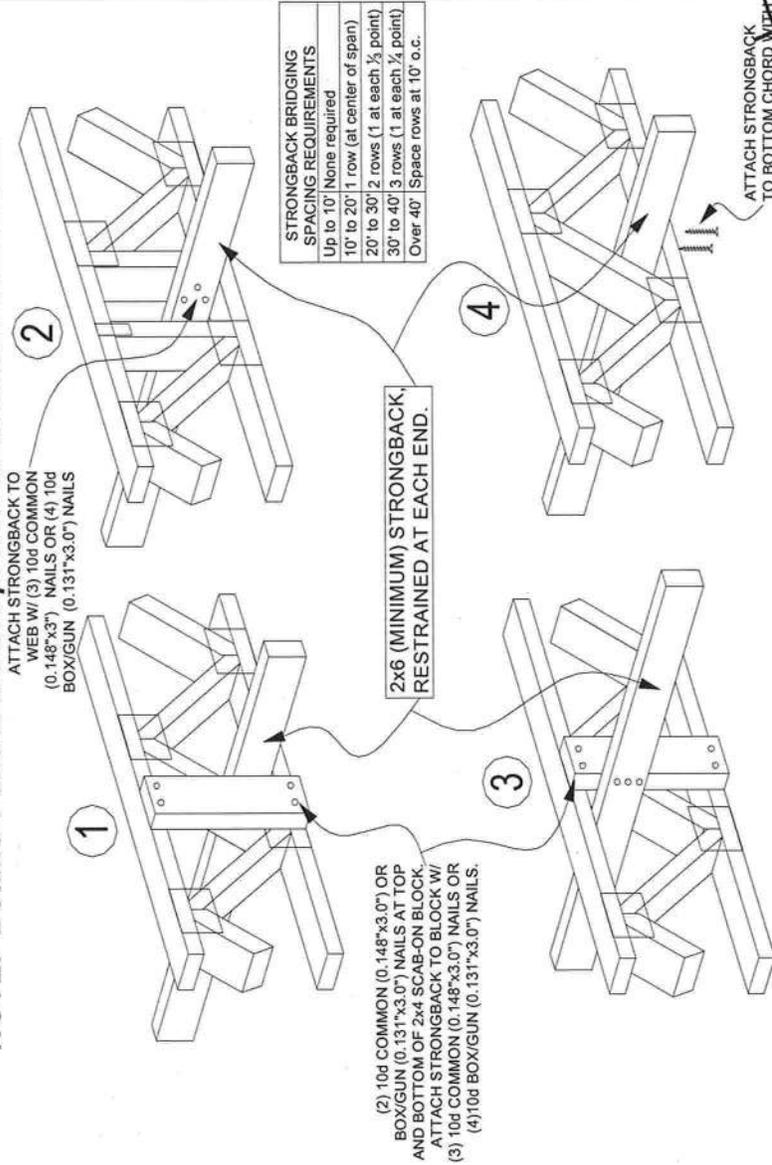
The terms "bridging" and "bracing" are sometimes mistakenly used interchangeably. "Bracing" is an important structural requirement of any floor or roof system. "Bridging," particularly "strongback bridging" is a requirement to a truss system to help control vibration. In addition to aiding in the distribution of point loads between adjacent truss, strongback bridging serves to reduce "bounce" or residual vibration resulting from moving point loads, such as footsteps.

The performance of all floor systems are enhanced by the installation of strongback bridging and therefore is strongly recommended by ITW Building Components Group Inc.

For additional information regarding bracing, refer to BCSI (Building Component Safety Information).



**NOTE: Details 1 and 2 are the preferred attachment methods**



STRONGBACK BRIDGING SPACING REQUIREMENTS	
Up to 10'	None required
10' to 20'	1 row (at center of span)
20' to 30'	2 rows (1 at each 1/2 point)
30' to 40'	3 rows (1 at each 1/4 point)
Over 40'	Space rows at 10' o.c.

## STRONGBACK BRIDGING ATTACHMENT ALTERNATIVES

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET**  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow BCSI (Building Component Safety Information), by TPI and WTCA for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural panels and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3 & B7. See this job's general notes page for more information.

**\*\*IMPORTANT\*\* FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR.**  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design, any failure to build the truss in conformance with TPI, or fabricating, handling, shipping, installing & bracing of trusses. ITWBCG connector plates are made of 30/18/16GA (W/H/S/K) ASTM A653 grade 37/40/50 (K/W/H/S) galv. steel. Apply plates to each face of truss, positioned as shown above and on Joint Details.  
A seal on this drawing or cover page indicates acceptance and professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any building is the responsibility of the Building Designer per TPI's Safety Manual.  
ITW - BCSI: [www.itwbcg.com](http://www.itwbcg.com); TPI: [www.tpiast.com](http://www.tpiast.com); WTCA: [www.abctindustry.com](http://www.abctindustry.com); ICC: [www.iccsafe.org](http://www.iccsafe.org)

**JAMES E. COLLINS, JR.**  
 LICENSE NO. 52212  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

TC LL	PSF	REF	STRONGBACK
TC DL	PSF	DATE	4/10/09
BC DL	PSF	DRWG	STRBRIBR0409
BC LL	PSF		
TOT. LD.	PSF		
DUR. FAC.	1.00		
SPACING			

ITW Building Components Group Inc.  
 Earth City, MO 63045



**STRUCTURAL AND WIND LOAD CALCULATIONS**

**For**

**Suwannee River Log Homes**

**Ted Smith**

  
Gary Gill, P.E. 51942  
P.O. Box 187  
130 West Howard Street  
Live Oak, FL 32064  
Ph. (386) 362-3678  
Fax (386) 362-6133  
AUTH #9461

# MECAWind Version 2.0.2.8 per ASCE 7-05

Developed by MECA Enterprises, Inc. Copyright 2009 [www.mecaenterprises.com](http://www.mecaenterprises.com)

Date : 9/9/2009 Project No. : PF09-096  
Company Name : GTC Design Group Designed By : Gary Gill  
Address : 130 W. Howard St. Description : Ted Smith Residence  
City : Live Oak Customer Name : SRLH  
State : FL Proj Location : Alachua County  
File Location: P:\2009\PF09-096 SRLH - Ted Smith\Calculations\Structural\smith.wnd

## Detailed Wind Load Design (Method 2) per ASCE 7-05

Basic Wind Speed (V)	= 110.00 mph	Structure Type	= Building
Structural Category	= II	Exposure Category	= B
Natural Frequency	= N/A	Flexible Structure	= No
Importance Factor	= 1.00	Kd Directional Factor	= 0.85
Alpha	= 7.00	Zg	= 1200.00 ft
At	= 0.14	Bt	= 0.84
Am	= 0.25	Bm	= 0.45
Cc	= 0.30	l	= 320.00 ft
Epsilon	= 0.33	Zmin	= 30.00 ft
Slope of Roof	= 7.2 : 12	Slope of Roof (Theta)	= 30.96 Deg
Ht: Mean Roof Ht	= 28.50 ft	Type of Roof	= Gabled
RHt: Ridge Ht	= 33.00 ft	Eht: Eave Height	= 24.00 ft
OH: Roof Overhang at Eave	= .00 ft	Roof Area	= 1749.00 ft <sup>2</sup>
Bldg Length Along Ridge	= 50.00 ft	Bldg Width Across Ridge	= 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:  $0.6 * Ht$  = 30.00 ft  
lzm:  $Cc * (33 / Zm)^{0.167}$  = 0.30  
Lzm:  $l * (Zm / 33)^{Epsilon}$  = 309.99 ft  
Q:  $(1 / (1 + 0.63 * ((B + Ht) / Lzm)^{0.63}))^{0.5}$  = 0.91  
Gust2:  $0.925 * ((1 + 1.7 * lzm * 3.4 * Q) / (1 + 1.7 * 3.4 * lzm))$  = 0.87

### Gust Factor Summary

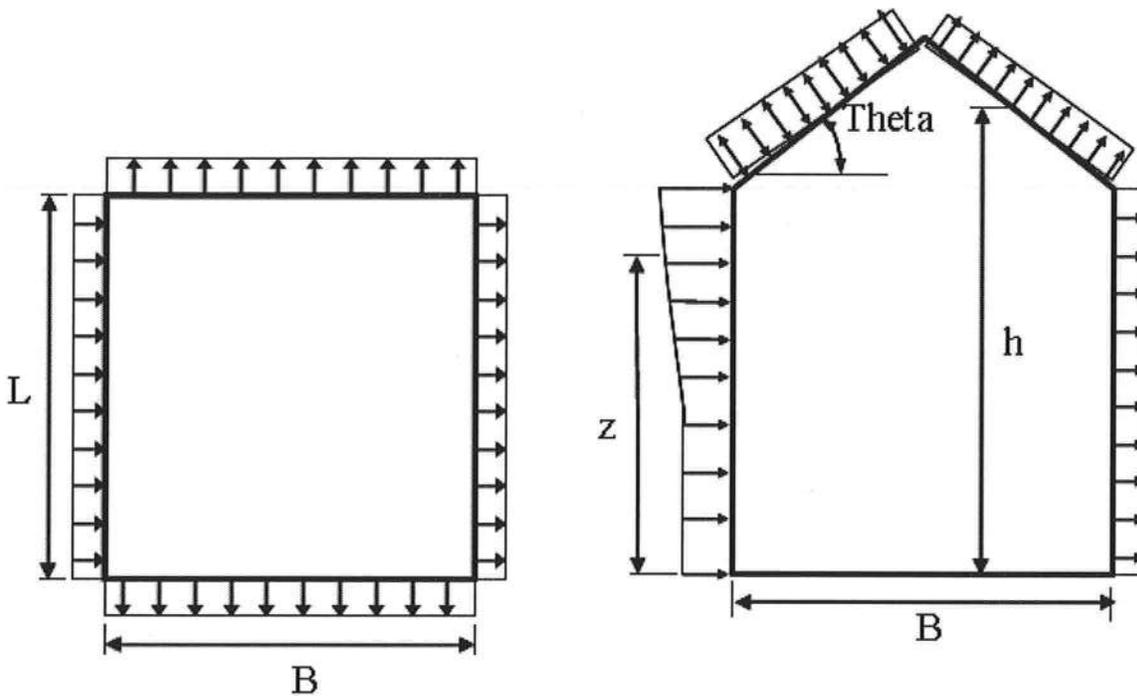
Not a Flexible Structure use the Lessor of Gust1 or Gust2 = 0.85

### Figure 6-5 Internal Pressure Coefficients for Buildings, GCpi

GCpi : Internal Pressure Coefficient = +/- 0.18

### Figure 6-6 External Pressure Coefficients

Cp - Loads on Main Wind-Force Resisting Systems (Method 2)



$K_h: 2.01 * (H_t / Z_g)^{2 / \alpha} = 0.69$   
 $K_{ht}: \text{Topographic Factor (Figure 6-4)} = 1.00$   
 $Q_h: .00256 * (V)^2 * I * K_h * K_{ht} * K_d = 18.18 \text{ psf}$   
 $C_{pww}: \text{Windward Wall } C_p (\text{Ref Fig 6-6}) = 0.80$   
 $\text{Roof Area} = 1749.00 \text{ ft}^2$   
 $\text{Reduction Factor based on Roof Area} = 0.80$

**MWFRS-Wall Pressures Perpendicular to Ridge**

Wall	$C_p$	+GCpi (psf)	-GCpi (psf)
Leeward Walls	-0.50	-11.00	-4.45
Side Walls	-0.70	-14.09	-7.54

Top Elev ft	Bot Elev ft	$K_z$	$K_{zt}$	$q_z$ psf	-Windward Wall- +GCpi	-GCpi	Total +/-GCpi	Shear Kip	Moment K-ft
33.00	23.00	0.72	1.00	18.96	9.62	16.16	20.62	3.1	4.6
30.00	20.00	0.70	1.00	18.45	9.27	15.82	20.27	13.2	86.2
20.00	10.00	0.62	1.00	16.43	7.90	14.44	18.90	22.7	265.7
10.00	.00	0.57	1.00	15.13	7.02	13.56	18.02	31.7	537.5

Note: 1) Total = Leeward GCpi + Windward GCpi  
 2) Shear and Moment are sum of forces (Leeward+Windard) acting at 'Bot Elev'

Roof Location	$C_p$	+GCpi (psf)	-GCpi (psf)
Windward - Min $C_p$	-0.27	-7.44	-0.90
Windward - Max $C_p$	0.20	-0.18	6.36
Leeward Perp to Ridge	-0.60	-12.54	-6.00
Overhang Top (Windward)	-0.27	-4.17	-4.17
Overhang Top (Leeward)	-0.60	-9.27	-9.27
Overhang (Windward only)	0.80	11.77	11.77

**MWFRS-Wall Pressures Parallel to Ridge**

Wall	$C_p$	+GCpi (psf)	-GCpi (psf)
------	-------	-------------	-------------

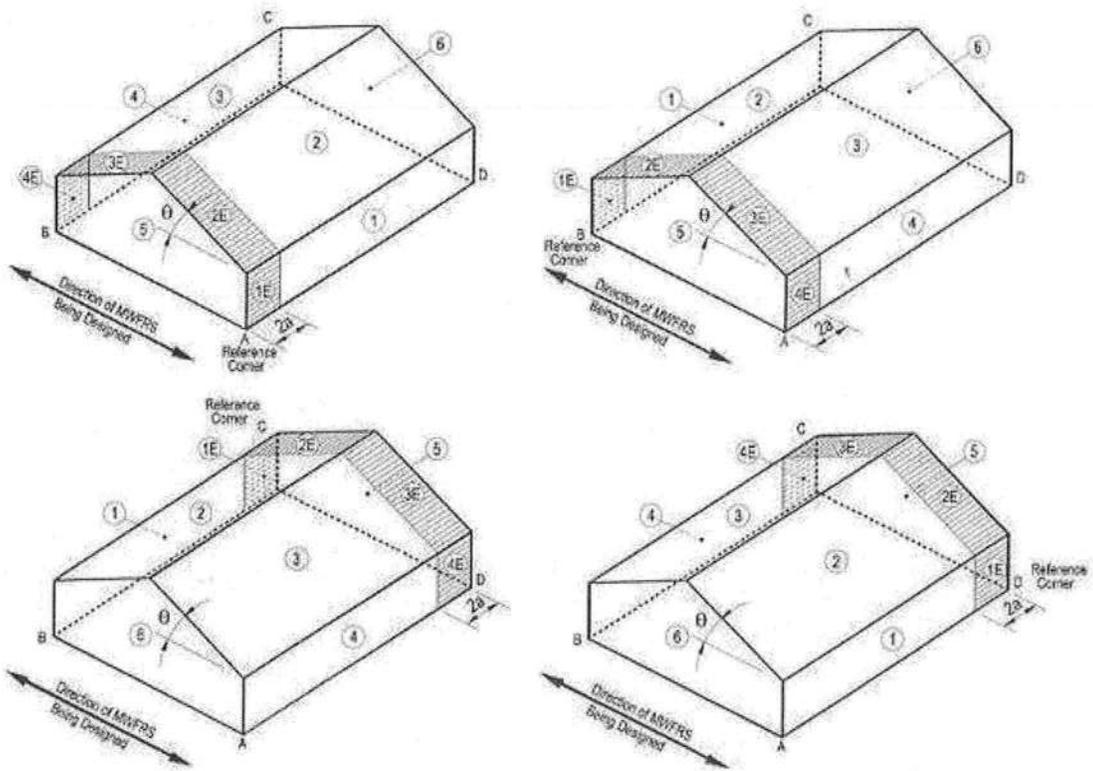
Top Elev ft	Bot Elev ft	Kz	Kzt	qz psf	-Windward +GCpi	Wall- -GCpi	Total +/-GCpi	Shear Kip	Moment K-ft
33.00	23.00	0.72	1.00	18.96	9.62	16.16	18.56	1.7	2.5
30.00	20.00	0.70	1.00	18.45	9.27	15.82	18.21	7.1	46.5
20.00	10.00	0.62	1.00	16.43	7.90	14.44	16.84	12.2	143.1
10.00	.00	0.57	1.00	15.13	7.02	13.56	15.96	17.0	288.9

-----  
Leeward Walls                    -0.37                    -8.94                    -2.39  
Side Walls                        -0.70                    -14.09                   -7.54  
-----

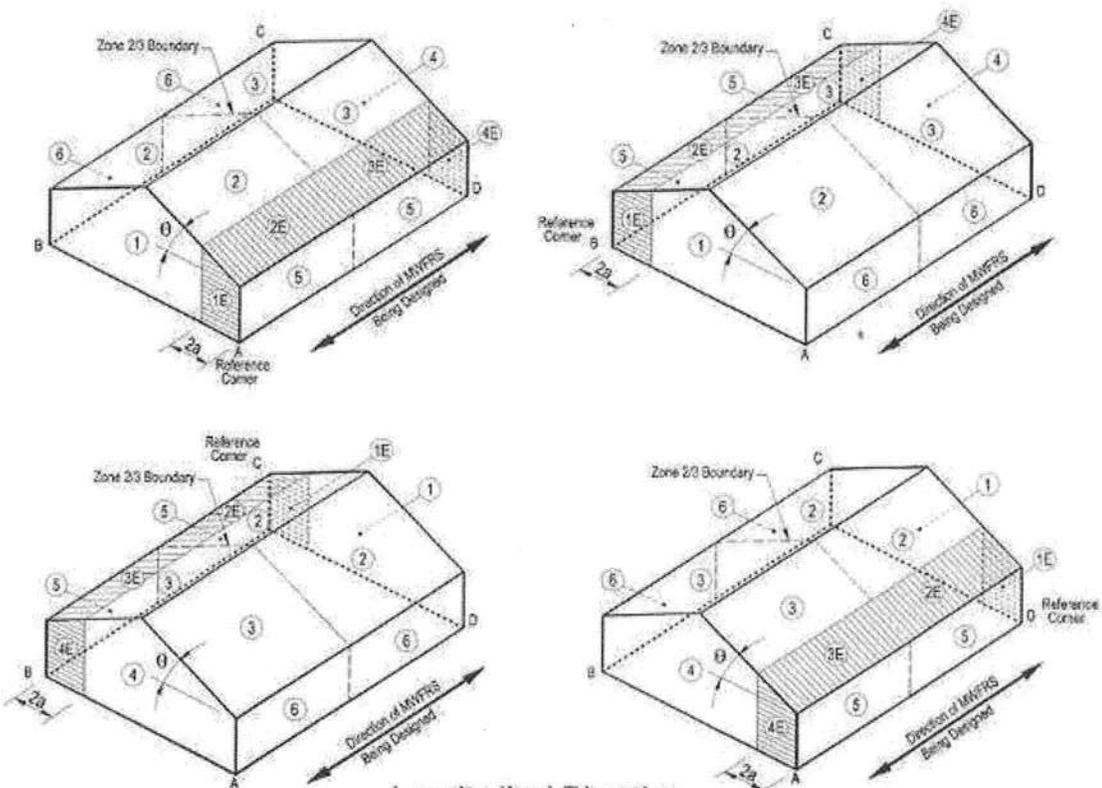
Note: 1) Total = Leeward GCpi + Windward GCpi  
2) Shear and Moment are sum of forces (Leeward+Windard) acting at 'Bot Elev'

Roof - Dist from Windward Edge	Cp	+GCpi (psf)	-GCpi (psf)
0.0 ft to 14.3 ft	-0.92	-17.48	-10.94
14.3 ft to 28.5 ft	-0.87	-16.75	-10.20
28.5 ft to 50.0 ft	-0.53	-11.43	-4.89

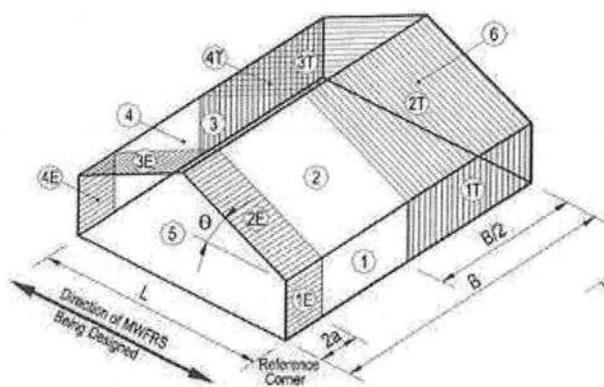
## Basic Load Cases



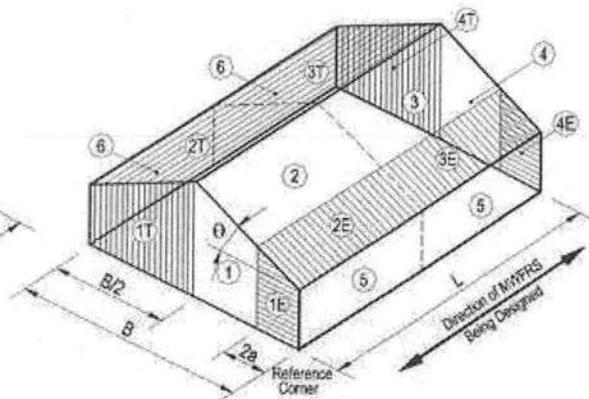
## Transverse Direction



## Longitudinal Direction



Transverse Direction



Longitudinal Direction

### Torsional Load Cases

Low Rise Bldg Provisions per Fig. 6-10: MWFRS Transverse Direction

Building Surface	GCpf	+GCpi	-GCpi	qh psf	Min P psf	Max P psf
1	0.56	0.18	-0.18	18.45	7.01	13.65
2	0.21	0.18	-0.18	18.45	0.55	7.20
3	-0.43	0.18	-0.18	18.45	-11.25	-4.61
4	-0.37	0.18	-0.18	18.45	-10.15	-3.51
5	-0.45	0.18	-0.18	18.45	-11.62	-4.98
6	-0.45	0.18	-0.18	18.45	-11.62	-4.98
1E	0.69	0.18	-0.18	18.45	9.41	16.05
2E	0.27	0.18	-0.18	18.45	1.66	8.30
3E	-0.53	0.18	-0.18	18.45	-13.10	-6.46
4E	-0.48	0.18	-0.18	18.45	-12.18	-5.54
1T	*	*	*	*	1.75	3.41
2T	*	*	*	*	0.14	1.80
3T	*	*	*	*	-2.81	-1.15
4T	*	*	*	*	-2.54	-0.88

Low Rise Bldg Provisions per Fig. 6-10: MWFRS Longitudinal Direction

Building Surface	GCpf	+GCpi	-GCpi	qh psf	Min P psf	Max P psf
1	0.4	0.18	-0.18	18.45	4.06	10.70
2	-0.69	0.18	-0.18	18.45	-16.05	-9.41
3	-0.37	0.18	-0.18	18.45	-10.15	-3.51
4	-0.29	0.18	-0.18	18.45	-8.67	-2.03
5	-0.45	0.18	-0.18	18.45	-11.62	-4.98
6	-0.45	0.18	-0.18	18.45	-11.62	-4.98
1E	0.61	0.18	-0.18	18.45	7.93	14.58
2E	-1.07	0.18	-0.18	18.45	-23.06	-16.42
3E	-0.53	0.18	-0.18	18.45	-13.10	-6.46
4E	-0.43	0.18	-0.18	18.45	-11.25	-4.61
1T	*	*	*	*	1.01	2.68
2T	*	*	*	*	-4.01	-2.35
3T	*	*	*	*	-2.54	-0.88

4T \* \* \* \* -2.17 -0.51

Notes: 1)  $\text{Min } P = qh * \{GCPf - (+GCpi)\}$

Notes: 2)  $\text{Max } P = qh * \{GCPf - (-GCpi)\}$

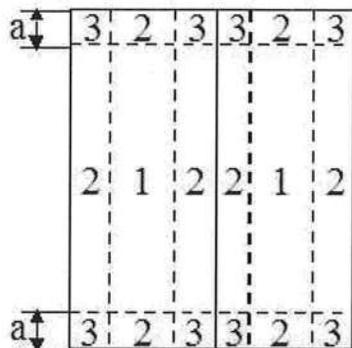
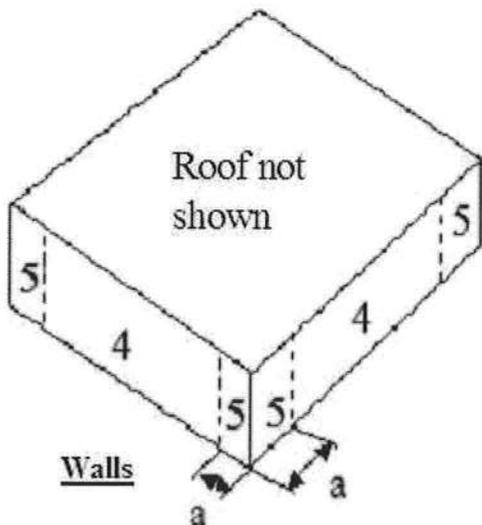
Notes: 3) \* For Torsional Load Cases, the zones are designated with a "T".  
The pressures (Min P & Max P) are 25% of the full design wind pressures (Ld Case 1T=25%\*1 (ld case 1), 2T=25%\*2, 3T=25%\*3, 4T=25%\*4).

Exceptions to Torsional Load Cases: One story buildings with mean roof height  $\leq 30$  ft (9.1m), buildings with two stories or less framed with light frame construction, and buildings two stories or less designed with flexible diaphragms need not be designed for the Torsional Load Cases. (Note 5 of Figure 6-10)

## MECAWind Version 2.0.2.8 ASCE 7-05

Developed by MECA Enterprises, Inc. Copyright 2009 [www.mecaenterprises.com](http://www.mecaenterprises.com)

Date : 9/9/2009	Project No. : PF09-096
Company Name : GTC Design Group	Designed By : Gary Gill
Address : 130 W. Howard St.	Description : Ted Smith Residence
City : Live Oak	Customer Name : SRLH
State : FL	Proj Location : Alachua County
File Location: P:\2009\PF09-096 SRLH - Ted Smith\Calculations\Structural\smith.wnd	



**Gable Roof  $7 < \theta \leq 45$**

### Wind Pressure on Components and Cladding

Width of Pressure Coefficient Zone "a" = 3 ft

Description	Width ft	Span ft	Area ft <sup>2</sup>	Zone	Max GCp	Min GCp	Max P psf	Min P psf
Walls corner	10.00	1.00	10.00	5	1.000	-1.400	21.767	-29.145
Walls	10.00	1.00	10.00	4	1.000	-1.100	21.767	-23.611
Roof Corner	10.00	1.00	10.00	3	0.900	-1.200	19.922	-25.456
Roof Edge	10.00	1.00	10.00	2	0.900	-1.200	19.922	-25.456
Roof	10.00	1.00	10.00	1	0.900	-1.000	19.922	-21.767

Khcc:Comp. & Clad. Table 6-3 Case 1

= 0.70

Qhcc: .00256 \* V<sup>2</sup> \* I \* Khcc \* Kht \* Kd

= 18.45 psf

# MECAWind Version 2.0.2.8 per ASCE 7-05

Developed by MECA Enterprises, Inc. Copyright 2009 [www.mecaenterprises.com](http://www.mecaenterprises.com)

Date : 9/9/2009 Project No. : PF09-096  
Company Name : GTC Design Group Designed By : Gary Gill  
Address : 130 W. Howard St. Description : Ted Smith Residence - Open Por  
City : Live Oak Customer Name : SRLH  
State : FL Proj Location : Alachua County  
File Location: P:\2009\PF09-096 SRLH - Ted Smith\Calculations\Structural\smith porch.wnd

## Detailed Wind Load Design(Method 2) per ASCE 7-05

Basic Wind Speed(V)	=	110.00 mph	Structure Type	=	Building
Structural Category	=	II	Exposure Category	=	B
Natural Frequency	=	N/A	Flexible Structure	=	No
Importance Factor	=	1.00	Kd Directional Factor	=	0.85
Alpha	=	7.00	Zg	=	1200.00 ft
At	=	0.14	Bt	=	0.84
Am	=	0.25	Bm	=	0.45
Cc	=	0.30	l	=	320.00 ft
Epsilon	=	0.33	Zmin	=	30.00 ft
Slope of Roof	=	3.03 : 12	Slope of Roof(Theta)	=	14.80 Deg
Ht: Mean Roof Ht	=	24.65 ft	Type of Roof	=	Monoslope
RHt: Ridge Ht	=	26.50 ft	Eht: Eave Height	=	22.80 ft
OH: Roof Overhang at Eave	=	2.00 ft	Roof Area	=	731.00 ft <sup>2</sup>
Bldg Length Along Ridge	=	50.50 ft	Bldg Width Across Ridge	=	12.00 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:  $0.6 * Ht$  = 30.00 ft  
lzm:  $Cc * (33 / Zm)^{0.167}$  = 0.30  
Lzm:  $l * (Zm / 33)^{Epsilon}$  = 309.99 ft  
Q:  $(1 / (1 + 0.63 * ((B + Ht) / Lzm)^{0.63}))^{0.5}$  = 0.93  
Gust2:  $0.925 * ((1 + 1.7 * lzm * 3.4 * Q) / (1 + 1.7 * 3.4 * lzm))$  = 0.88

### Gust Factor Summary

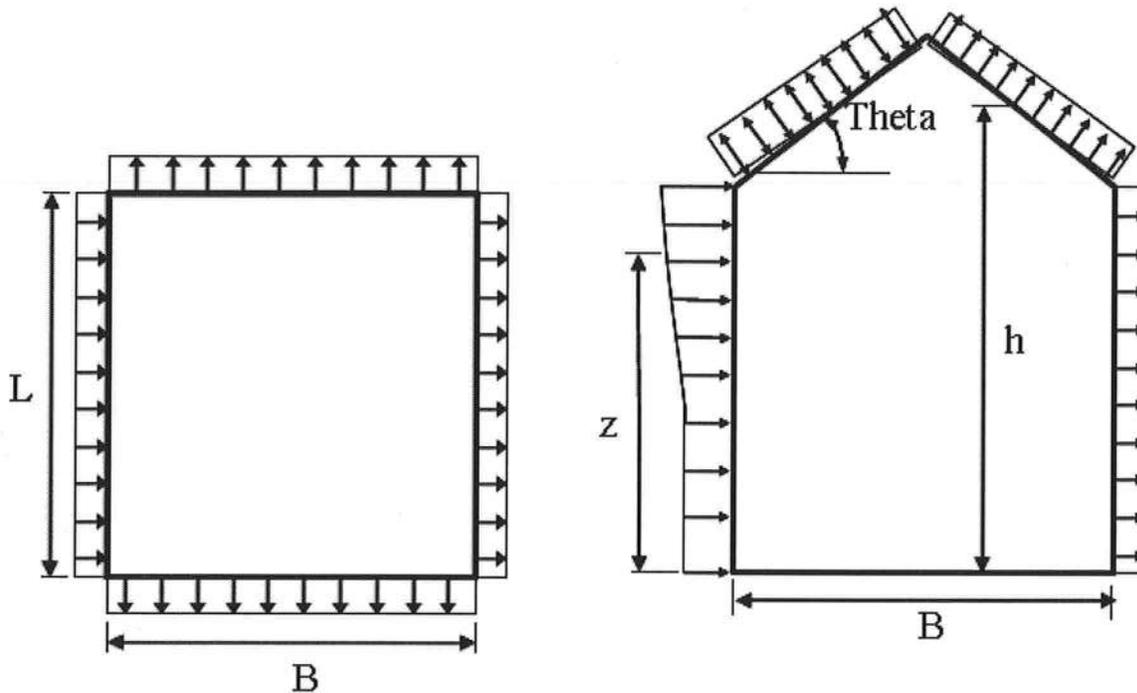
Not a Flexible Structure use the Lessor of Gust1 or Gust2 = 0.85

### Figure 6-5 Internal Pressure Coefficients for Buildings, GCpi

GCpi : Internal Pressure Coefficient = +/-0.18

### Figure 6-6 External Pressure Coefficients

Cp - Loads on Main Wind-Force Resisting Systems(Method 2)



$K_h: 2.01 * (H_t/Z_g)^{(2/\alpha)} = 0.66$   
 $K_{ht}: \text{Topographic Factor (Figure 6-4)} = 1.00$   
 $Q_h: .00256 * (V)^2 * I * K_h * K_{ht} * K_d = 17.44 \text{ psf}$   
 $C_{pww}: \text{Windward Wall } C_p \text{ (Ref Fig 6-6)} = 0.80$   
 $\text{Roof Area} = 731.00 \text{ ft}^2$   
 $\text{Reduction Factor based on Roof Area} = 0.84$

**MWFRS-Wall Pressures Perpendicular to Ridge**

Wall	Cp	+GCpi (psf)	-GCpi (psf)
Leeward Walls	-0.50	-10.55	-4.27
Side Walls	-0.70	-13.52	-7.24

Top Elev ft	Bot Elev ft	Kz	Kzt	qz psf	-Windward Wall- +GCpi	Wall- -GCpi	Total +/-GCpi	Shear Kip	Moment K-ft
26.50	16.50	0.68	1.00	17.80	8.97	15.25	19.52	6.4	20.8
20.00	10.00	0.62	1.00	16.43	8.03	14.31	18.58	15.8	131.8
10.00	.00	0.57	1.00	15.13	7.15	13.43	17.70	24.7	334.4

Note: 1) Total = Leeward GCpi + Windward GCpi  
 2) Shear and Moment are sum of forces (Leeward+Windard) acting at 'Bot Elev'

Roof Location	Cp	+GCpi (psf)	-GCpi (psf)
Windward - Min Cp	-1.01	-18.11	-11.83
Windward - Max Cp	-0.18	-5.81	0.47
Leeward Perp to Ridge	-0.60	-12.03	-5.76
Overhang Top (Windward)	-1.01	-14.97	-14.97
Overhang Top (Leeward)	-0.60	-8.89	-8.89
Overhang (Windward only)	0.80	11.60	11.60

**MWFRS-Wall Pressures Parallel to Ridge**

Wall	Cp	+GCpi (psf)	-GCpi (psf)
------	----	-------------	-------------

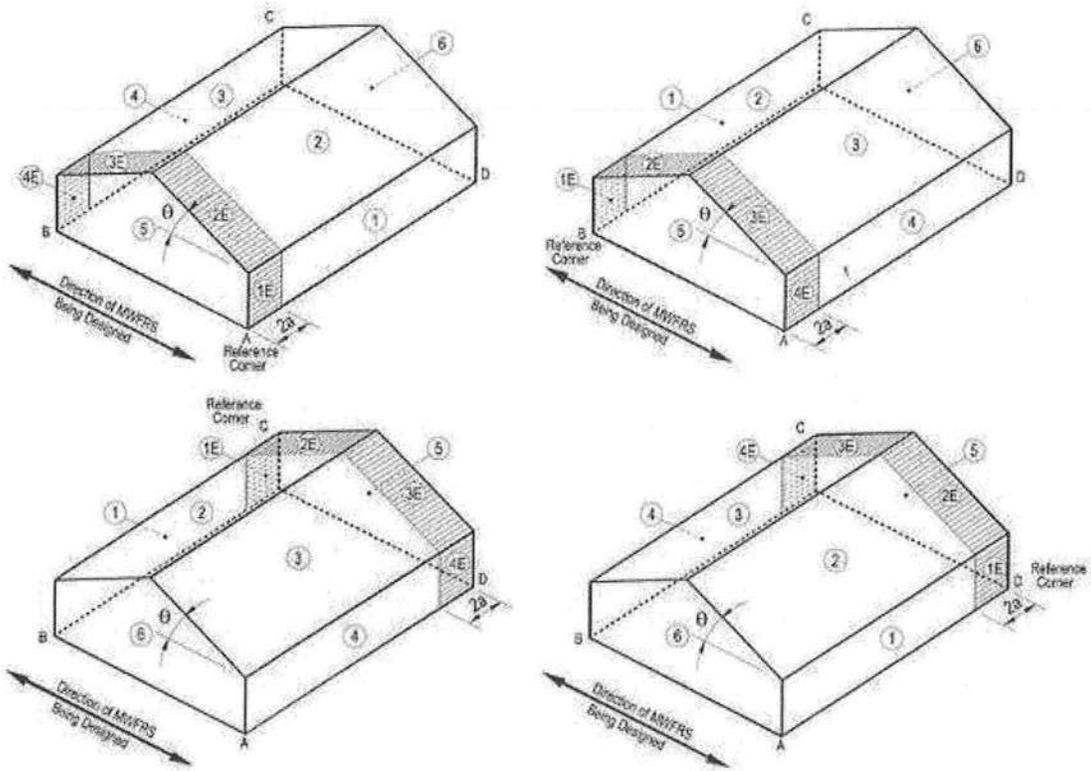
Leeward Walls	-0.20	-6.10	0.17
Side Walls	-0.70	-13.52	-7.24

Top Elev ft	Bot Elev ft	Kz	Kzt	qz psf	-Windward +GCpi	Wall- -GCpi	Total +/-GCpi	Shear Kip	Moment K-ft
26.50	16.50	0.68	1.00	17.80	8.97	15.25	15.07	1.2	3.8
20.00	10.00	0.62	1.00	16.43	8.03	14.31	14.14	2.9	24.1
10.00	.00	0.57	1.00	15.13	7.15	13.43	13.25	4.5	60.7

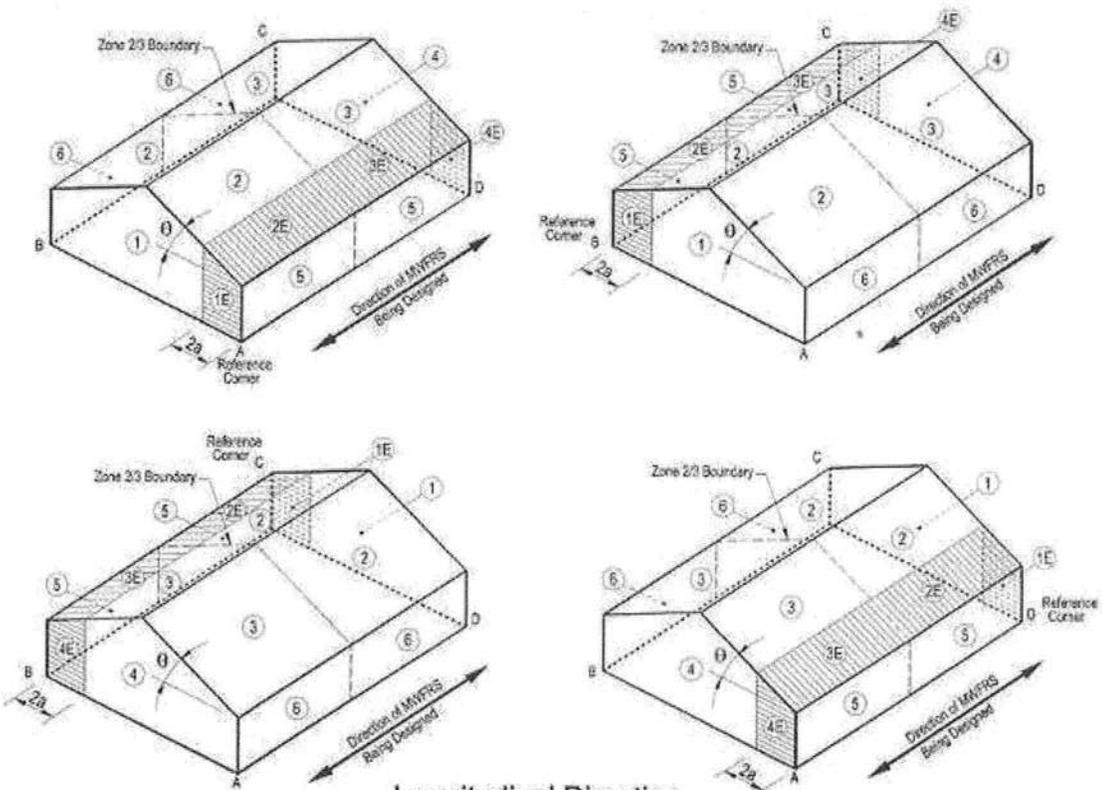
Note: 1) Total = Leeward GCPI + Windward GCPI  
 2) Shear and Moment are sum of forces (Leeward+Windard) acting at 'Bot Elev'

Roof - Dist from Windward Edge	Cp	+GCpi (psf)	-GCpi (psf)
0.0 ft to 12.3 ft	-0.90	-16.48	-10.20
12.3 ft to 24.7 ft	-0.90	-16.48	-10.20
24.7 ft to 49.3 ft	-0.50	-10.55	-4.27
49.3 ft to 50.5 ft	-0.30	-7.59	-1.31

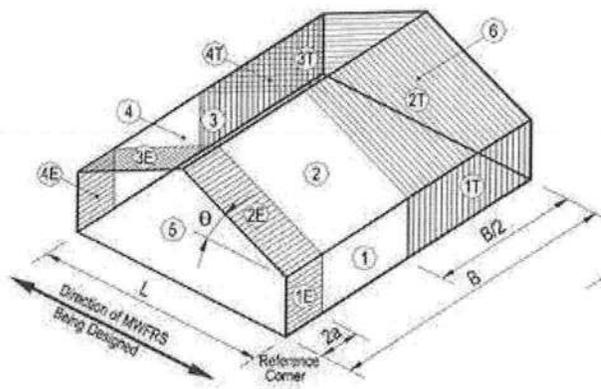
## Basic Load Cases



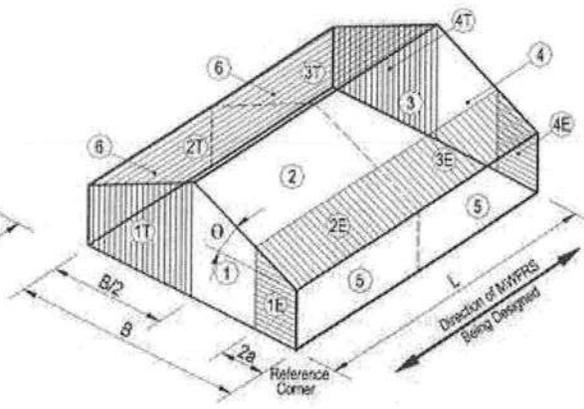
## Transverse Direction



## Longitudinal Direction



Transverse Direction



Longitudinal Direction

### Torsional Load Cases

Low Rise Bldg Provisions per Fig. 6-10: MWFRS Transverse Direction

Building Surface	GCpf	+GCpi	-GCpi	qh psf	Min P psf	Max P psf
1	0.48	0.18	-0.18	18.45	5.54	12.18
2	-0.69	0.18	-0.18	18.45	-16.05	-9.41
3	-0.44	0.18	-0.18	18.45	-11.44	-4.80
4	-0.38	0.18	-0.18	18.45	-10.33	-3.69
5	-0.45	0.18	-0.18	18.45	-11.62	-4.98
6	-0.45	0.18	-0.18	18.45	-11.62	-4.98
1E	0.73	0.18	-0.18	18.45	10.15	16.79
2E	-1.07	0.18	-0.18	18.45	-23.06	-16.42
3E	-0.63	0.18	-0.18	18.45	-14.94	-8.30
4E	-0.57	0.18	-0.18	18.45	-13.84	-7.20
1T	*	*	*	*	1.38	3.04
2T	*	*	*	*	-4.01	-2.35
3T	*	*	*	*	-2.86	-1.20
4T	*	*	*	*	-2.58	-0.92

Low Rise Bldg Provisions per Fig. 6-10: MWFRS Longitudinal Direction

Building Surface	GCpf	+GCpi	-GCpi	qh psf	Min P psf	Max P psf
1	0.4	0.18	-0.18	18.45	4.06	10.70
2	-0.69	0.18	-0.18	18.45	-16.05	-9.41
3	-0.37	0.18	-0.18	18.45	-10.15	-3.51
4	-0.29	0.18	-0.18	18.45	-8.67	-2.03
5	-0.45	0.18	-0.18	18.45	-11.62	-4.98
6	-0.45	0.18	-0.18	18.45	-11.62	-4.98
1E	0.61	0.18	-0.18	18.45	7.93	14.58
2E	-1.07	0.18	-0.18	18.45	-23.06	-16.42
3E	-0.53	0.18	-0.18	18.45	-13.10	-6.46
4E	-0.43	0.18	-0.18	18.45	-11.25	-4.61
1T	*	*	*	*	1.01	2.68
2T	*	*	*	*	-4.01	-2.35
3T	*	*	*	*	-2.54	-0.88

4T \* \* \* \* -2.17 -0.51

Notes: 1)  $\text{Min } P = qh * (\text{GCPf} - (+\text{GCpi}))$

Notes: 2)  $\text{Max } P = qh * (\text{GCPf} - (-\text{GCpi}))$

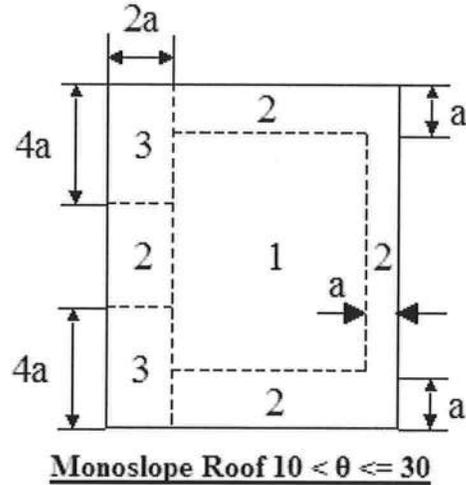
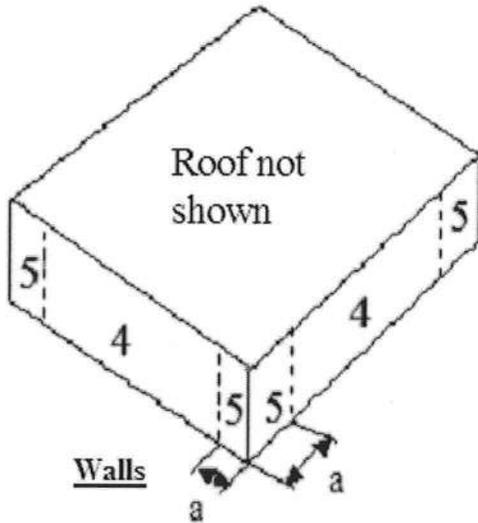
Notes: 3) \* For Torsional Load Cases, the zones are designated with a "T".  
The pressures (Min P & Max P) are 25% of the full design wind pressures (Ld Case 1T=25%\*1 (ld case 1), 2T=25%\*2, 3T=25%\*3, 4T=25%\*4).

Exceptions to Torsional Load Cases: One story buildings with mean roof height  $\leq 30$  ft (9.1m), buildings with two stories or less framed with light frame construction, and buildings two stories or less designed with flexible diaphragms need not be designed for the Torsional Load Cases. (Note 5 of Figure 6-10)

## MECAWind Version 2.0.2.8 ASCE 7-05

Developed by MECA Enterprises, Inc. Copyright 2009 [www.mecaenterprises.com](http://www.mecaenterprises.com)

Date : 9/9/2009	Project No. : PF09-096
Company Name : GTC Design Group	Designed By : Gary Gill
Address : 130 W. Howard St.	Description : Ted Smith Residence - Open Por
City : Live Oak	Customer Name : SRLH
State : FL	Proj Location : Alachua County
File Location: P:\2009\PF09-096 SRLH - Ted Smith\Calculations\Structural\smith porch.wnd	



### Wind Pressure on Components and Cladding

Width of Pressure Coefficient Zone "a" = 3 ft

Description	Width ft	Span ft	Area ft <sup>2</sup>	Zone	Max GCp	Min GCp	Max P psf	Min P psf
Walls corner	10.00	1.00	10.00	5	1.000	-1.400	21.767	-29.145
Walls	10.00	1.00	10.00	4	1.000	-1.100	21.767	-23.611
Roof Corner	10.00	1.00	10.00	3	0.400	-2.900	10.699	-56.815
Roof Edge	10.00	1.00	10.00	2	0.400	-1.600	10.699	-32.834
Roof	10.00	1.00	10.00	1	0.400	-1.300	10.699	-27.301

Khcc:Comp. & Clad. Table 6-3 Case 1  
 Qhcc: .00256\*V<sup>2</sup>\*I\*Khcc\*Kht\*Kd

= 0.70  
 = 18.45 psf



GTC DESIGN GROUP

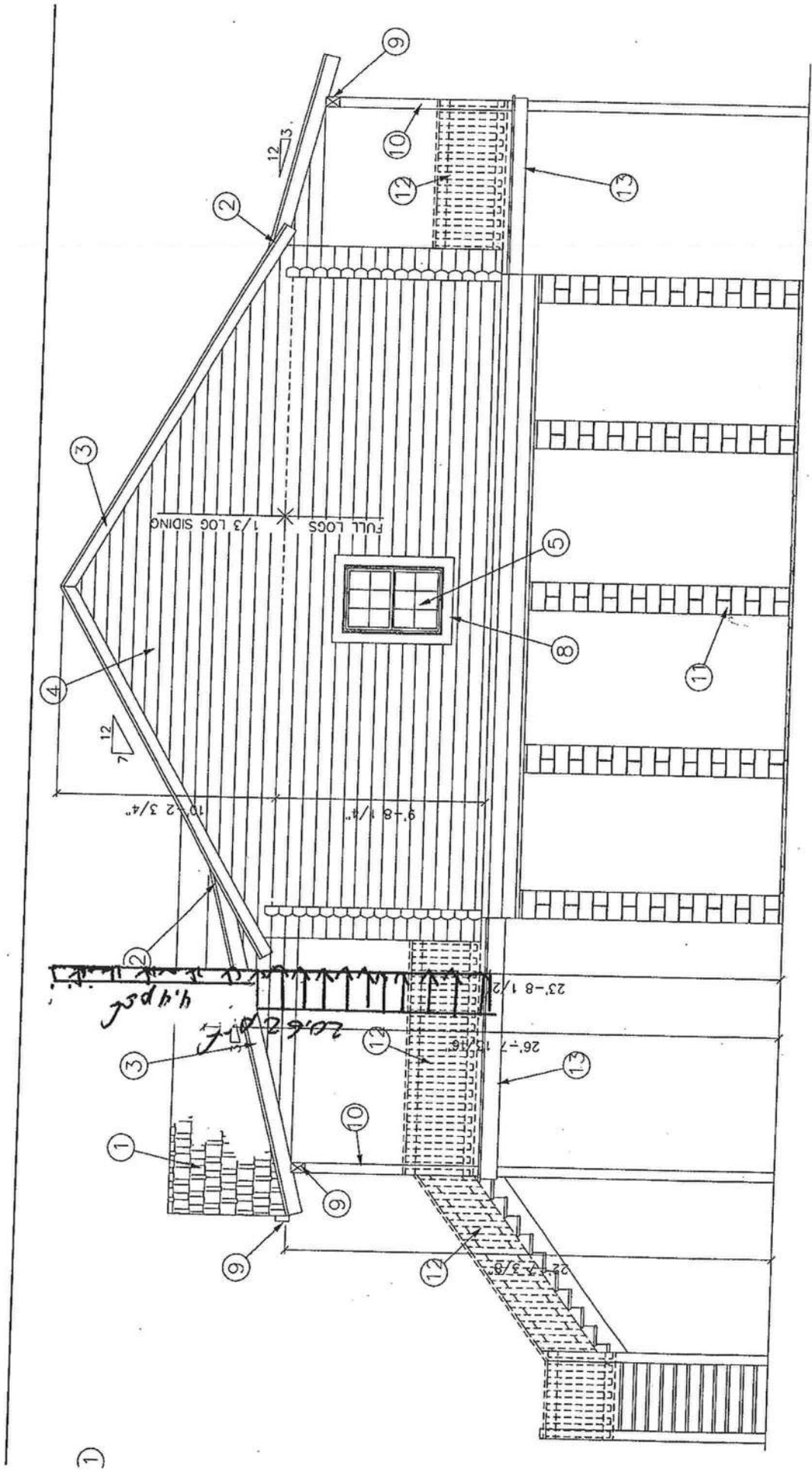
Project name:  
 Project:  
 Client  
 Calculations:  
 Date:

Smith Residence  
 PF09-096  
 SRLH  
 G.G.  
 9/9/2007

### Wind, Dead and Live Load Calculations

Roof Elements		DL (psf)	RLL (psf)	WL -C&C)	WL-Main	Trib. Wid.	wdead	wrl	wwl(CC)	wwl(main)
1	Ridge Beams	15	20	-25.46	-16.05	15	300	261	-381.9	-240.75
Floor Elements		DL-flr (psf)	DL-wall (psf)	LL (psf)	RLL (psf)	Trib. Wid.	Wall hgt	wdead (plf)\wll (plf)	wrl (plf)	
1	Flr Girder (1)	10	8	40	40	6.5	12.00	161	260	
2	Flr Girder (2)	10	8	40	40	16.50		165.00	660.00	
3	Flr Girder (3)	10	8	40	40	19.20		192.00	768.00	
4	Flr Girder (4)	10	8	40	40	8.50	12.00	181	340	
5	Perimeter Bm	15	8		20	7.00	10	185		140

WIND  
LOAD



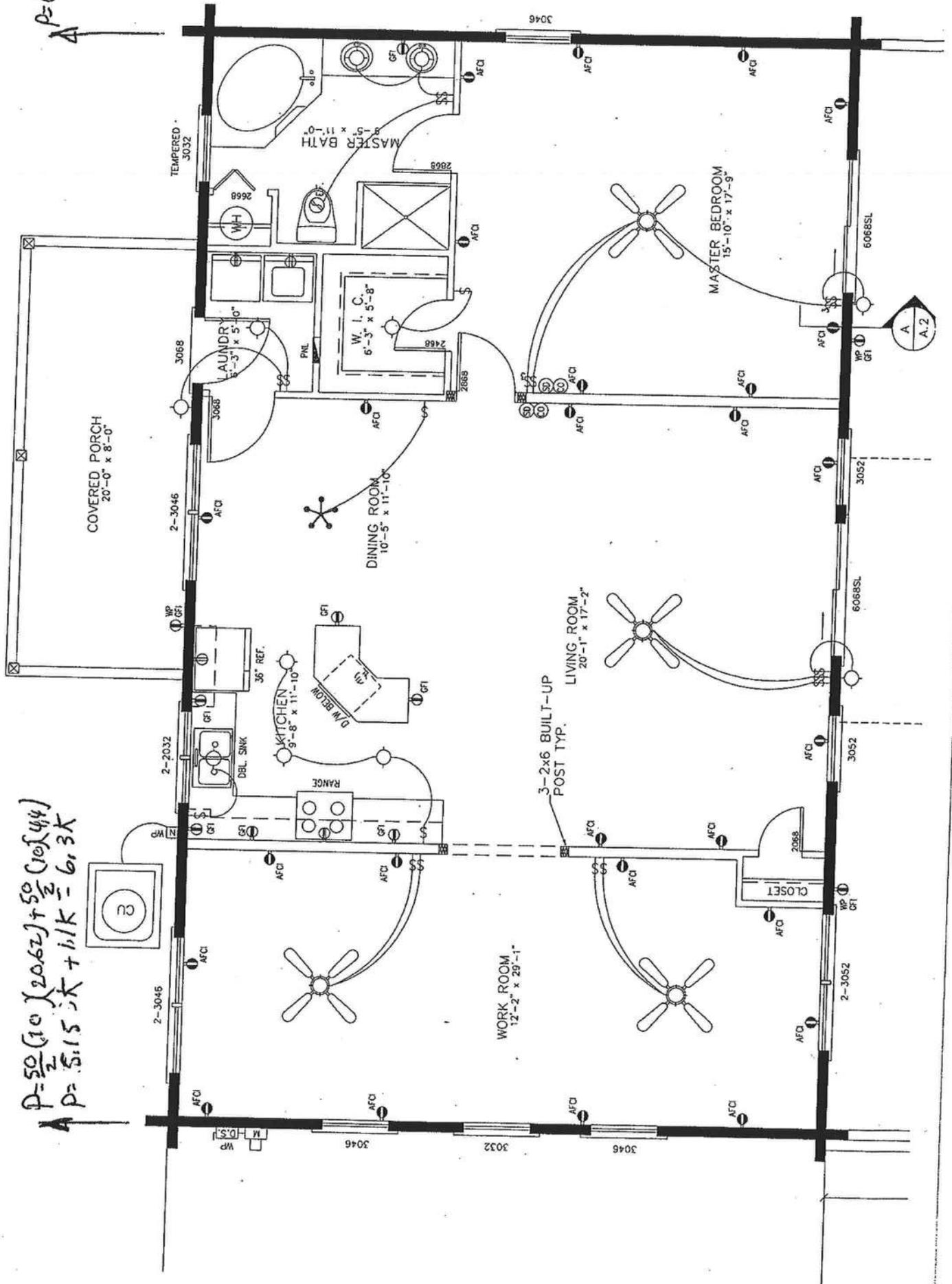
①

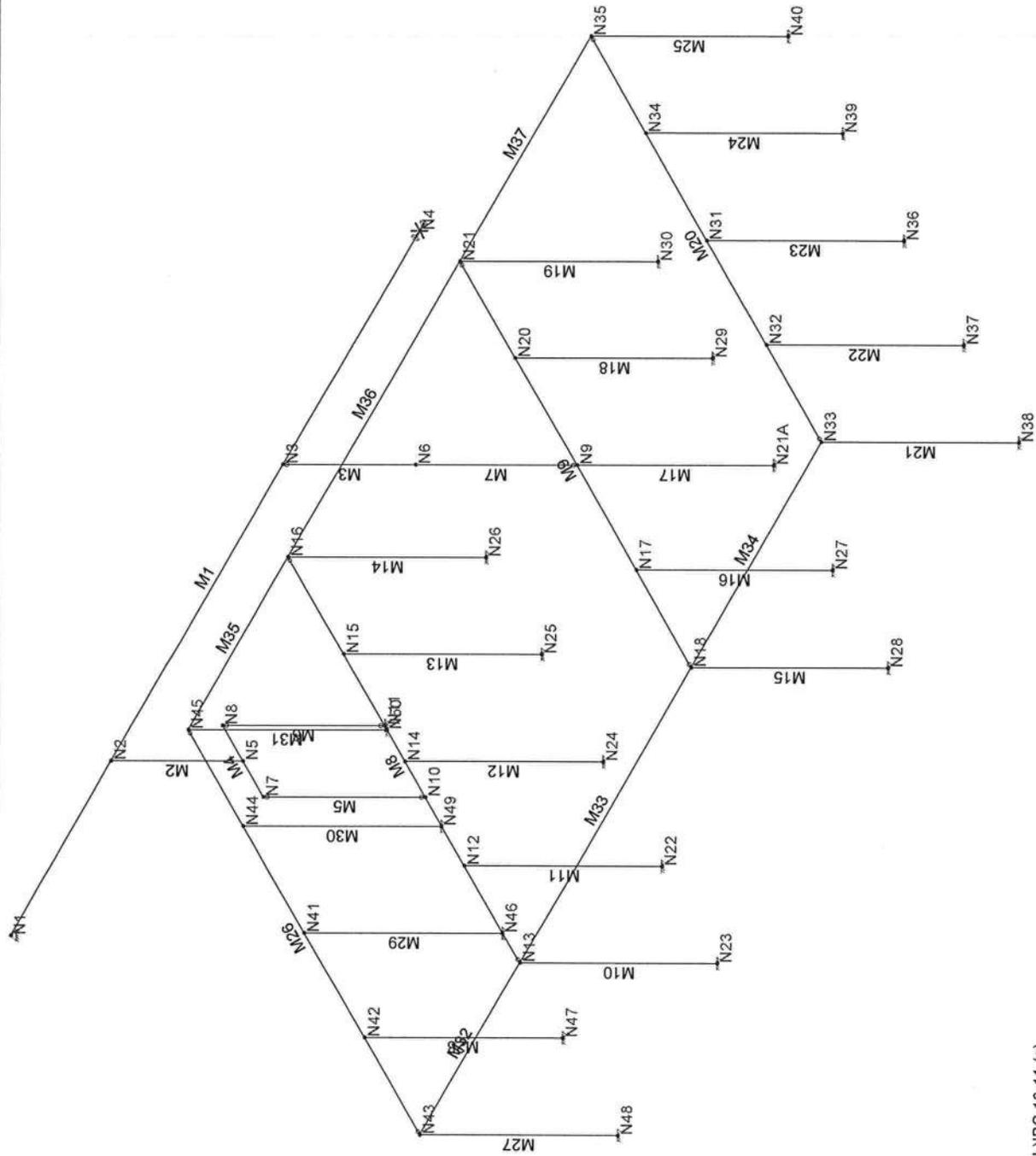
**PIERS  
HORIZONTAL  
LOAD**

$$P = \frac{50}{2} (10 \times 20.622) + \frac{50}{2} (10 \times 44)$$

$$A \quad P = 515.5K + 111K = 626.5K$$

$$P = 6.3K$$





Results for LC 4, (DL+RLL+LL)IBC 16-11 (a)

GTC Design Group

Gary Gill

PF09-096

Ted Smith

Sept 10, 2009 at 9:43 AM

Smith.r3d

**Load Combinations**

	Description	Solve	PDelta	SRSS	BLC Fact...	BLC	Fact...	BLC Fact...					
1	(DL)IBC 16-8	Yes			DL	1							
2	(DL+LL)IBC 16-9	Yes			DL	1	LL	1	LLS	1			
3	(DL+RLL) IBC 16-1...	Yes			DL	1	RLL	1					
4	(DL+RLL+LL)IBC 1...	Yes			DL	1	LL	.75	LLS	.75	RLL	.75	
5	(.6DL+WL)IBC 16-14	Yes			DL	.6	WL	1					
6	IBC 16-12 (b)	Yes			DL	1	EL	.7					

**Joint Reactions (By Combination)**

LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
1	1	N1	0	1016.457	-.002	0	0
2	1	N4	0	1559.969	.002	-4.254	0
3	1	N11	-6.854	2542.468	-41.595	129.916	6.253
4	1	N23	348.884	3550.951	.28	3.158	-.21
5	1	N22	4.137	2104.057	-92.453	-364.249	2.69
6	1	N24	-.092	2868.701	173.605	686.943	-7.458
7	1	N25	6.181	1134.541	-40.051	-157.808	.835
8	1	N26	348.849	3620.446	.119	1.342	-.085
9	1	N28	-199.204	3995.948	-.054	-.622	.145
10	1	N27	-.387	1579.449	7.116	27.786	8.115
11	1	N21A	2.199	6841.992	-3.967	-15.901	.048
12	1	N29	-.345	1593.852	-3.076	-12.269	-8.1
13	1	N30	-199.166	3989.852	-.011	-.125	.06
14	1	N36	3.403	1316.824	-3.531	-14.891	.063
15	1	N37	-1.03	1432.969	15.396	59.614	9.935
16	1	N38	-320.107	1799.086	-.176	-2.08	.05
17	1	N39	-.974	1448.6	-11.615	-46.535	-9.874
18	1	N40	-320.029	1793.144	-.066	-.774	.023
19	1	N46	-1.389	1317.785	-3.509	-14.741	-.001
20	1	N47	1.723	1431.471	14.879	57.642	3.91
21	1	N48	166.169	1414.508	-.18	-2.013	-.328
22	1	N49	1.732	1447.12	-11.046	-44.238	-4.04
23	1	N50	166.3	1408.808	-.066	-.729	-.131
24	1	Totals:	0	51209	0		
25	1	COG (ft):	X: 24.296	Y: 2.677	Z: -.056		
26	2	N1	0	1019.645	-.003	0	0
27	2	N4	0	1559.503	.003	-7.858	0
28	2	N11	-6.881	4687.655	-74.457	812.697	6.295
29	2	N23	349.745	5264.822	-.084	-1.255	-.079
30	2	N22	4.14	7431.401	-59.376	-236.176	2.629
31	2	N24	-.092	6148.032	317.006	1253.174	-7.489
32	2	N25	6.192	5609.201	-183.836	-724.353	.924
33	2	N26	349.717	5383.173	.548	6.172	-.265
34	2	N28	-199.959	6004.073	-.783	-9.201	.066
35	2	N27	-.398	7645.833	64.609	249.863	8.073
36	2	N21A	2.204	12453.436	-18.997	-79.344	.048
37	2	N29	-.358	7726.561	-44.399	-178.515	-8.048
38	2	N30	-199.968	5973.065	-.346	-3.964	.189
39	2	N36	3.41	3796.637	-10.207	-43.151	.065
40	2	N37	-1.041	4115.125	40.792	157.619	9.901
41	2	N38	-321.023	2688.342	-.487	-5.919	-.143
42	2	N39	-.987	4160.052	-29.918	-120.255	-9.829
43	2	N40	-320.949	2671.338	-.209	-2.541	-.074
44	2	N46	-1.4	3797.599	-10.144	-42.725	.001
45	2	N47	1.722	4113.608	40.311	155.909	3.856
46	2	N48	167.007	2304.049	-.487	-5.722	-.292
47	2	N49	1.73	4158.592	-29.312	-117.694	-3.975
48	2	N50	167.19	2287.411	-.222	-2.429	-.553
49	2	Totals:	0	110999.15	0		
50	2	COG (ft):	X: 23.992	Y: .266	Z: -.066		
51	3	N1	0	2183.888	-.004	0	0
52	3	N4	0	3353.171	.004	-8.113	0
53	3	N11	-12.041	4850.651	-79.977	87.291	10.986
54	3	N23	612.893	5890.92	.712	8.151	-.424
55	3	N22	7.267	2986.981	-209.991	-826.646	4.722
56	3	N24	-.162	5225.756	332.132	1314.581	-13.102

**Joint Reactions (By Combination) (Continued)**

LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]	
57	3	N25	10.858	1146.554	-43.156	-170.043	1.472	-15.627
58	3	N26	612.834	6026.456	.125	1.437	-.098	-2484.847
59	3	N28	-349.96	6637.571	.095	1.179	.291	1247.401
60	3	N27	-.681	1648.646	-3.135	-11.615	14.252	-69.988
61	3	N21A	3.862	13099.403	-4.22	-16.014	.084	-54.714
62	3	N29	-.607	1660.549	7.204	29.01	-14.225	-71.408
63	3	N30	-349.9	6631.687	.06	.705	.069	1246.91
64	3	N36	5.978	1314.316	-3.518	-14.804	.111	-84.129
65	3	N37	-1.809	1436.844	16.814	65.219	17.45	-100.397
66	3	N38	-562.337	2802.669	-.182	-2.114	.117	2050.054
67	3	N39	-1.712	1452.498	-13.035	-52.081	-17.342	-102.392
68	3	N40	-562.202	2796.682	-.057	-.659	.052	2049.27
69	3	N46	-2.441	1316.006	-3.484	-14.571	-.002	32.639
70	3	N47	3.027	1434.214	15.9	61.728	6.865	16.905
71	3	N48	291.927	2127.097	-.192	-2.02	-.645	-1197.573
72	3	N49	3.042	1449.896	-12.041	-48.076	-7.092	17.133
73	3	N50	292.163	2121.546	-.053	-.577	-.126	-1198.771
74	3	Totals:	0	79594	0			
75	3	COG (ft):	X: 24.393	Y: 4.391	Z: -.049			
76	4	N1	0	1894.421	-.004	0	0	0
77	4	N4	0	2904.52	.004	-9.851	0	0
78	4	N11	-10.765	5882.496	-95.028	610.033	9.835	7.818
79	4	N23	547.537	6591.33	.331	3.593	-.272	-2219.44
80	4	N22	6.487	6761.758	-155.798	-614.992	4.168	22.811
81	4	N24	-.145	7095.991	400.05	1582.345	-11.714	5.882
82	4	N25	9.697	4499.545	-150.219	-591.893	1.38	-13.887
83	4	N26	547.488	6746.999	.446	5.036	-.23	-2219.431
84	4	N28	-312.837	7483.258	-.489	-5.706	.195	1115.528
85	4	N27	-.616	6181.135	42.547	164.793	12.687	-62.446
86	4	N21A	3.45	15743.634	-15.429	-63.568	.075	-48.873
87	4	N29	-.551	6243.407	-26.358	-105.994	-12.655	-63.7
88	4	N30	-312.819	7458.638	-.209	-2.382	.164	1115.285
89	4	N36	5.34	3174.803	-8.529	-36.021	.1	-75.137
90	4	N37	-1.623	3447.492	35.506	137.321	15.546	-89.604
91	4	N38	-502.467	3218.715	-.414	-4.985	-.045	1832.183
92	4	N39	-1.537	3485.112	-26.408	-105.984	-15.441	-91.37
93	4	N40	-502.349	3204.442	-.167	-2.013	-.028	1831.553
94	4	N46	-2.186	3176.31	-8.466	-35.602	0	29.237
95	4	N47	2.7	3445.131	34.719	134.407	6.086	15.243
96	4	N48	261.116	2616.105	-.419	-4.8	-.539	-1070.717
97	4	N49	2.713	3482.805	-25.491	-102.209	-6.28	15.469
98	4	N50	261.365	2602.314	-.173	-1.889	-.444	-1071.875
99	4	Totals:	0	117340.363	0			
100	4	COG (ft):	X: 24.129	Y: 1.838	Z: -.06			
101	5	N1	0	-203.441	-.002	0	0	0
102	5	N4	0	-313.28	.002	.141	0	0
103	5	N11	-4.107	-85.769	209.485	100.672	3.707	2.977
104	5	N23	209.718	2175.667	-26.586	-98.605	437.97	-849.825
105	5	N22	2.481	653.257	30.236	123.264	1.563	8.803
106	5	N24	-.055	76.794	-6.022	-22.924	-4.493	2.255
107	5	N25	3.705	681.167	-23.304	-89.602	.449	-5.388
108	5	N26	208.949	2173.175	-24.649	-91.935	404.427	-847.598
109	5	N28	-119.962	2394.932	-9.969	47.219	-293.787	428.073
110	5	N27	-.242	891.125	42.527	253.831	4.831	-23.857
111	5	N21A	1.319	-257.706	28.741	199.089	.033	-18.688
112	5	N29	-.199	931.278	16.755	152.425	-4.891	-24.431
113	5	N30	-119.109	2407.752	-8.288	54.44	-271.574	424.029

**Joint Reactions (By Combination) (Continued)**

	LC	Joint Label	X [lb]	Y [lb]	Z [lb]	MX [lb-ft]	MY [lb-ft]	MZ [lb-ft]
114	5	N36	2.042	880.13	1742.936	11751.978	.042	-28.735
115	5	N37	-.626	-18.856	1647.952	11502.355	5.927	-34.248
116	5	N38	-192.472	622.048	660.46	7757.069	-301.532	702.083
117	5	N39	-.577	1668.913	1564.055	10970.448	-5.953	-35.008
118	5	N40	-191.637	1522.16	610.849	7174.619	-278.451	698.169
119	5	N46	-.834	879.813	1716.563	11574.234	-.035	11.154
120	5	N47	1.032	-6.558	1623.313	11331.014	2.292	5.911
121	5	N48	100.187	398.443	657.41	7670.094	482.788	-410.521
122	5	N49	1.04	1655.853	1540.181	10802.222	-2.47	5.728
123	5	N50	99.347	1284.353	607.355	7086.084	446.1	-408.058
124	5	Totals:	0	20411.25	12600			
125	5	COG (ft):	X: 24.104	Y: -4.055	Z: -.085			
126	6	N1	0	1016.457	-.002	0	0	0
127	6	N4	0	1559.969	.002	-4.254	0	0
128	6	N11	-6.854	2542.468	-41.595	129.916	6.253	4.975
129	6	N23	348.884	3550.951	.28	3.158	-.21	-1414.472
130	6	N22	4.137	2104.057	-92.453	-364.249	2.69	14.469
131	6	N24	-.092	2868.701	173.605	686.943	-7.458	3.745
132	6	N25	6.181	1134.541	-40.051	-157.808	.835	-8.899
133	6	N26	348.849	3620.446	.119	1.342	-.085	-1414.495
134	6	N28	-199.204	3995.948	-.054	-.622	.145	710.028
135	6	N27	-.387	1579.449	7.116	27.786	8.115	-39.843
136	6	N21A	2.199	6841.992	-3.967	-15.901	.048	-31.146
137	6	N29	-.345	1593.852	-3.076	-12.269	-8.1	-40.653
138	6	N30	-199.166	3989.852	-.011	-.125	.06	709.725
139	6	N36	3.403	1316.824	-3.531	-14.891	.063	-47.891
140	6	N37	-1.03	1432.969	15.396	59.614	9.935	-57.154
141	6	N38	-320.107	1799.086	-.176	-2.08	.05	1166.968
142	6	N39	-.974	1448.6	-11.615	-46.535	-9.874	-58.291
143	6	N40	-320.029	1793.144	-.066	-.774	.023	1166.51
144	6	N46	-1.389	1317.785	-3.509	-14.741	-.001	18.577
145	6	N47	1.723	1431.471	14.879	57.642	3.91	9.618
146	6	N48	166.169	1414.508	-.18	-2.013	-.328	-681.695
147	6	N49	1.732	1447.12	-11.046	-44.238	-4.04	9.746
148	6	N50	166.3	1408.808	-.066	-.729	-.131	-682.366
149	6	Totals:	0	51209	0			
150	6	COG (ft):	X: 24.296	Y: 2.677	Z: -.056			

Beam: **M1**

Shape: **5.125X13.75FS**

Material: **Glu-lam**

Length: **49.35 ft**

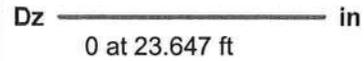
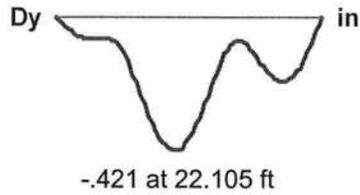
I Joint: **N1**

J Joint: **N4**

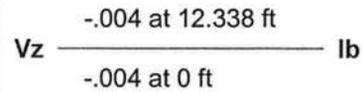
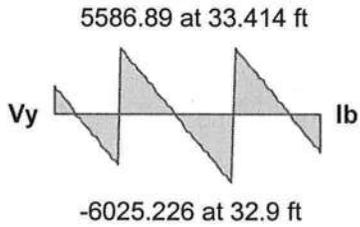
LC 3: (DL+RLL) IBC 16-10 (a)

Code Check: **0.587 (bending)**

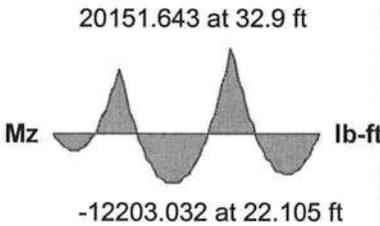
Report Based On 97 Sections



A lb

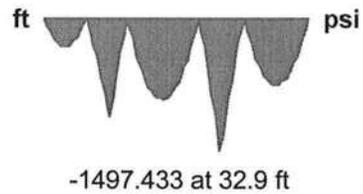
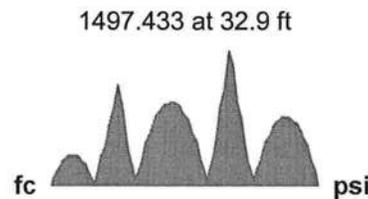


T lb-ft  
8.113 at 12.338 ft



My lb-ft  
.154 at 12.338 ft  
-.052 at 11.823 ft

fa psi



**NDS 2005 Code Check**

Max Bending Check **0.587**  
Location **32.9 ft**  
Equation **3.9-3**

Max Shear Check **0.398 (y)**  
Location **32.9 ft**  
Max Defl Ratio **L/1406**

CD **1.25** RB **17.607**  
Cr **1** Cfu **1.1**

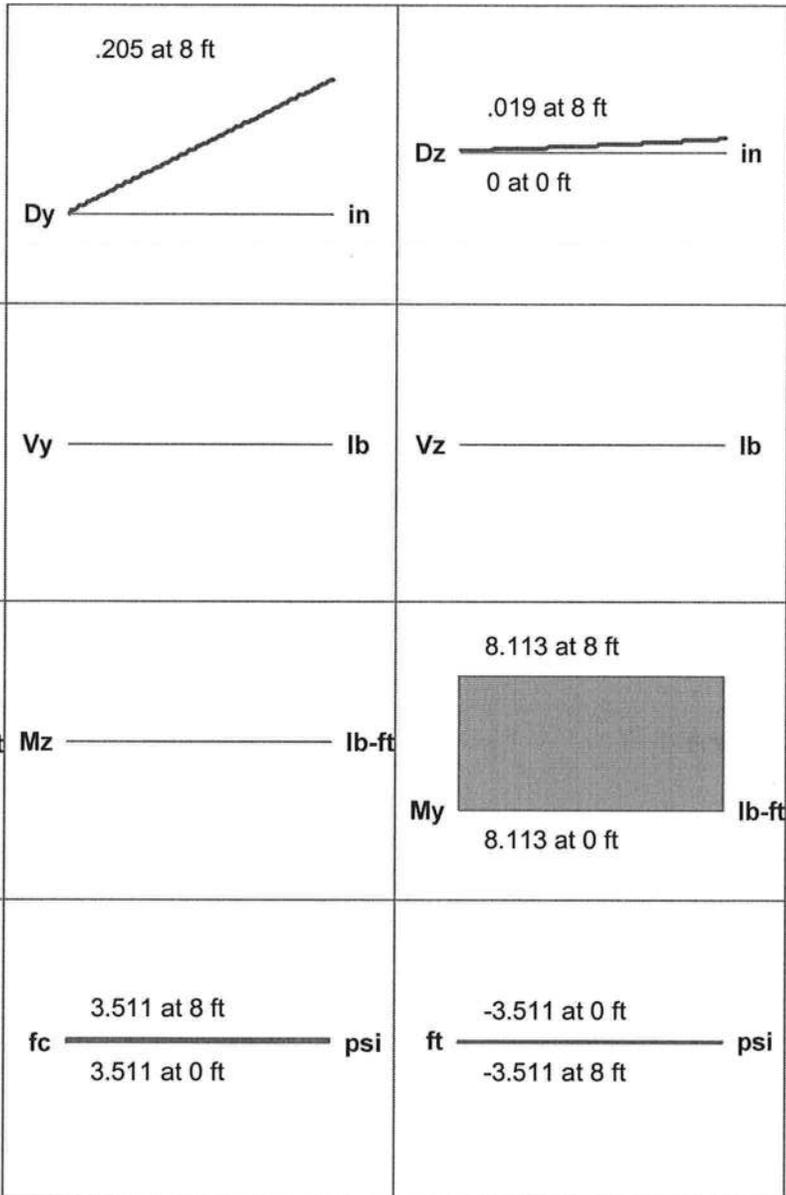
CL **.85** CV **.952**  
CP **.025**

	(psi)	Cm	Ct	CF
Fc'	51.922	1	1	1
Ft'	1437.5	1	1	1
Fb1'	2550.156	1	1	1
Fb2'	2289.978	1	1	1
Fv'	293.75	1	1	
E'	1.8e+6	1	1	

	Y-Y	Z-Z
Lb	49.35 ft	49.35 ft
le/d	115.551	43.069
Sway	No	No
Le-Bending Top	49.35 ft	
Le-Bending Bot	49.35 ft	

Column: **M2**

Shape: **6X6**  
 Material: **Cypress**  
 Length: **8 ft**  
 I Joint: **N2**  
 J Joint: **N5**  
 LC 3: (DL+RLL) IBC 16-10 (a)  
 Code Check: **0.582 (bending)**  
 Report Based On 97 Sections



**NDS 2005 Code Check**

Max Bending Check **0.582**  
 Location **0 ft**  
 Equation **3.6.3**  
 CD **1.25** RB **4.178**  
 Cr **1** Cfu **1**

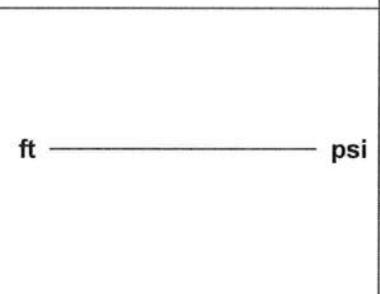
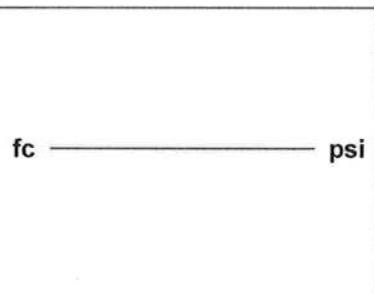
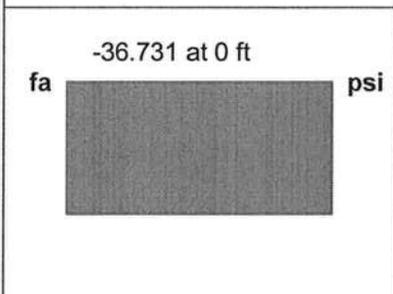
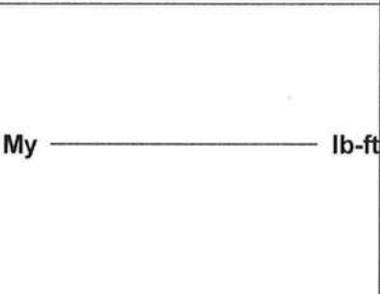
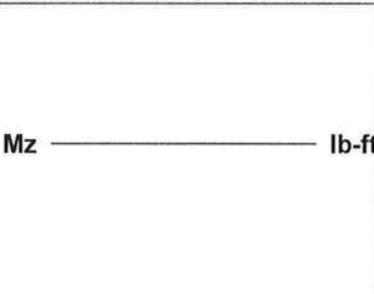
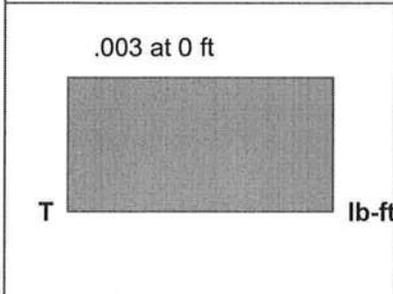
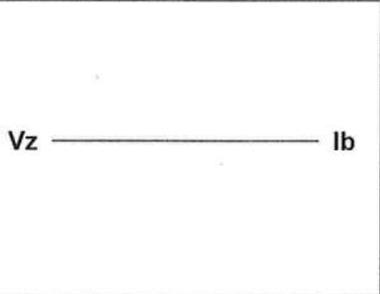
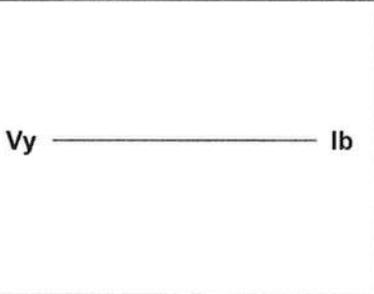
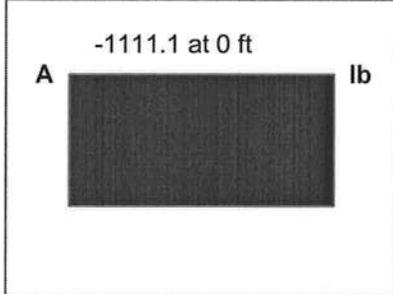
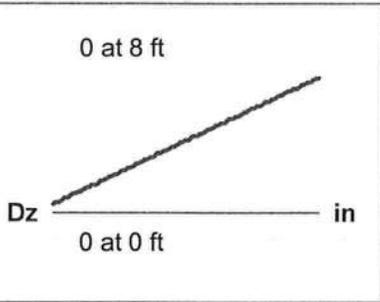
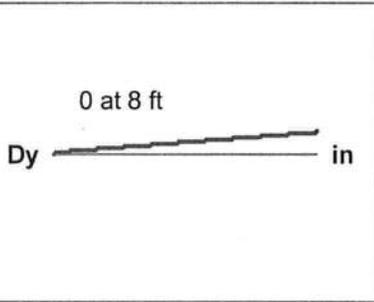
Max Shear Check **0.000 (z)**  
 Location **0 ft**  
 Max Defl Ratio **L/5159**  
 CL **1**  
 CP **.776**

	(psi)	Cm	Ct	CF
Fc'	<b>582.081</b>	<b>1</b>	<b>1</b>	<b>1</b>
Ft'	<b>531.25</b>	<b>1</b>	<b>1</b>	<b>1</b>
Fb1'	<b>781.25</b>	<b>1</b>	<b>1</b>	<b>1</b>
Fb2'	<b>781.25</b>	<b>1</b>	<b>1</b>	<b>1</b>
Fv'	<b>218.75</b>	<b>1</b>	<b>1</b>	
E'	<b>1e+6</b>	<b>1</b>	<b>1</b>	

	Y-Y	Z-Z
Lb	<b>8 ft</b>	<b>8 ft</b>
le/d	<b>17.455</b>	<b>17.455</b>
Sway	<b>No</b>	<b>No</b>
Le-Bending Top	<b>8 ft</b>	
Le-Bending Bot	<b>8 ft</b>	

Column: **M3**

Shape: **6X6**  
 Material: **Cypress**  
 Length: **8 ft**  
 I Joint: **N3**  
 J Joint: **N6**  
 LC 5: (.6DL+WL)IBC 16-14  
 Code Check: **0.054 (bending)**  
 Report Based On 97 Sections



**NDS 2005 Code Check**

Max Bending Check **0.054**  
 Location **0 ft**  
 Equation **3.9-1**

Max Shear Check **0.000 (z)**  
 Location **0 ft**  
 Max Defl Ratio **L/10000**

CD **1.6** RB **4.178**  
 Cr **1** Cfu **1**

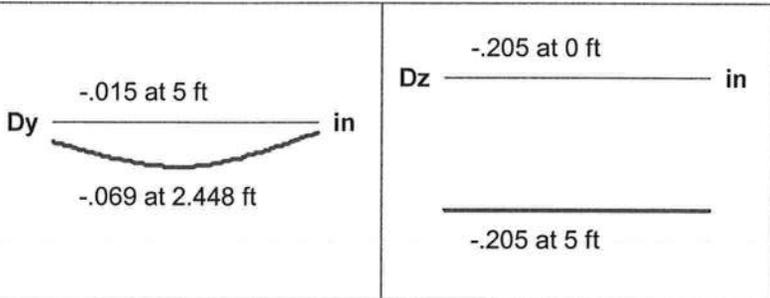
CL **1**  
 CP **.7**

	(psi)	Cm	Ct	CF
Fc'	672.011	1	1	1
Ft'	680	1	1	1
Fb1'	1000	1	1	1
Fb2'	1000	1	1	1
Fv'	280	1	1	
E'	1e+6	1	1	

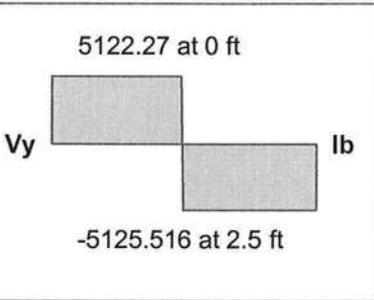
	Y-Y	Z-Z
Lb	8 ft	8 ft
le/d	17.455	17.455
Sway	No	No
Le-Bending Top	8 ft	
Le-Bending Bot	8 ft	

Column: **M4**

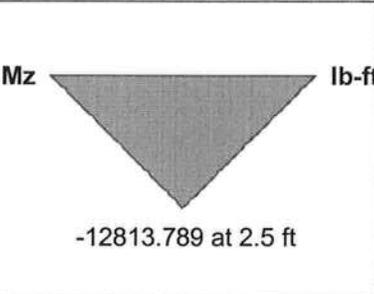
Shape: **6X12**  
 Material: **DF Larch**  
 Length: **5 ft**  
 I Joint: **N7**  
 J Joint: **N8**  
 LC 3: (DL+RLL) IBC 16-10 (a)  
 Code Check: **0.752 (bending)**  
 Report Based On 97 Sections



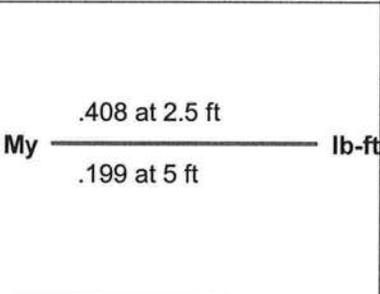
A \_\_\_\_\_ lb



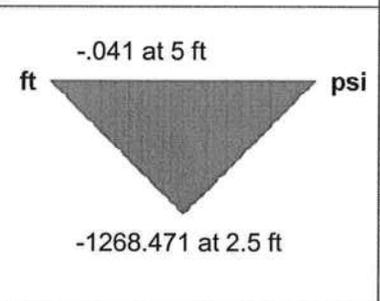
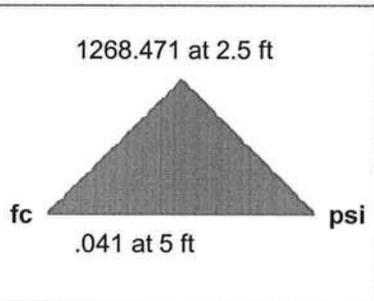
T \_\_\_\_\_ lb-ft



Vz \_\_\_\_\_ lb



fa \_\_\_\_\_ psi



**NDS 2005 Code Check**

Max Bending Check **0.752**  
 Location **2.5 ft**  
 Equation **3.9-3**

Max Shear Check **0.572 (y)**  
 Location **2.5 ft**  
 Max Defl Ratio **L/1304**

CD **1.25** RB **4.776**  
 Cr **1** Cfu **1**

CL **1**  
 CP **.932**

	(psi)	Cm	Ct	CF
Fc'	1077.751	1	1	1
Ft'	843.75	1	1	1
Fb1'	1687.5	1	1	1
Fb2'	1687.5	1	1	1
Fv'	212.5	1	1	
E'	1.6e+6	1	1	

Lb **5 ft** Y-Y **5 ft** Z-Z  
 le/d **10.909** **5.217**  
 Sway **No** **No**  
 Le-Bending Top **5 ft**  
 Le-Bending Bot **5 ft**

Column: **M7**

Shape: **3-2X6**

Material: **So Pine**

Length: **9.8 ft**

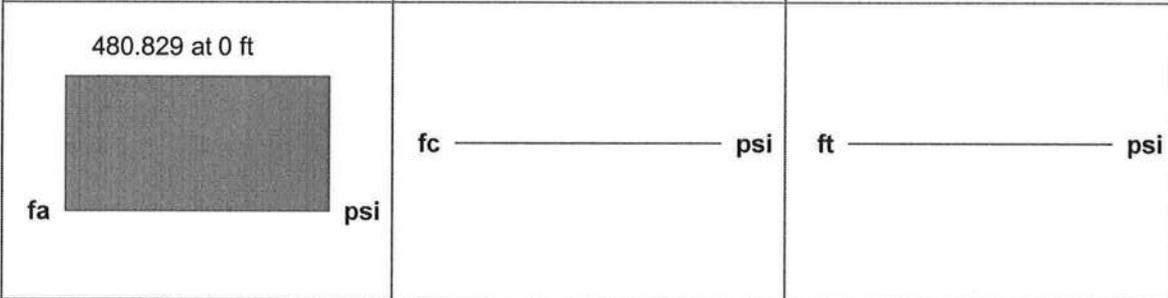
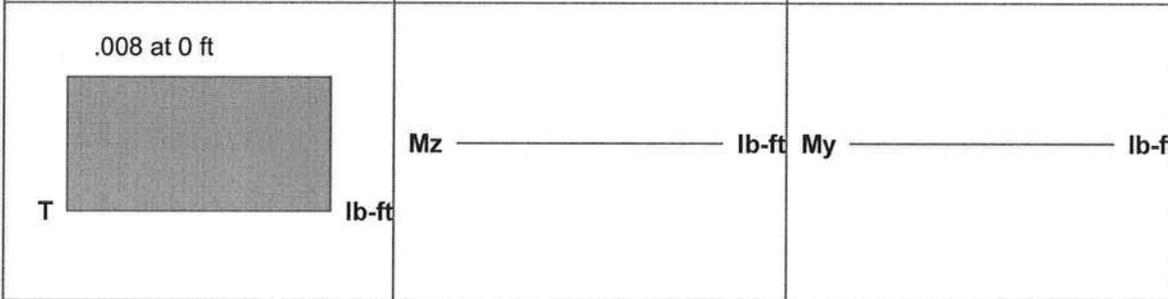
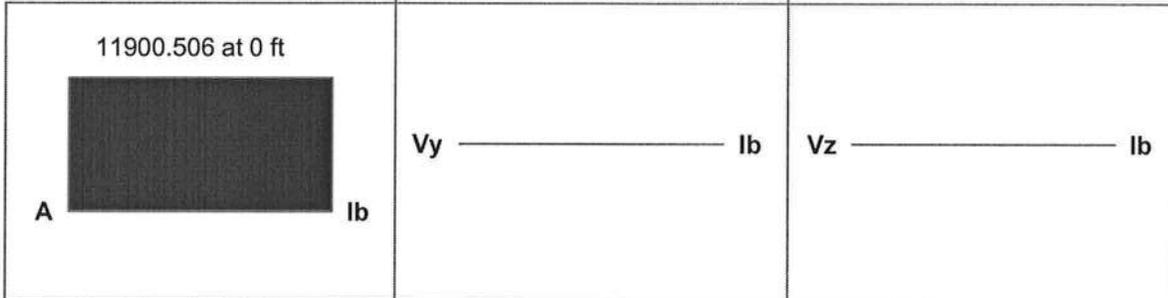
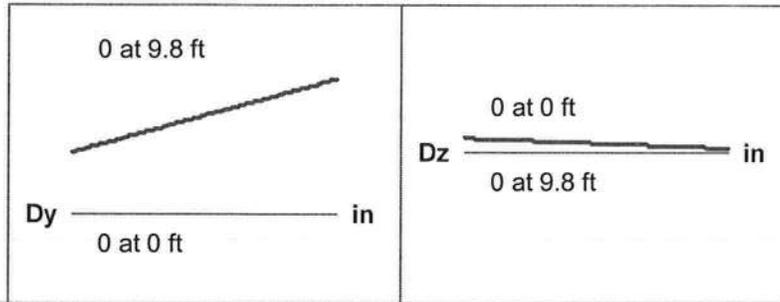
I Joint: **N6**

J Joint: **N9**

LC 3: (DL+RLL) IBC 16-10 (a)

Code Check: **0.748 (bending)**

Report Based On 97 Sections



**NDS 2005 Code Check**

Max Bending Check **0.748**  
 Location **0 ft**  
 Equation **3.6.3**

Max Shear Check **0.000 (z)**  
 Location **0 ft**  
 Max Defl Ratio **L/10000**

CD **1.25** RB **5.652**  
 Cr **1** Cfu **1.15**

CL **1**  
 CP **.321**

	(psi)	Cm	Ct	CF
Fc'	<b>642.645</b>	<b>1</b>	<b>1</b>	<b>1</b>
Ft'	<b>906.25</b>	<b>1</b>	<b>1</b>	<b>1</b>
Fb1'	<b>1562.5</b>	<b>1</b>	<b>1</b>	<b>1</b>
Fb2'	<b>1796.875</b>	<b>1</b>	<b>1</b>	<b>1</b>
Fv'	<b>218.75</b>	<b>1</b>	<b>1</b>	
E'	<b>1.6e+6</b>	<b>1</b>	<b>1</b>	

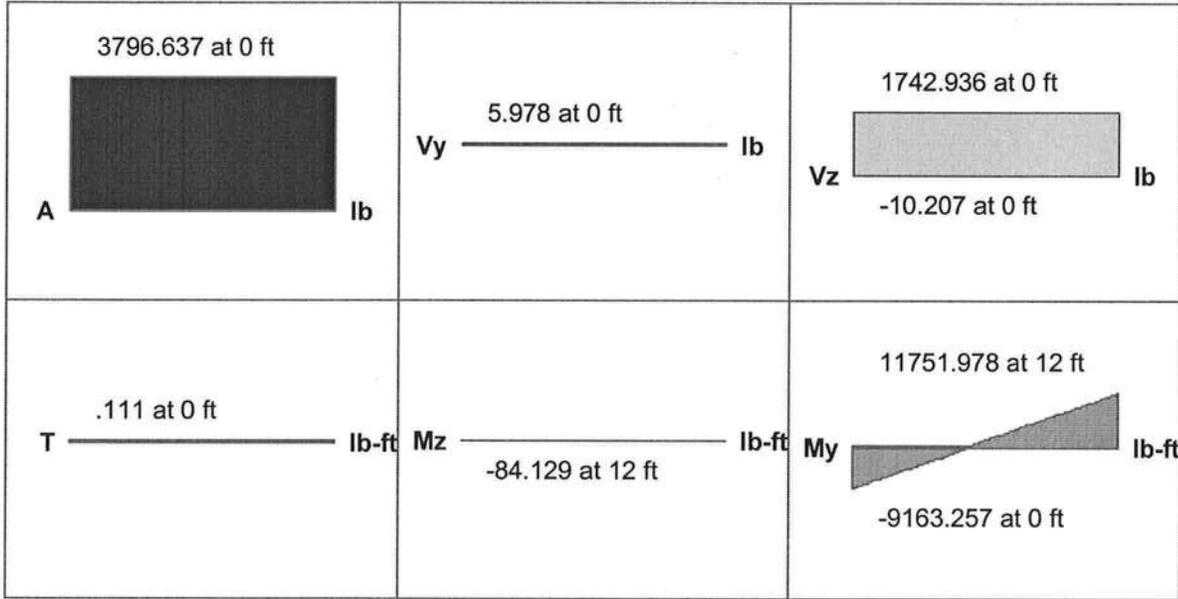
	Y-Y	Z-Z
Lb	<b>9.8 ft</b>	<b>9.8 ft</b>
le/d	<b>26.133</b>	<b>21.382</b>
Sway	<b>No</b>	<b>No</b>
Le-Bending Top	<b>9.8 ft</b>	
Le-Bending Bot	<b>9.8 ft</b>	

Column: **M23**

Shape: **CRECT12X12**  
 Material: **Conc3000NW**  
 Length: **12 ft**  
 I Joint: **N31**  
 J Joint: **N36**

Concrete Stress Block: **Rectangular**  
 Cracked Sections Used: **Yes**  
 Cracked 'I' Factor: **.70**  
 Effective 'I': **1209.6 in^4**  
 Biaxial Bending Solution: **PCA Load Contour**  
 Parme Beta Factor: **0.65**

Code Check: **0.335 (bending)**  
 Report Based On 97 Sections

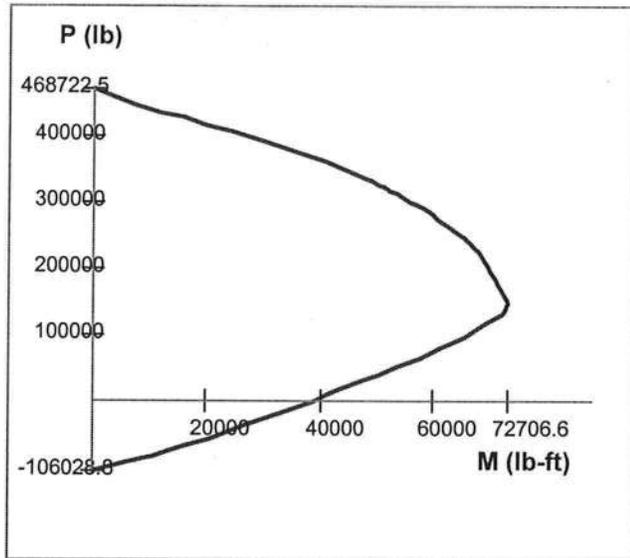


Column Design does not consider any Torsional Moments

**ACI 318-05 Code Check**

Gov LC	5	Bending Check	0.335	Shear Check	0.074 (z)
Gov Pu	0 lb	Location	.625 ft	Location	.625 ft
phi*Pn	0 lb	Gov Muy	-11751.978 lb-ft	Gov Vuy	5.978 lb
Phi eff.	.9	Gov Muz	0 lb-ft	Gov Vuz	1742.936 lb
Tension Bar Fy	60000 psi	phi*Mny	35035.508 lb-ft	phi*Vny	23663.276 lb
Shear Bar Fy	60000 psi	phi*Mnz		phi*Vnz	23663.276 lb
F'c	3000 psi	Concrete Weight	.145 k/ft^3	Bar Cover	1.5 in
Flex. Rebar Set	ASTM A615	Concrete Type	Normal WT	Sway yy	No
		E_Concrete	3.156e+6 psi	Sway zz	No
		Shear Rebar Set	ASTM A615		

**Column Interaction Diagram**



**Span Information**

Span	Span Length (ft)	I-Face Dist. (in)	J-Face Dist. (in)
1	0 - 12	6.875	0

**Column Steel**

Span	Main Bars	Gov LC	Loc (ft)	Pu (lb)	Muy (lb-ft)	Muz (lb-ft)
1	4 #6	1	.625 ft	0	105.346	105.346

**Axial Span Results**

Span	Phi_eff	Pn (lb)	Po (lb)	Rho Gross	As Prvd (in^2)
1	.9		468722.53	.0123	1.767

**Bending Span Results**

Span	ecc. y (ft)	ecc. z (ft)	NA y-y (ft)	NA z-z (ft)	Mny (lb-ft)	Mnz (lb-ft)	Mnoy (lb-ft)	Mnoz (lb-ft)
1	0	0			117.051	117.051	38928.343	38928.343

**Slender Bending Span Results**

Span	KL/r yy	KL/r zz	Cm yy	Cm zz	Lu yy (ft)	Lu zz (ft)	Mcy (lb-ft)	Mcz (lb-ft)
1	42	42	.4	.677	12	12	105.346	105.346

**Shear Steel**

Span	Region (ft)	Bars Provided
1	.6 - 12	12 #4 @12in
	-	-
	-	-

**y-Dir Shear Span Results**

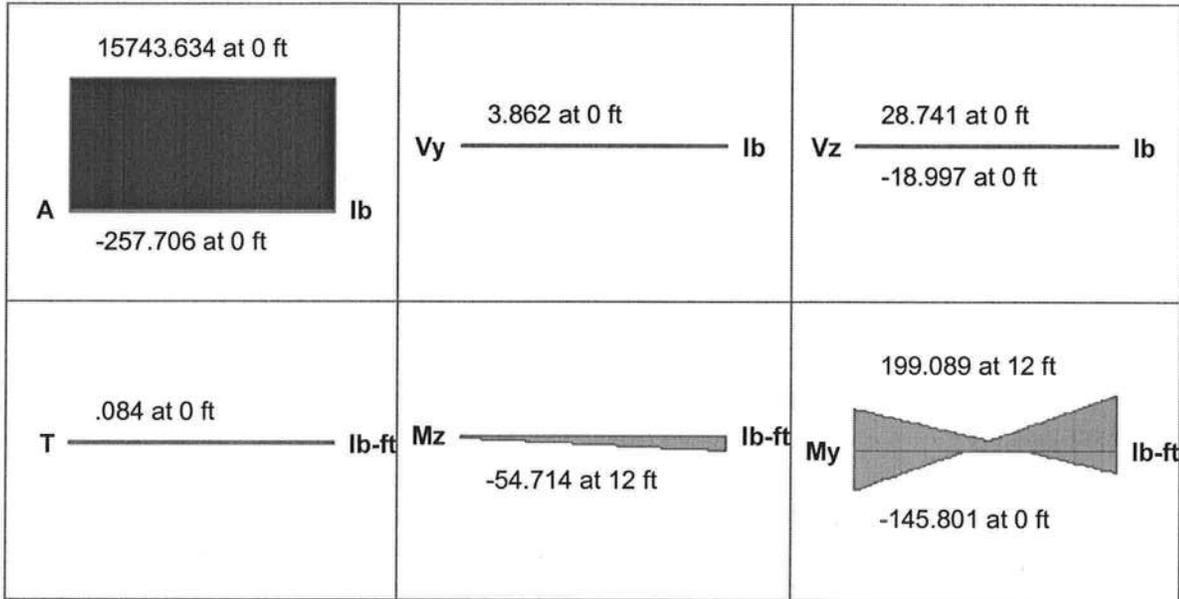
Span	Region (ft)	Vny (lb)	Vcy (lb)	Vsy (lb)	Asy Reqd (in^2)	As Prvd (in^2)
1	.6 - 12	31551.034	12652.391	18898.643	0	.033
	-	0	0	0	0	0
	-	0	0	0	0	0
	-	0	0	0	0	0

Column: **M17**

Shape: **CRECT12X12**  
 Material: **Conc3000NW**  
 Length: **12 ft**  
 I Joint: **N9**  
 J Joint: **N21A**

Concrete Stress Block: **Rectangular**  
 Cracked Sections Used: **Yes**  
 Cracked 'I' Factor: **.70**  
 Effective 'I': **1209.6 in<sup>4</sup>**  
 Biaxial Bending Solution: **PCA Load Contour**  
 Parme Beta Factor: **0.65**

Code Check: **0.008 (bending)**  
 Report Based On 97 Sections

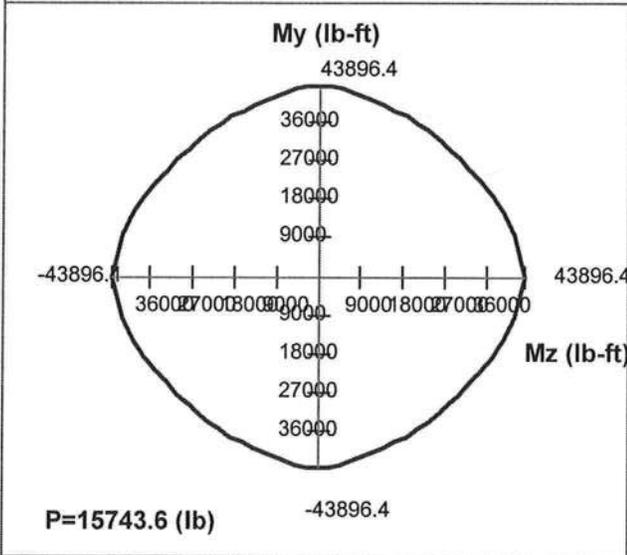
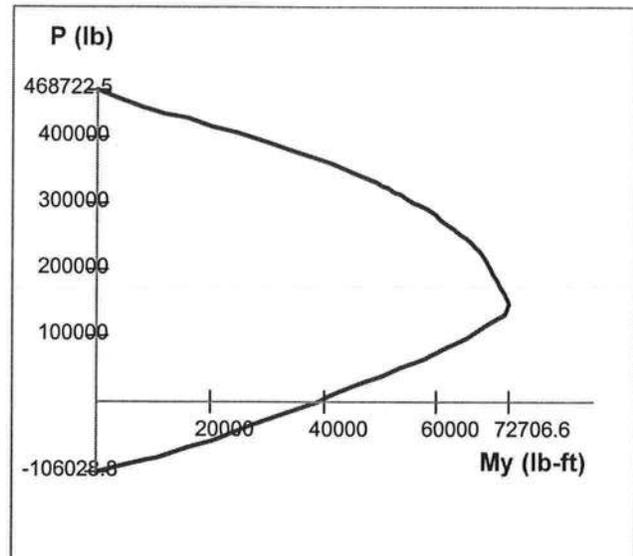
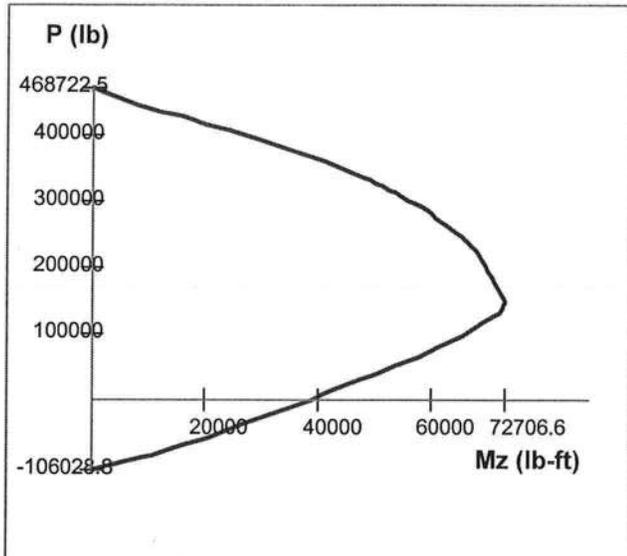


Column Design does not consider any Torsional Moments

**ACI 318-05 Code Check**

Gov LC	4	Bending Check	0.008	Shear Check	0.001 (z)
Gov Pu	15743.634 lb	Location	.625 ft	Location	.625 ft
phi*Pn	15743.634 lb	Gov Muy	1259.491 lb-ft	Gov Vuy	3.862 lb
Phi eff.	.9	Gov Muz	1259.491 lb-ft	Gov Vuz	28.741 lb
Tension Bar Fy	60000 psi	phi*Mny	1259.491 lb-ft	phi*Vny	37957.173 lb
Shear Bar Fy	60000 psi	phi*Mnz	1259.491 lb-ft	phi*Vnz	37957.173 lb
F'c	3000 psi	Concrete Weight	.145 k/ft <sup>3</sup>	Bar Cover	1.5 in
Flex. Rebar Set	ASTM A615	Concrete Type	Normal WT	Sway yy	No
		E_Concrete	3.156e+6 psi	Sway zz	No
		Shear Rebar Set	ASTM A615		

**Column Interaction Diagram**



**Span Information**

Span	Span Length (ft)	I-Face Dist. (in)	J-Face Dist. (in)
1	0 - 12	6.875	0

**Column Steel**

Span	Main Bars	Gov LC	Loc (ft)	Pu (lb)	Muy (lb-ft)	Muz (lb-ft)
1	4 #6	1	.625 ft	6841.992	547.359	547.359

**Axial Span Results**

Span	Phi_eff	Pn (lb)	Po (lb)	Rho Gross	As Prvd (in^2)
1	.9	7602.213	468722.53	.0123	1.767

**Bending Span Results**

Span	ecc. y (ft)	ecc. z (ft)	NA y-y (ft)	NA z-z (ft)	Mny (lb-ft)	Mnz (lb-ft)	Mnoy (lb-ft)	Mnoz (lb-ft)
1	.08	.08			608.177	608.177	41340.408	41340.408

**Slender Bending Span Results**

Span	KL/r yy	KL/r zz	Cm yy	Cm zz	Lu yy (ft)	Lu zz (ft)	Mcy (lb-ft)	Mcz (lb-ft)
1	42	42	.4	.679	12	12	547.359	547.359

**Shear Steel**

Span	Region (ft)	Bars Provided
1	.6 - 12	35 #4 @4in
	-	
	-	
	-	

**y-Dir Shear Span Results**

Span	Region (ft)	Vny (lb)	Vcy (lb)	Vsy (lb)	Asy Reqd (in^2)	As Prvd (in^2)
1	.6 - 12	50609.564	0	50609.564	0	.098
	-	0	0	0	0	0
	-	0	0	0	0	0
	-	0	0	0	0	0

**z-Dir Shear Span Results**

Span	Region (ft)	Vnz (lb)	Vcz (lb)	Vsz (lb)	Asz Reqd (in^2)	As Prvd (in^2)
1	.6 - 12	50609.564	0	50609.564	0	.098
	-	0	0	0	0	0
	-	0	0	0	0	0
	-	0	0	0	0	0

# SOUTHERN PINE SPAN TABLES

Maximum spans given in feet and inches  
inside to inside of bearings

**TABLE 2 FLOOR JOISTS – 40 PSF LIVE LOAD, 10 PSF DEAD LOAD, 360 DEFLECTION**

ALL ROOMS EXCEPT SLEEPING ROOMS AND ATTIC FLOORS

Size inches	Spacing inches on center	Grade									
		Visually Graded				Machine Stress Rated (MSR)			Machine Evaluated Lumber (MEL)		
		SS	No.1	No.2	No.3	2400f - 2.0E	2250f - 1.9E	1950f - 1.7E	M23	M14	M29
<b>2 x 6</b>	<b>12.0</b>	11-2	10-11	10-9	9-4	11-7	11-4	10-11	11-2	10-11	10-11
	<b>16.0</b>	10-2	9-11	9-9	8-1	10-6	10-4	9-11	10-2	9-11	9-11
	<b>19.2</b>	9-6	9-4	9-2	7-4	9-10	9-8	9-4	9-6	9-4	9-4
	<b>24.0</b>	8-10	8-8	8-6	6-7	9-2	9-0	8-8	8-10	8-8	8-8
<b>2 x 8</b>	<b>12.0</b>	14-8	14-5	14-2	11-11	15-3	15-0	14-5	14-8	14-5	14-5
	<b>16.0</b>	13-4	13-1	12-10	10-3	13-10	13-7	13-1	13-4	13-1	13-1
	<b>19.2</b>	12-7	12-4	12-1	9-5	13-0	12-10	12-4	12-7	12-4	12-4
	<b>24.0</b>	11-8	11-5	11-0	8-5	12-1	11-11	11-5	11-8	11-5	11-5
<b>2 x 10</b>	<b>12.0</b>	18-9	18-5	18-0	14-0	19-5	19-1	18-5	18-9	18-5	18-5
	<b>16.0</b>	17-0	16-9	16-1	12-2	17-8	17-4	16-9	17-0	16-9	16-9
	<b>19.2</b>	16-0	15-9	14-8	11-1	16-7	16-4	15-9	16-0	15-9	15-9
	<b>24.0</b>	14-11	14-7	13-1	9-11	15-5	15-2	14-7	14-11	14-7	14-7
<b>2 x 12</b>	<b>12.0</b>	22-10	22-5	21-9	16-8	23-7	23-3	22-5	22-10	22-5	22-5
	<b>16.0</b>	20-9	20-4	18-10	14-6	21-6	21-1	20-4	20-9	20-4	20-4
	<b>19.2</b>	19-6	19-2	17-2	13-2	20-2	19-10	19-2	19-6	19-2	19-2
	<b>24.0</b>	18-1	17-5	15-5	11-10	18-9	18-5	17-9	18-1	17-9	17-9

These spans are intended for use in enclosed structures or where the moisture content in use does not exceed 19 percent for an extended period of time unless the table is labeled Wet-Service. Applied loads are given in psf (pounds per square foot). Deflection is limited to the span in inches divided by 360, 240, or 180 and is based on live load only. The load duration factor, Cp, is 1.0 unless shown as 1.15 or 1.25. An asterisk (\*) indicates the listed span has been limited to 26'0" based on availability; check sources of supply for lumber longer than 20'. Highlighted sizes/grades are NOT commonly produced.

The Southern Pine Council does not grade or test lumber, and accordingly, does not assign design values to Southern Pine lumber. The design values contained herein are based on the 2002 SPIB Standard Grading Rules for Southern Pine Lumber, published by the Southern Pine Inspection Bureau, and modified as required by the 2001 National Design Specification® (NDS®) for Wood Construction published by the American Forest & Paper Association (AF&PA).

The primary purpose of this publication is to provide a convenient reference for joist and rafter spans for specific grades of Southern Pine lumber. The maximum spans provided herein were determined on the same basis as those in Span Tables for Joists and Rafters, published by AF&PA. Accordingly, the Southern Pine Council, its principals and/or members, do not warrant in any way that the design values on which the span tables for Southern Pine lumber contained herein are based are correct, and specifically disclaim any liability for injury or damage resulting from the use of such span tables.

The conditions under which lumber is used in construction may vary widely, as does the quality of the lumber and workmanship. Neither the Southern Pine Council, nor its principals and/or members, have any knowledge of the construction methods, quality of materials and workmanship used on any construction project; and accordingly, cannot and do not, warrant the performance of the lumber used in completed structures.

**SOUTHERN PINE ALLOWABLE LOAD TABLES** Allowable Roof Loads (plf) – 1.25 Load Duration Factor

**Table 30 – No. 2 Southern Pine Lumber**

Clear Opening	*	1-ply				2-ply				3-ply				4-ply			
		2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12
4'	TL	467	754	1036	1360	934	1508	2072	2721	1600	2569	3512	4577	2133	3426	4682	6102
	LL	467	754	1036	1360	934	1508	2072	2721	1600	2569	3512	4577	2133	3426	4682	6102
	BL	1.5	3.0	3.0	4.5	1.5	3.0	3.0	4.5	1.5	3.0	3.0	4.5	1.5	3.0	3.0	4.5
6'	TL	212	349	490	661	424	699	981	1322	730	1200	1680	2257	974	1600	2240	3009
	LL	212	349	490	661	424	699	981	1322	660	1200	1680	2257	879	1600	2240	3009
	BL	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0
8'	TL	120	199	281	382	239	397	562	764	413	684	966	1312	550	912	1288	1749
	LL	95	199	281	382	189	397	562	764	283	639	966	1312	377	852	1288	1749
	BL	1.5	1.5	1.5	3.0	1.5	1.5	1.5	3.0	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0
10'	TL	71	127	180	247	142	254	361	493	214	439	622	849	285	585	830	1132
	LL	49	111	180	247	98	221	361	493	146	331	622	849	195	442	830	1132
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	1.5	1.5	1.5	3.0
12'	TL	41	88	125	171	81	176	250	343	122	282	432	591	162	376	576	789
	LL	28	64	125	171	57	129	250	343	85	193	398	591	113	258	531	789
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
14'	TL	25	59	91	125	50	117	183	251	75	176	316	434	99	234	421	578
	LL	18	41	84	125	36	82	169	251	54	122	252	434	72	163	336	578
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
16'	TL	16	39	69	95	32	77	139	191	48	116	240	330	64	154	320	441
	LL	12	27	57	95	24	55	113	191	36	82	170	304	48	110	226	405
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
18'	TL	11	26	54	75	21	53	108	149	32	79	169	259	43	105	226	346
	LL	8	19	40	71	17	39	80	143	25	58	120	214	34	77	159	285
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

**Table 31 – No. 3 Southern Pine Lumber**

Clear Opening	*	1-ply				2-ply				3-ply				4-ply			
		2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12	2 x 6	2 x 8	2 x 10	2 x 12
4'	TL	285	454	622	857	570	908	1244	1715	980	1557	2125	2917	1306	2076	2834	3889
	LL	285	454	622	857	570	908	1244	1715	980	1557	2125	2917	1306	2076	2834	3889
	BL	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0	1.5	1.5	3.0	3.0
6'	TL	128	206	285	400	255	412	570	800	440	709	981	1373	587	946	1308	1830
	LL	128	206	285	400	255	412	570	800	440	709	981	1373	587	946	1308	1830
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	1.5	1.5	1.5	3.0
8'	TL	71	116	161	227	143	232	322	455	247	400	556	783	329	533	741	1045
	LL	71	116	161	227	143	232	322	455	247	400	556	783	329	533	741	1045
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
10'	TL	45	73	103	145	90	147	205	291	156	254	355	502	208	339	473	669
	LL	43	73	103	145	86	147	205	291	128	254	355	502	171	339	473	669
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
12'	TL	31	50	70	100	62	101	141	200	106	175	244	347	141	233	326	462
	LL	25	50	70	100	50	101	141	200	74	170	244	347	99	227	326	462
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
14'	TL	22	36	51	73	43	73	102	145	65	127	177	252	86	169	236	337
	LL	16	36	51	73	31	72	102	145	47	107	177	252	63	143	236	337
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
16'	TL	14	27	38	55	28	55	77	110	41	95	134	191	55	127	178	255
	LL	11	24	38	55	21	48	77	110	32	72	134	191	42	96	178	255
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
18'	TL	9	21	30	43	18	42	59	85	27	68	104	149	36	91	138	198
	LL	7	17	30	43	15	34	59	85	22	51	104	149	30	68	138	198
	BL	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

(See Requirements for Use on page 23, and Key, Example and Notes on page 30)

# ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844  
Florida Engineering Certificate of Authorization Number: 0 278  
Florida Certificate of Product Approval # FL1999  
Page 1 of 1 Document ID:ITVV215-Z0113084627

Truss Fabricator: W.B. Howland  
Job Identification: 6461F-/TED SMITH /SUWANNEE RIVER LOG HOMES -- , \*\*  
Truss Count: 6  
Model Code: Florida Building Code 2007 and 2009 Supplement  
Truss Criteria: FBC2007Res/TPI-2002(STD)  
Engineering Software: Alpine Software, Version 9.02.  
Structural Engineer of Record: The identity of the structural EOR did not exist as of  
Address: the seal date per section 61G15-31.003(5a) of the FAC  
Minimum Design Loads: Roof - N/A  
Floor - 55.0 PSF @ 1.00 Duration  
Wind - No Wind

#### Notes:

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR215

Details: STRBRIBR-

#	Ref	Description	Drawing#	Date
1	60681--F1		09286001	10/13/09
2	60682--F4		09286002	10/13/09
3	60683--F5		09286003	10/13/09
4	60684--F6		09286004	10/13/09
5	60685--F2		09286005	10/13/09
6	60686--F3		09286006	10/13/09



Seal Date: 10/13/2009

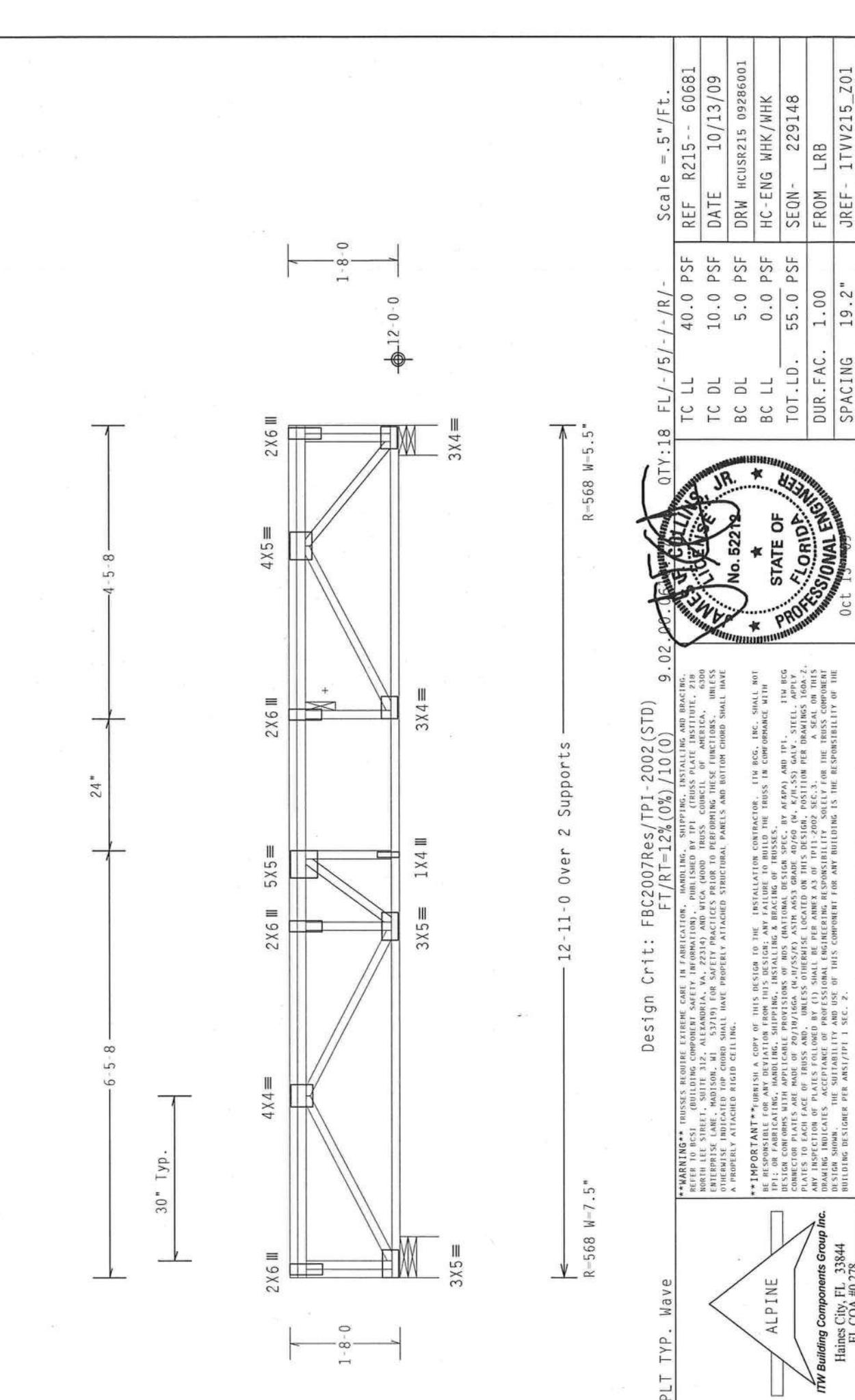
-Truss Design Engineer-  
James F. Collins Jr.  
Florida License Number: 52212  
1950 Marley Drive  
Haines City, FL 33844



Top chord 4x2 SP #2 N  
 Bot chord 4x2 SP #2 N  
 Webs 4x2 SP #2 N

Deflection meets L/360 live and L/240 total load.  
 The overall height of this truss excluding overhang is 1-8-0.

+ 2x6 continuous strongback. See detail STRBRIBR0409 for bracing and bridging recommendations.  
 Trusses to be spaced at 19.2" OC maximum.  
 Truss must be installed as shown with top chord up.



R=568 W=7.5"      12-11-0 Over 2 Supports      R=568 W=5.5"      Scale = .5" / Ft.

PLT TYP. Wave

Design Crit: FBC2007Res/TPI-2002 (STD)  
 FT/RT=12%(0%)/10(0)      9.02.00.00      QTY: 18      FL/-/5/-/-/R/-

TC LL	40.0 PSF	REF	R215--	60681
TC DL	10.0 PSF	DATE	10/13/09	
BC DL	5.0 PSF	DRW	HCUSR215	09286001
BC LL	0.0 PSF	HC-ENG	WHK/WHK	
TOT.LD.	55.0 PSF	SEQN-	229148	
DUR.FAC.	1.00	FROM	LRB	
SPACING	19.2"	JREF-	1TVV215_Z01	

**JAMES R. COLLINS, JR.**  
 No. 52212  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 Oct 13 2009

**ALPINE**  
 ITW Building Components Group Inc.  
 Haines City, FL 33844  
 FL COA #0 278

**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. THE USER SHALL BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI1 OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AF&PA) AND TPI1. TPI1 BCG CONNECTOR PLATES ARE MADE OF 20/18/16GA (N-31/SS/2X) ASTM A653 GRADE 40/60 (W- K/14-SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 100A-2. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER AISC A3.07 TPI1-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY. SUELLY FOR THE TRUSS COMPONENT DESIGNER SHALL BE THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER AISC/TPI1 SEC. 2.

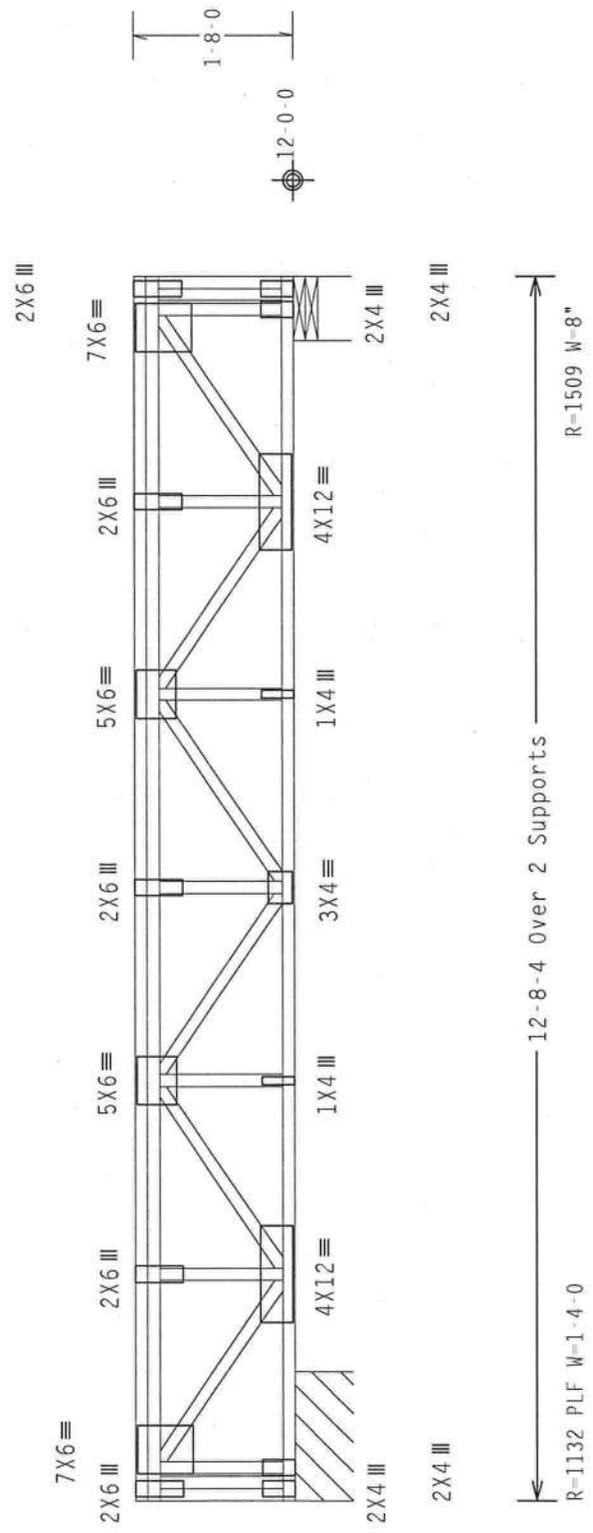
(6461F-)/TED SMITH /SUWANNEE RIVER LOG HOMES -- \*\* - F4)

See detail STRBRIBR0409 for bracing and bridging recommendations.  
 Truss spaced at 19.2" OC designed to support 2-0-0 top chord  
 outlookers. Cladding load shall not exceed 0.00 PSF. Top chord must  
 not be cut or notched.

Trusses to be spaced at 19.2" OC maximum.  
 Deflection meets L/360 live and L/240 total load.  
 The overall height of this truss excluding overhang is 1-8-0.

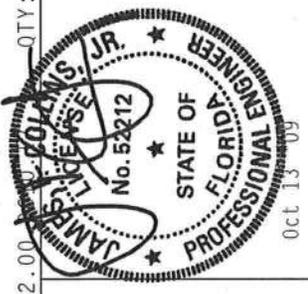
Special loads  
 --- (Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)  
 TC - From 230 pif at 0.00 to 230 pif at 12.69  
 BC - From 8 pif at 0.00 to 8 pif at 12.69

Truss must be installed as shown with top chord up.



PLT TYP. Wave  
 R=1132 PLF W=1-4-0  
 12-8-4 Over 2 Supports  
 R=1509 W=8"

Design Crit: FBC2007Res/TPI-2002 (STD)  
 FT/RT=12%(0%)/10(0) 9.02.00



**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND MCA (WOOD TRUSS COUNCIL OF AMERICA, 6000 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

**\*\*IMPORTANT\*\*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. JTW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DETAILING FROM THIS DESIGN. CAPABILITY OF ALL BUILDINGS THE TRUSS IN CONFORMANCE WITH DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF AISC (AXIAL DESIGN SPEC. BY AISC) AND TPI. JTW BCG CORRELATOR PLATES ARE MADE OF 20/18/16GA (W/J/SS) ASTM A653 GRADE 40/60 (W, K/J/SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 100A-2. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER ANNEX A3 OF TPI-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGN SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/SPC 1 SEC. 9.

ALPINE

RTW Building Components Group Inc.  
 Haines City, FL 33844  
 FL COA #0 278

REF	R215--	60682	Scale = .5"/Ft.
DATE	10/13/09		
DRW	HCUSR215	09286002	
HC-ENG	WHK/MHK		
SEQN	230473		
FROM	LRB		
JREF	1TVV215_Z01		

(6461F-)/TED SMITH /SUNANNEE RIVER LOG HOMES --, \*\* - F5)

See detail STRBRIBR0409 for bracing and bridging recommendations.

Truss spaced at 19.2" OC designed to support 2-0-0 top chord outlookers. Cladding load shall not exceed 0.00 PSF. Top chord must not be cut or notched.

Trusses to be spaced at 19.2" OC maximum.

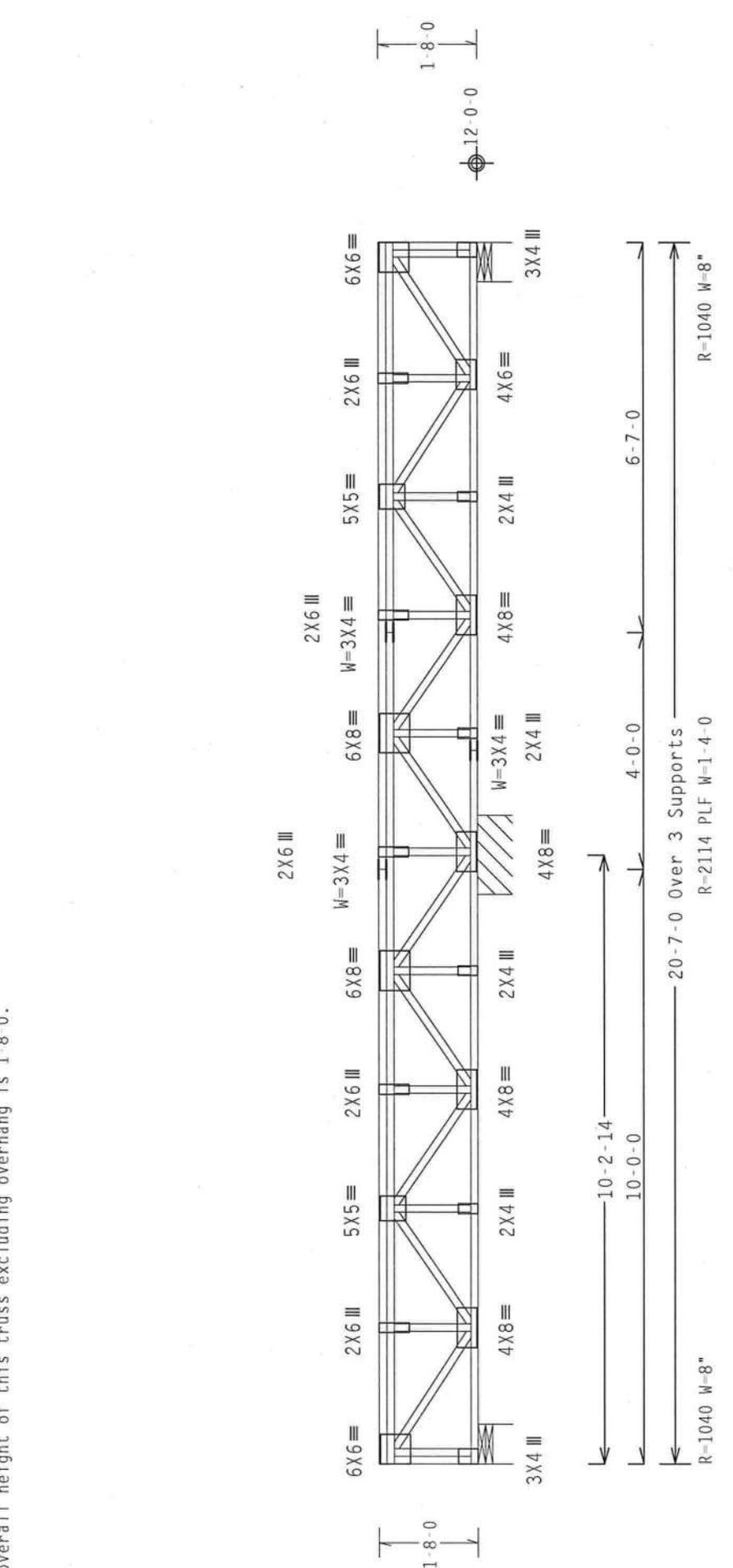
Deflection meets L/360 live and L/240 total load.

Truss must be installed as shown with top chord up.

**Special loads**

- (Lumber Dur. Fac. = 1.00 / Plate Dur. Fac. = 1.00)
- TC - From 230 pif at 0.00 to 230 pif at 10.00
- TC - From 230 pif at 10.00 to 230 pif at 14.00
- TC - From 230 pif at 14.00 to 230 pif at 20.58
- BC - From 8 pif at 0.00 to 8 pif at 12.00
- BC - From 8 pif at 12.00 to 8 pif at 20.58

The overall height of this truss excluding overhang is 1-8-0.



PLT TYP. Wave Scale = .375"/ft.

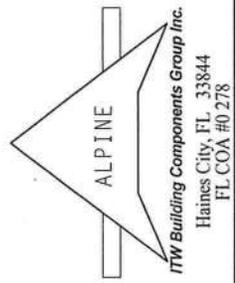
Design Crit: FBC2007Res/TPI-2002 (STD)  
FT/RT=12%(0%)/10(0) QTY: 2 FL/-/5/-/-/R/-

TC LL	40.0 PSF	REF	R215-- 60683
TC DL	10.0 PSF	DATE	10/13/09
BC DL	5.0 PSF	DRW	HCUSR215 09286003
BC LL	0.0 PSF	HC-ENG	WHK/WHK
TOT.LD.	55.0 PSF	SE0N-	230510
DUR.FAC.	1.00	FROM	LRB
SPACING	SEE ABOVE	JREF-	ITVV215_Z01



**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCST (BUILDING COMPONENTS SAFETY EMERGENCY), PUBLISHED BY TPI (TRUSS PLATE INSTITUTE, 210 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22304) AND MICA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, MADISON, WI 53719) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

**\*\*IMPORTANT\*\*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITM BEG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY ACP/A) AND TPI. 1TH BEG CONNECTOR PLATES ARE MADE OF 20/18/16GA (M-H/SS2X) ASTM A653 GRADE 40/60 (4- K/1.55) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 100A-2. ANY INSPECTION OF PLATES FOLLOWED BY (C) SHALL BE PER AIA 808 AS OF 1/11/2002 SEC.3. A SEAL OR THIS DESIGNER SHALL BE REQUIRED FOR ALL TRUSSES. THE DESIGNER SHALL BE RESPONSIBLE FOR THE PROPER USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



See detail STRBRIBR0409 for bracing and bridging recommendations.

Truss spaced at 19.2" OC designed to support 2-0-0 top chord outlookers. Cladding load shall not exceed 0.00 PSF. Top chord must not be cut or notched.

Trusses to be spaced at 19.2" OC maximum.

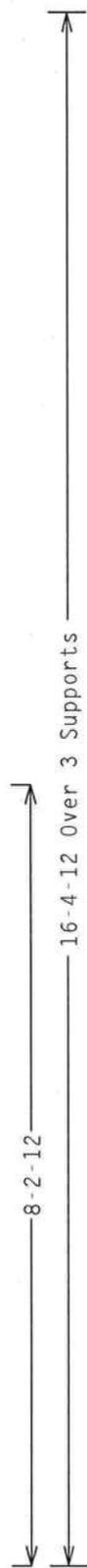
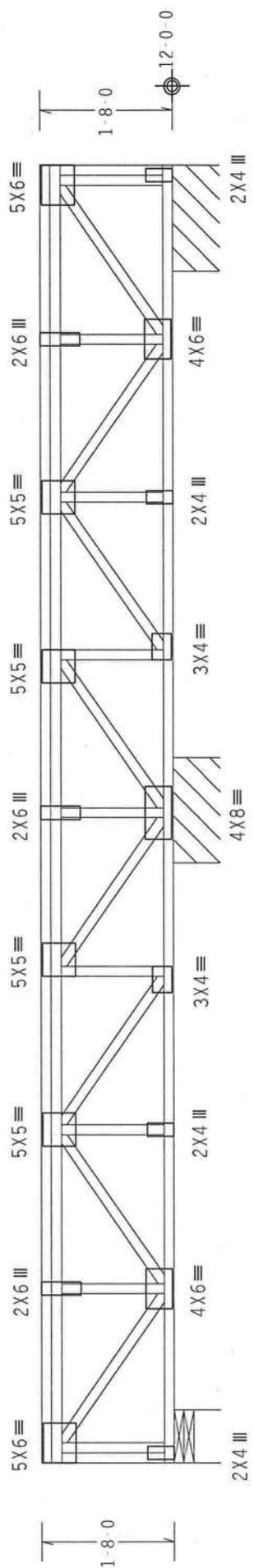
Deflection meets L/360 live and L/240 total load.

The overall height of this truss excluding overhang is 1-8-0.

Special loads

----- (Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)  
 TC - From 230 pif at 0.00 to 230 pif at 16.40  
 BC - From 8 pif at 0.00 to 8 pif at 16.40

Truss must be installed as shown with top chord up.



REF	R215 --	60684
DATE	10/13/09	
DRW	HCUSR215	09286004
HC-ENG	WHK/WHK	
SECN-	230507	
FROM	LRB	
JREF-	1TVV215_Z01	



Design Crit: FBC2007Res/TPI-2002 (STD)  
 FT/RT=12%(0%)/10(0) 9.02-0.00  
 QTY: 2 FL/-/5/-/-/R/- Scale = .5"/Ft.

PLT TYP. Wave  
 R=839 W=8"  
 R=1667 PLF W=1-4-0

ALPINE  
 ITW Building Components Group Inc.  
 Haines City, FL 33844  
 FL COA #0 278

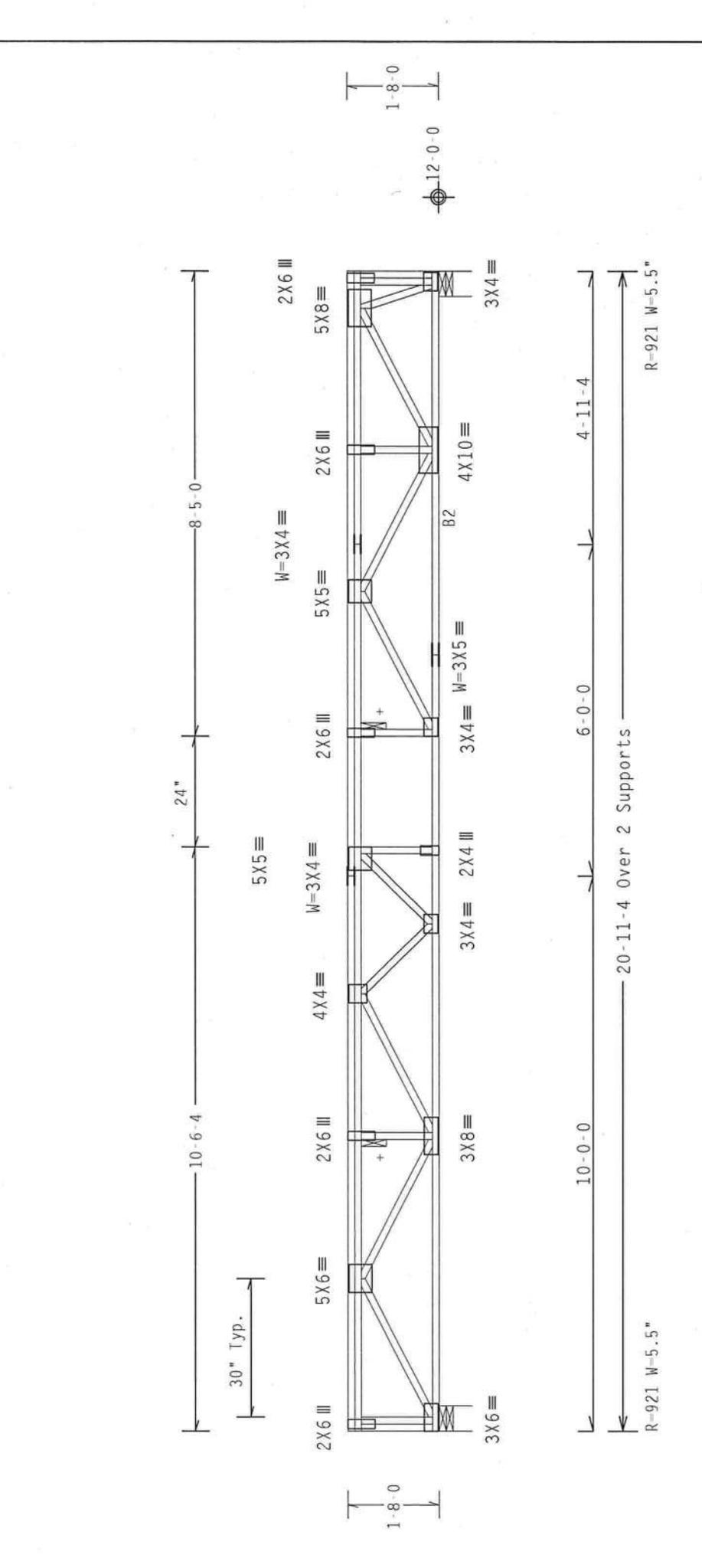
**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST PRACTICES (CONSTRUCTION), SAFETY INFORMATION, UNRELEASED BY THE MANUFACTURER. 6300  
 ENTERPRISE LANE, HADISON, MI 48371/9 FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.  
**\*\*IMPORTANT\*\*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN; ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI; OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES.  
 DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF AIA (NATIONAL DESIGN SPEC. BY AIA/AIA) AND TPI. ITW BCG CONNECTOR PLATES ARE MADE OF 2018/16GA (4-11/55/2) ASPM A653 GRADE 40/60 (4, 8/14, 55) GALV. STEEL. APPLY PLATES TO EACH FACE OF TOP CHORD AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 10A-2. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER AIA/AIA AS OF TPI-2002, SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE AND INSPECTION REQUIREMENTS FOR THE DESIGN. THE SEAL IS THE PROPERTY OF THE BUILDING DESIGNER PER AIA/AIA TPI 1 SEC. 2.

Top chord 4x2 SP #2 N  
 Bot chord 4x2 SP #2 Dense :B2 4x2 SP #2 N  
 Webs 4x2 SP #2 N

Trusses to be spaced at 19.2" OC maximum.  
 Deflection meets L/360 live and L/240 total load.

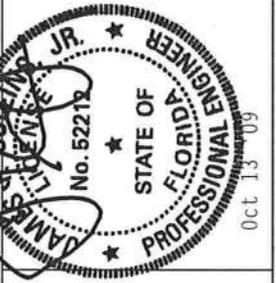
The overall height of this truss excluding overhang is 1-8-0.

+ 2x6 continuous strongback. See detail STRBRIBR0409 for bracing and bridging recommendations.  
 Maximum panel length exceeds 30". TPI allows non-bearing partition walls to be supported at any point when panels are 30" or less.  
 Truss must be installed as shown with top chord up.



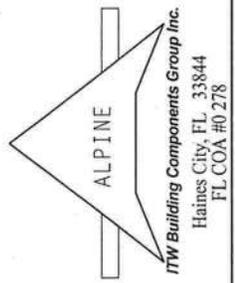
PLT TYP. Wave  
 Design Crit: FBC2007Res/TPI-2002 (STD)  
 FT/RT=12%(0%)/10(0) 9.02.00

QTY: 17	FL / - / 5 / - / - / R / -	Scale = .375" / Ft.
TC LL	40.0 PSF	REF R215 - 60685
TC DL	10.0 PSF	DATE 10/13/09
BC DL	5.0 PSF	DRW HCUSR215 09286005
BC LL	0.0 PSF	HC-ENG WHK /M/K
TOT.LD.	55.0 PSF	SEON- 230450
DUR.FAC.	1.00	FROM LRB
SPACING	19.2"	JREF- 1TVV215_Z01



**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BCSE (BUILDING COMPONENT SAFETY INFORMATION), PUBLISHED BY TPI CROSS PLATE INSTITUTE, 218 NORTH LEE STREET, SUITE 312, ALEXANDRIA, VA, 22314) AND MICA (WOOD TRUSS COUNCIL OF AMERICA, 6300 ENTERPRISE LANE, HADISON, NJ 07619) FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

**\*\*IMPORTANT\*\*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. ITW BEG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN. ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CORRECTIONS WITH APPLICABLE PROVISIONS OF BOB (NATIONAL DESIGN SPEC. BY AIA/PJA) AND TPI. ITW BEG CONNECTION PLATES ARE MADE OF 2018/170GA (0.0155) ASH 6061 GRADE 40/60 (W. K/0.55) GALV. STEEL. APPLY AN INDEPENDENT ENGINEER'S SIGNATURE AND SEAL TO EACH TRUSS PER SECTION 101.02 OF THE TPI 2002 SPEC. 1. ANY INSPECTION OF PLATES FOLLOWED BY THE TRUSS DESIGNER SHALL BE SOLELY FOR THE TRUSS COMPONENT DRAWING INDICATES. ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGNER. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER ANSI/TPI 1 SEC. 2.



(6461F-)/TED SMITH /SUWANNEE RIVER LOG HOMES - - - , \*\* - F3)

Top chord 4x2 SP #2 N  
 Bot chord 4x2 SP #2 N  
 Webs 4x2 SP #2 N

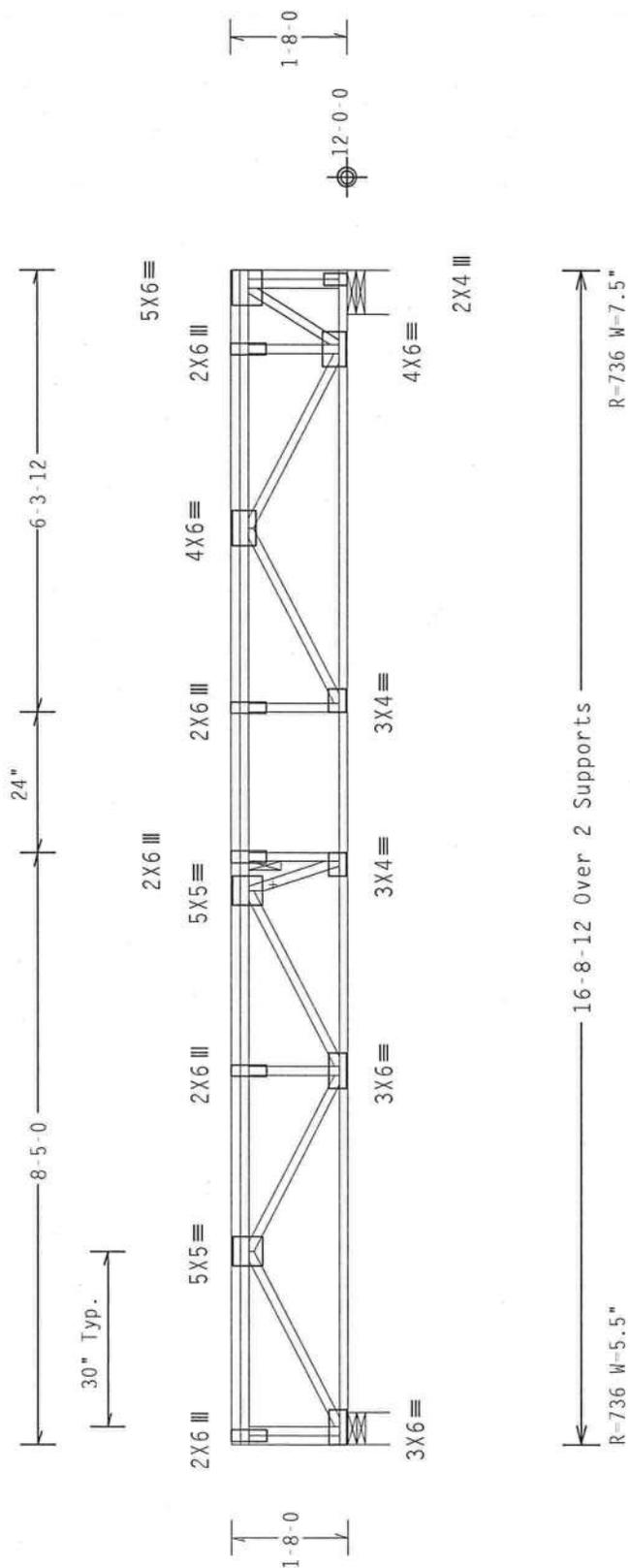
+ 2x6 continuous strongback. See detail STRBRIBR0409 for bracing and bridging recommendations.

Trusses to be spaced at 19.2" OC maximum.

Truss must be installed as shown with top chord up.

Deflection meets L/360 live and L/240 total load.

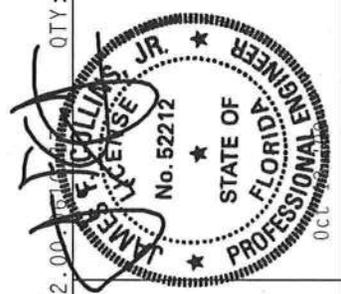
The overall height of this truss excluding overhang is 1-8-0.



Design Crit: FBC2007Res/TPI-2002 (STD)  
 FT/RT=12%(0%)/10(0)

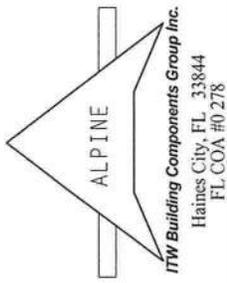
QTY: 18 FL/-/5/-/-/R/- Scale = .375"/Ft.

TC LL	40.0 PSF	REF	R215 --	60686
TC DL	10.0 PSF	DATE	10/13/09	
BC DL	5.0 PSF	DRW	HCUSR215	09286006
BC LL	0.0 PSF	HC-ENG	WHK/WHK	
TOT.LD.	55.0 PSF	SEQN-	230456	
DUR.FAC.	1.00	FROM	LRB	
SPACING	19.2"	JREF-	ITVV215_Z01	



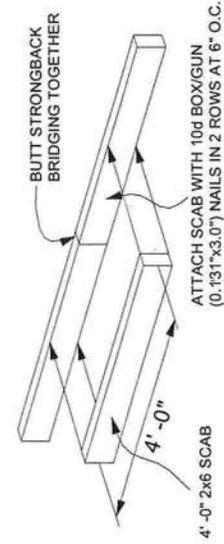
**\*\*WARNING\*\*** TRUSSES REQUIRE EXTREME CARE IN FABRICATION, HANDLING, SHIPPING, INSTALLING AND BRACING. REFER TO BEST BUILDING COMPONENT SAFETY INFORMATION, PUBLISHED BY TPI - CROSS PLATE INSTITUTE, 218 ENTERPRISE LANE, HADISON, NJ 07610, 201-981-5379, FOR SAFETY PRACTICES PRIOR TO PERFORMING THESE FUNCTIONS. UNLESS OTHERWISE INDICATED TOP CHORD SHALL HAVE PROPERLY ATTACHED STRUCTURAL PANELS AND BOTTOM CHORD SHALL HAVE A PROPERLY ATTACHED RIGID CEILING.

**\*\*IMPORTANT\*\*** FURNISH A COPY OF THIS DESIGN TO THE INSTALLATION CONTRACTOR. TPI BCG, INC. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATION FROM THIS DESIGN, ANY FAILURE TO BUILD THE TRUSS IN CONFORMANCE WITH TPI - OR FABRICATING, HANDLING, SHIPPING, INSTALLING & BRACING OF TRUSSES. DESIGN CONFORMS WITH APPLICABLE PROVISIONS OF NDS (NATIONAL DESIGN SPEC. BY AIA/ASA) AND TPI. TPI BCG CONNECTION PLATES ARE MADE OF 20/18/16GA (A-H/SS/K) ASTM A653 GRADE 40/60 (4, K/H/SS) GALV. STEEL. APPLY PLATES TO EACH FACE OF TRUSS AND, UNLESS OTHERWISE LOCATED ON THIS DESIGN, POSITION PER DRAWINGS 160A-2. ANY INSPECTION OF PLATES FOLLOWED BY (1) SHALL BE PER AMBEX A3 OF TPI-2002 SEC.3. A SEAL ON THIS DRAWING INDICATES ACCEPTANCE OF PROFESSIONAL ENGINEERING RESPONSIBILITY SOLELY FOR THE TRUSS COMPONENT DESIGNER SHOWN. THE SUITABILITY AND USE OF THIS COMPONENT FOR ANY BUILDING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER PER AMBEX/TPI 1 SEC. 2.



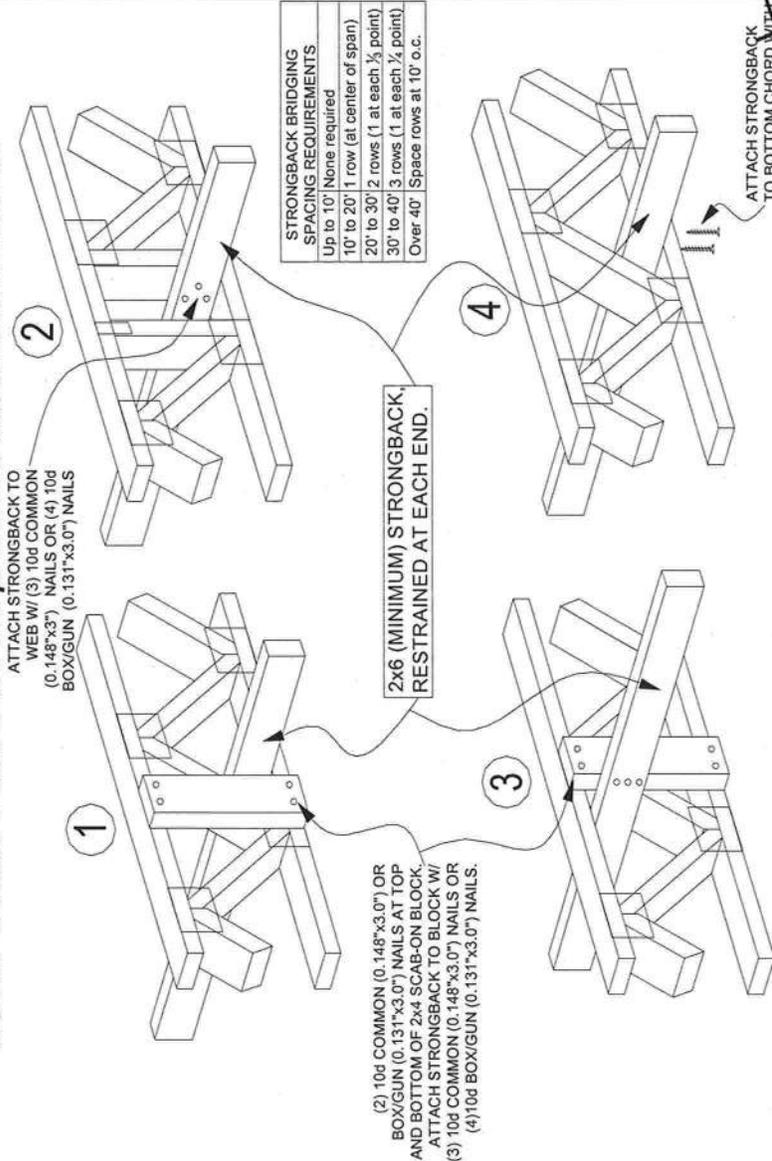
PLT TYP. Wave

# STRONGBACK BRIDGING AND BRACING REQUIREMENTS



NOTE: IN LIEU OF SPLICING AS SHOWN, LAB STRONGBACK BRIDGING MEMBERS FOR AT LEAST ONE TRUSS SPACING STRONGBACK BRIDGING SPLICE DETAIL

**NOTE: Details 1 and 2 are the preferred attachment methods**



## STRONGBACK BRIDGING ATTACHMENT ALTERNATIVES

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET**  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow BCSI (Building Component Safety Information, by TPI and WTCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural panels and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3 & B7. See this job's general notes page for more information.

**\*\*IMPORTANT\*\* FURNISH COPY OF THIS DESIGN TO INSTALLATION CONTRACTOR**  
ITW Building Components Group, Inc. (ITWBCG) shall not be responsible for any deviation from this design, any failure to build the truss in conformance with TPI or fabricating, handling, shipping, installing & bracing of trusses. ITWBCG connector plates are made of 2018/160GA (W11/S/K) ASTM A653 grade 37/40/60 (K/A/HLS) galv. steel. Apply plates to each face of truss, positioned as shown above and on joint details.  
A seal on this drawing or cover page indicates acceptance and professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any building is the responsibility of the Building Engineer per AIAA/TP1 1-30-04.  
ITW-BCSI: [www.itwbcg.com](http://www.itwbcg.com); TPI: [www.tpi.net](http://www.tpi.net); WTCA: [www.wtca.com](http://www.wtca.com); ICC: [www.iccsafe.org](http://www.iccsafe.org)

▶ All vertical scabs, bracing, and strongback bridging material to be grade marked same species and grade of webs.

▶ The purpose of strongback bridging is to develop load sharing between individual trusses, resulting in an overall increase in the stiffness of the floor system. 2x6 strongback bridging, positioned as shown in details, is required at 10' -0" o.c. (max.)

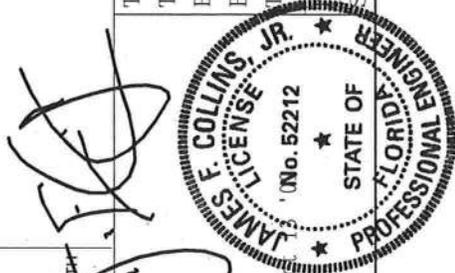
▶ The purpose of lateral bracing is to provide lateral stability of the member. 2x4 continuous lateral bracing is required at intervals not to exceed 10' -0" o.c. **NOTE:** when positioned at the upper side of the bottom chord, strongback bridging also satisfies the lateral bracing requirements for the bottom chord of the truss.

The terms "bridging" and "bracing" are sometimes mistakenly used interchangeably. "Bracing" is an important structural requirement of any floor or roof system. "Bridging," particularly "strongback bridging" is a requirement to a truss system to help control vibration. In addition to aiding in the distribution of point loads between adjacent truss, strongback bridging serves to reduce "bounce" or residual vibration resulting from moving point loads, such as footsteps.

The performance of all floor systems are enhanced by the installation of strongback bridging and therefore is strongly recommended by ITW Building Components Group Inc.

For additional information regarding bracing, refer to BCSI (Building Component Safety Information).

TC LL	PSF	REF	STRONGBACK
TC DL	PSF	DATE	4/10/09
BC DL	PSF	DRWG	STRBRIBR0409
BC LL	PSF		
TOT. LD.	PSF		
CUR. FAC.	1.00		
SPACING			



- District No. 1 - Ronald Williams
- District No. 2 - Dewey Weaver
- District No. 3 - Jody DuPree
- District No. 4 - Stephen E. Bailey
- District No. 5 - Scarlet P. Frisina



28147



**BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY**

**MEMO OF REVIEW FOR CORRECTNESS AND COMPLETION**

In accordance with participation in the NFIP/CRS program, all elevation certificates are required to be reviewed for correctness and completion prior to acceptance by the community. This completed form shall be attached to all elevation certificates maintained on file and provided with requested copies of elevation certificates.

- The attached elevation certificate requires corrections by the surveyor of section(s) \_\_\_\_\_ prior to acceptance by the community.
- The attached elevation certificated is complete and correct.
- Minor corrections have been made in the below marked sections by the authorized Community Official.

SECTION A - PROPERTY INFORMATION		For Insurance Company Use:
A1. Building Owner's Name		Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.		Company NAIC Number
City	State	ZIP Code
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)		
A5. Latitude/Longitude: Lat. _____ Long. _____		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number _____		
A8. For a building with a crawl space or enclosure(s), provide:		
a) Square footage of crawl space or enclosure(s) _____ sq ft	A9. For a building with an attached garage, provide:	
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade _____	a) Square footage of attached garage _____ sq ft	b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____
c) Total net area of flood openings in A8.b _____ sq in	c) Total net area of flood openings in A9.b _____ sq in	

**SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION**

B1. NFIP Community Name & Community Number		B2. County Name		B3. State	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9. <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA <input type="checkbox"/> Yes <input type="checkbox"/> No					

**COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Date of Review: 18 MARCH 2010  
 \_\_\_\_\_  
 BOARD MEETS FIRST THURSDAY AT 7 00 P.M.  
 AND THE COMMUNITY OFFICIAL: \_\_\_\_\_

# ELEVATION CERTIFICATE

28147

OMB No. 1660-0008  
 Expires March 31, 2012

Important: Read the instructions on pages 1-9.

## SECTION A - PROPERTY INFORMATION

<b>A1. Building Owner's Name</b> Theodore F. Smith	<b>For Insurance Company Use:</b>
	Policy Number
<b>A2. Building Street Address</b> (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	Company NAIC Number
City High Springs State FL ZIP Code 32643	
<b>A3. Property Description</b> (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 3, Riverview - Plat Bk 5, Pages 73-74	
<b>A4. Building Use</b> (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>	
<b>A5. Latitude/Longitude:</b> Lat. <u>29°51.379</u> Long. <u>82°36.232</u>	Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983
<b>A6. Attach at least 2 photographs</b> of the building if the Certificate is being used to obtain flood insurance.	
<b>A7. Building Diagram Number</b> <u>5</u>	
<b>A8. For a building with a crawlspace or enclosure(s):</b>	
a) Square footage of crawlspace or enclosure(s) <u>N/A</u> sq ft	<b>A9. For a building with an attached garage:</b>
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>N/A</u>	a) Square footage of attached garage <u>N/A</u> sq ft
c) Total net area of flood openings in A8.b <u>N/A</u> sq in	b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>N/A</u>
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	c) Total net area of flood openings in A9.b <u>N/A</u> sq in
	d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

<b>B1. NFIP Community Name &amp; Community Number</b> Columbia County, Florida 120070		<b>B2. County Name</b> Columbia		<b>B3. State</b> Florida	
<b>B4. Map/Panel Number</b> 12023C0551	<b>B5. Suffix</b> C	<b>B6. FIRM Index Date</b> 2/4/2009	<b>B7. FIRM Panel Effective/Revised Date</b> 2/4/2009	<b>B8. Flood Zone(s)</b> AE	<b>B9. Base Flood Elevation(s) (Zone AO, use base flood depth)</b> 47
<b>B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.</b>					
<input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
<b>B11. Indicate elevation datum used for BFE in Item B9:</b> <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
<b>B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

**C1. Building elevations are based on:**  Construction Drawings\*     Building Under Construction\*     Finished Construction  
 \*A new Elevation Certificate will be required when construction of the building is complete.

**C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO.** Complete Items C2.a-h below according to the building diagram specified in Item A7. Use the same datum as the BFE.  
 Benchmark Utilized Florida DOT Vertical Datum NAVD1988  
 Conversion/Comments N/A

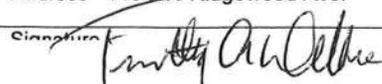
Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor) <u>50.20</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
b) Top of the next higher floor <u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only) <u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
d) Attached garage (top of slab) <u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <u>50.10</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
f) Lowest adjacent (finished) grade next to building (LAG) <u>35.3</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
g) Highest adjacent (finished) grade next to building (HAG) <u>36.5</u>	<input checked="" type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <u>N/A</u>	<input type="checkbox"/> feet	<input type="checkbox"/> meters (Puerto Rico only)

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Check here if comments are provided on back of form.    Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes     No

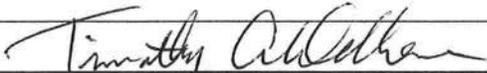
Certifier's Name <u>Timothy A. Delbene</u>	License Number <u>LS 5594</u>
Title <u>Land Surveyor &amp; Mapper</u>	Company Name <u>Donald F. Lee &amp; Associates, Inc.</u>
Address <u>140 NW Ridgewood Ave.</u>	City <u>Lake City</u> State <u>FL</u> ZIP Code <u>32055</u>
Signature 	Date <u>3/17/2010</u> Telephone <u>386 755 6166</u>

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	Policy Number
City High Springs State FL ZIP Code 32643	Company NAIC Number

**SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)**

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments Mechanical equipment is Air Conditioner on house deck.

Signature  Date 3/17/2010  Check here if attachments

**SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)**

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

- E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).  
 a) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_\_\_  feet  meters  above or  below the HAG.  
 b) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_\_\_  feet  meters  above or  below the LAG.
- E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8-9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?  Yes  No  Unknown. The local official must certify this information in Section G.

**SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION**

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, and E are correct to the best of my knowledge.*

Property Owner's or Owner's Authorized Representative's Name  
Timothy Delbene

Address 140 NW Ridgewood Ave City Lake City State FL ZIP Code 32055

Signature  Date 3/17/2010 Telephone 386-755-6166

Comments Donald F. Lee & Associates, Inc. - Land Surveyors

Check here if attachments

**SECTION G - COMMUNITY INFORMATION (OPTIONAL)**

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8 and G9.

- G1.  The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued
-------------------	------------------------	-----------------------------------------------------

- G7. This permit has been issued for:  New Construction  Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_
- G9. BFE or (in Zone AO) depth of flooding at the building site: \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_
- G10. Community's design flood elevation \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_

Local Official's Name \_\_\_\_\_ Title \_\_\_\_\_

Community Name \_\_\_\_\_ Telephone \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Comments \_\_\_\_\_

# Building Photographs

See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	For Insurance Company Use: Policy Number
City High Springs State FL ZIP Code 32643	Company NAIC Number
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.	



FRONT VIEW OF HOUSE

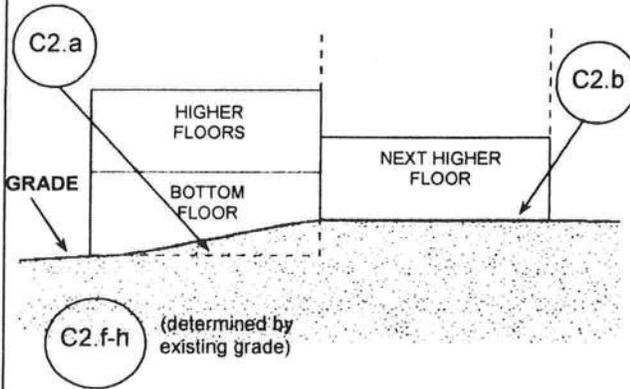


REAR VIEW OF HOUSE

**DIAGRAM 3**

All split-level buildings that are slab-on-grade, either detached or row type (e.g., townhouses); with or without attached garage.

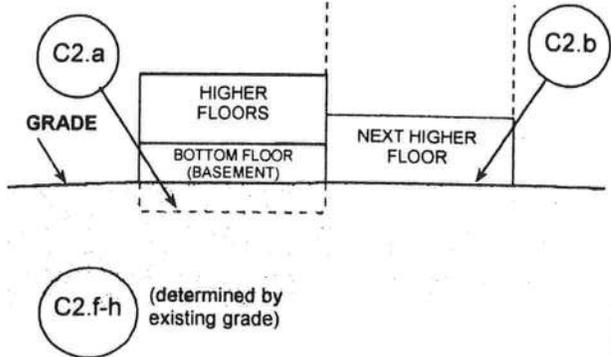
Distinguishing Feature – The bottom floor (excluding garage) is at or above ground level (grade) on at least one side.\*



**DIAGRAM 4**

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

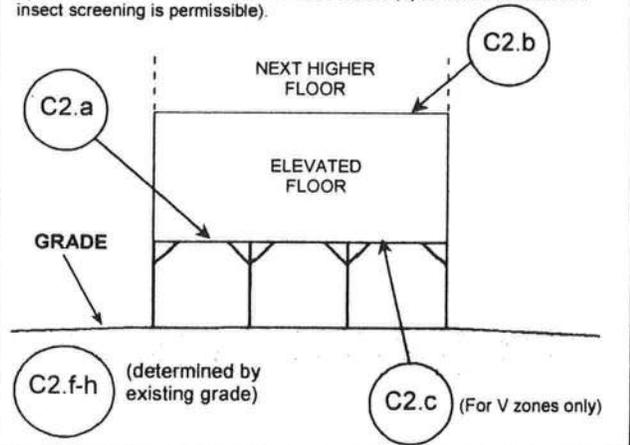
Distinguishing Feature – The bottom floor (basement or underground garage) is below ground level (grade) on all sides.\*



**DIAGRAM 5**

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

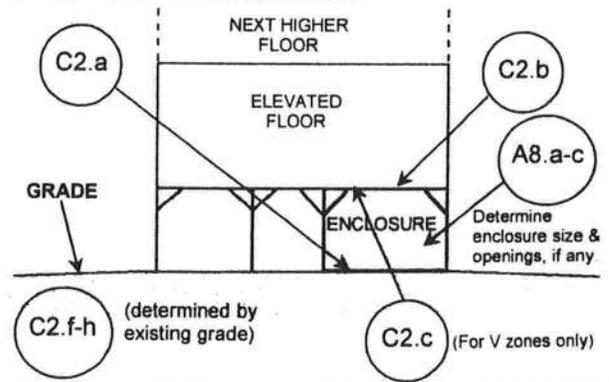
Distinguishing Feature – For all zones, the area below the elevated floor is open, with no obstruction to flow of flood waters (open lattice work and/or insect screening is permissible).



**DIAGRAM 6**

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

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



\* A floor that is below ground level (grade) on all sides is considered a basement even if the floor is used for living purposes, or as an office, garage, workshop, etc.

\*\* An "opening" is a permanent opening that allows for the free passage of water automatically in both directions without human intervention. Under the NFIP, a minimum of two openings is required for enclosures or crawlspaces. The openings shall provide a total net area of not less than one square inch for every square foot of area enclosed, excluding any bars, louvers, or other covers of the opening. Alternatively, an Individual Engineered Flood Openings Certification or an Evaluation Report issued by the International Code Council Evaluation Service (ICC ES) must be submitted to document that the design of the openings will allow for the automatic equalization of hydrostatic flood forces on exterior walls. A window, a door, or a garage door is not considered an opening; openings may be installed in doors. Openings shall be on at least two sides of the enclosed area. If a building has more than one enclosed area, each area must have openings to allow floodwater to directly enter. The bottom of the openings must be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening. For more guidance on openings, see NFIP Technical Bulletin 1.

- District No. 1 - Ronald Williams
- District No. 2 - Dewey Weaver
- District No. 3 - Jody DuPree
- District No. 4 - Stephen E. Bailey
- District No. 5 - Scarlet P. Frisina



## BOARD OF COUNTY COMMISSIONERS • COLUMBIA COUNTY

### MEMO OF REVIEW FOR CORRECTNESS AND COMPLETION

In accordance with participation in the NFIP/CRS program, all elevation certificates are required to be reviewed for correctness and completion prior to acceptance by the community. This completed form shall be attached to all elevation certificates maintained on file and provided with requested copies of elevation certificates.

- The attached elevation certificate requires corrections by the surveyor of section(s) \_\_\_\_\_ prior to acceptance by the community.
- The attached elevation certificated is complete and correct.
- Minor corrections have been made in the below marked sections by the authorized Community Official.

SECTION A - PROPERTY INFORMATION		For Insurance Company Use:
A1. Building Owner's Name		Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.		Company NAIC Number
City	State	ZIP Code
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.)		
A5. Latitude/Longitude: Lat. _____ Long. _____		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number _____		
A8. For a building with a crawl space or enclosure(s), provide:		
a) Square footage of crawl space or enclosure(s) _____ sq ft		
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A8.b _____ sq in		
A9. For a building with an attached garage, provide:		
a) Square footage of attached garage _____ sq ft		
b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A9.b _____ sq in		

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number		B2. County Name		B3. State	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.					
<input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?					
Designation Date _____				<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

**COMMENTS:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date of Review: 18 MARCH 2010      BOARD MEETS FIRST THURSDAY AT 7:00 P.M.

AND THE COMMUNITY OFFICIAL IS: \_\_\_\_\_ P.M.

# ELEVATION CERTIFICATE

28147

OMB No. 1660-0008  
Expires March 31, 2012

Important: Read the instructions on pages 1-9.

## SECTION A - PROPERTY INFORMATION

A1. Building Owner's Name Theodore F. Smith		For Insurance Company Use:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle		Policy Number
City High Springs State FL ZIP Code 32643		Company NAIC Number
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Lot 3, Riverview - Plat Bk 5, Pages 73-74		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) <u>Residential</u>		
A5. Latitude/Longitude: Lat. <u>29°51.379</u> Long. <u>82°36.232</u>		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input checked="" type="checkbox"/> NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.		
A7. Building Diagram Number <u>5</u>		
A8. For a building with a crawlspace or enclosure(s):		A9. For a building with an attached garage:
a) Square footage of crawlspace or enclosure(s) <u>N/A</u> sq ft		a) Square footage of attached garage <u>N/A</u> sq ft
b) No. of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade <u>N/A</u>		b) No. of permanent flood openings in the attached garage within 1.0 foot above adjacent grade <u>N/A</u>
c) Total net area of flood openings in A8.b <u>N/A</u> sq in		c) Total net area of flood openings in A9.b <u>N/A</u> sq in
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number Columbia County, Florida 120070		B2. County Name Columbia		B3. State Florida	
B4. Map/Panel Number 12023C0551	B5. Suffix C	B6. FIRM Index Date 2/4/2009	B7. FIRM Panel Effective/Revised Date 2/4/2009	B8. Flood Zone(s) AE	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 47
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9. <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

## SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on:  Construction Drawings\*  Building Under Construction\*  Finished Construction  
\*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. Use the same datum as the BFE.  
Benchmark Utilized Florida DOT Vertical Datum NAVD1988  
Conversion/Comments N/A

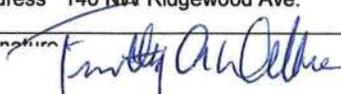
Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor) <u>50.20</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
b) Top of the next higher floor <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
d) Attached garage (top of slab) <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) <u>50.10</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
f) Lowest adjacent (finished) grade next to building (LAG) <u>35.3</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
g) Highest adjacent (finished) grade next to building (HAG) <u>36.5</u>	<input checked="" type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support <u>N/A</u>	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)

## SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor?  Yes  No

Certifier's Name Timothy A. Delbene	License Number LS 5594
Title Land Surveyor & Mapper	Company Name Donald F. Lee & Associates, Inc.
Address 140 NW Ridgewood Ave.	City Lake City State FL ZIP Code 32055
Signature 	Date 3/17/2010 Telephone 386 755 6166

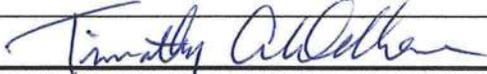
PLACE  
SEAL  
HERE

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>	For Insurance Company Use:
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	Policy Number
City High Springs State FL ZIP Code 32643	Company NAIC Number

**SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)**

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments Mechanical equipment is Air Conditioner on house deck.

Signature  Date 3/17/2010  Check here if attachments

**SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)**

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

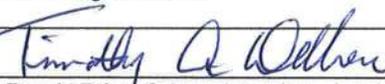
- E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).  
 a) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_\_\_  feet  meters  above or  below the HAG.  
 b) Top of bottom floor (including basement, crawlspace, or enclosure) is \_\_\_\_\_  feet  meters  above or  below the LAG.
- E2. For Building Diagrams 6-9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8-9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E3. Attached garage (top of slab) is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_  feet  meters  above or  below the HAG.
- E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance?  Yes  No  Unknown. The local official must certify this information in Section G.

**SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION**

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, and E are correct to the best of my knowledge.*

Property Owner's or Owner's Authorized Representative's Name  
Timothy Delbene

Address 140 NW Ridgewood Ave City Lake City State FL ZIP Code 32055

Signature  Date 3/17/2010 Telephone 386-755-6166

Comments Donald F. Lee & Associates, Inc. - Land Surveyors

Check here if attachments

**SECTION G - COMMUNITY INFORMATION (OPTIONAL)**

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8 and G9.

- G1.  The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2.  A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3.  The following information (Items G4-G9) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued
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- G7. This permit has been issued for:  New Construction  Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_
- G9. BFE or (in Zone AO) depth of flooding at the building site: \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_
- G10. Community's design flood elevation \_\_\_\_\_  feet  meters (PR) Datum \_\_\_\_\_

Local Official's Name \_\_\_\_\_ Title \_\_\_\_\_

Community Name \_\_\_\_\_ Telephone \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Comments \_\_\_\_\_

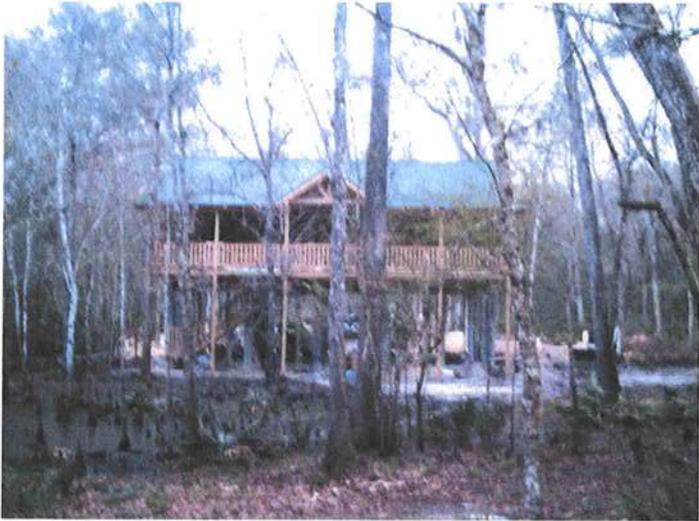
# Building Photographs

See Instructions for Item A6.

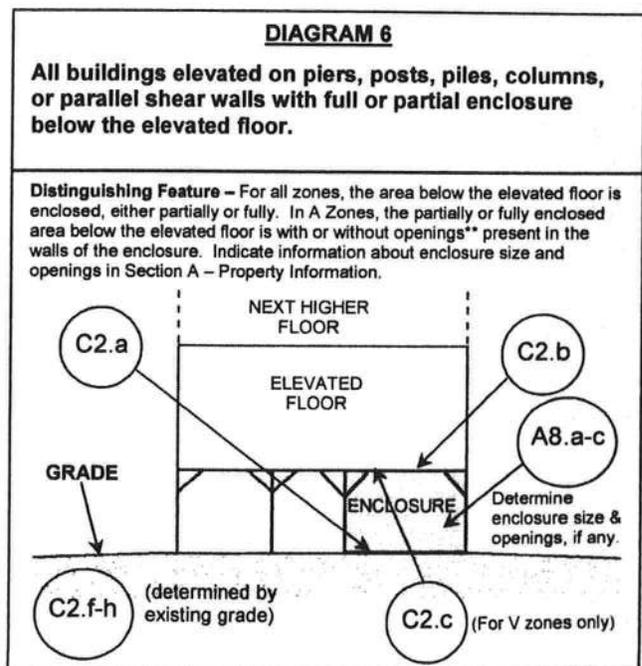
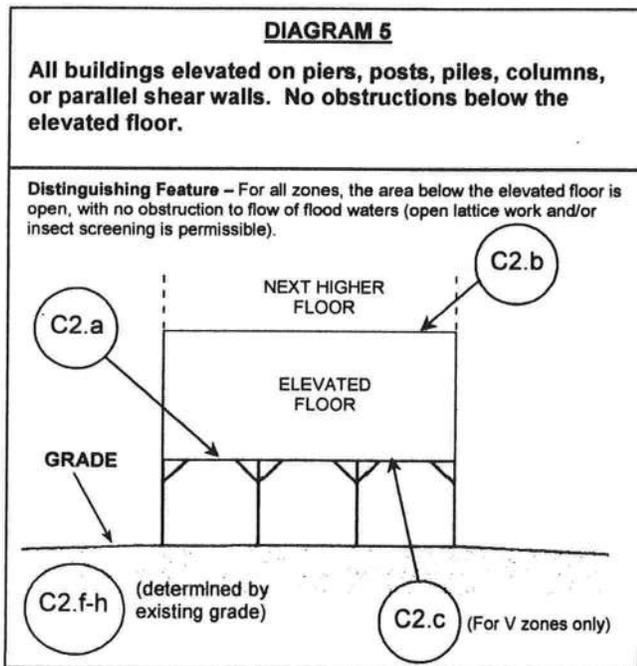
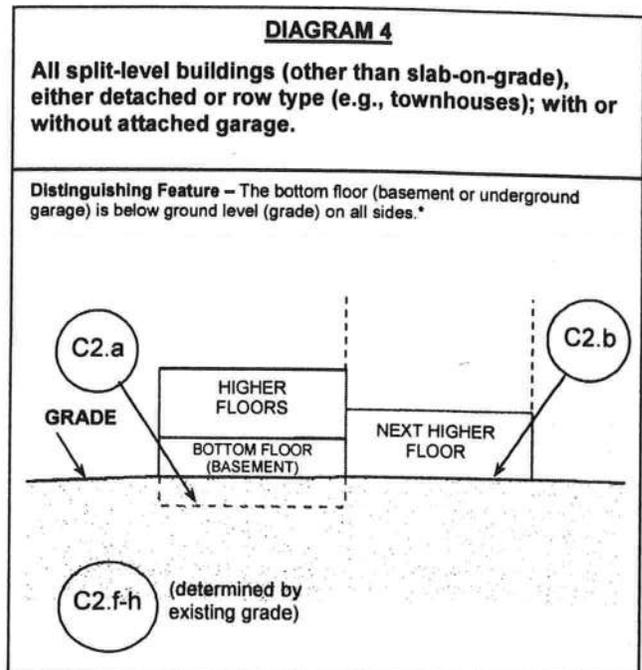
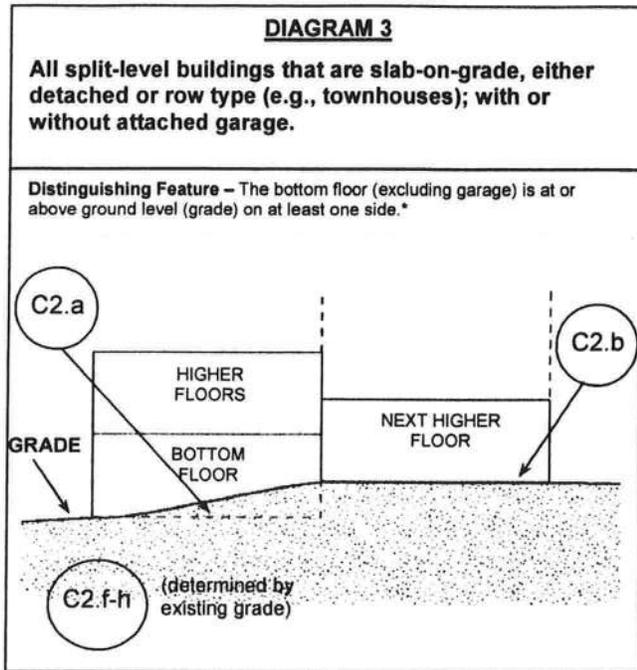
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 382 SE Riverview Circle	For Insurance Company Use: Policy Number
City High Springs State FL ZIP Code 32643	Company NAIC Number
<p>If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page on the reverse.</p>	



FRONT VIEW OF HOUSE



REAR VIEW OF HOUSE



\* A floor that is below ground level (grade) on all sides is considered a basement even if the floor is used for living purposes, or as an office, garage, workshop, etc.

\*\* An "opening" is a permanent opening that allows for the free passage of water automatically in both directions without human intervention. Under the NFIP, a minimum of two openings is required for enclosures or crawlspaces. The openings shall provide a total net area of not less than one square inch for every square foot of area enclosed, excluding any bars, louvers, or other covers of the opening. Alternatively, an Individual Engineered Flood Openings Certification or an Evaluation Report issued by the International Code Council Evaluation Service (ICC ES) must be submitted to document that the design of the openings will allow for the automatic equalization of hydrostatic flood forces on exterior walls. A window, a door, or a garage door is not considered an opening; openings may be installed in doors. Openings shall be on at least two sides of the enclosed area. If a building has more than one enclosed area, each area must have openings to allow floodwater to directly enter. The bottom of the openings must be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening. For more guidance on openings, see NFIP Technical Bulletin 1.