1782

Columbia County Building Permit Application

Office Use Only Application # 0710-21 Date Received 10/11 By JW Permit # 1470/26355

Application Approved by - Zoning Official BLK Date 15.1007 Plans Examiner OKJTH Date 10-12-07

Flood Zone X per plat Development Permit N/A Zoning RSF-2 Land Use Plan Map Category RES. Low Den.

Comments 1st Floor / St Clare Rd.

☑ NOC ☐ EH ☑ Deed or PA ☑ Site Plan ☐ State Road Info ☐ Parent Parcel # ☐ Development Permit

Fax 961-9963

Name Authorized Person Signing Permit Wade Willis - DeAnna Willis Phone 6233331

Address PO Box 1546 LC FL 32056

Owners Name Wade Willis Phone

911 Address 325 SW Timberland Ct, Lake City, FL 32055

Contractors Name Wade Willis Phone 386-623-3331

Address PO Box 1546 LC FL 32056

Fee Simple Owner Name & Address

Bonding Co. Name & Address

Architect/Engineer Name & Address Mark Disosway

Mortgage Lenders Name & Address Carolina First Bank

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

Property ID Number 33-3S-16-02438-179 Estimated Cost of Construction $220,000.00

Subdivision Name Emerald Cove Lot 79 Block Unit Phase 2

Driving Directions Highway 90 west, TL on Heathridge drive, TR on timberland court, 6th on left

Type of Construction new res-VFD Number of Existing Dwellings on Property NA

Total Acreage 1 Lot Size Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 60 Side 15 Side 35 Rear 140

Total Building Height 27.5 Number of Stories 2 Heated Floor Area 2892 TOTAL 4065 Roof Pitch 6/12

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.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

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

Owner Builder or Authorized Person by Notarized Letter

Contractor Signature

Contractors License Number CBC125244

Competency Card Number

NOTARY STAMP/SEAL

VIRGINIA HAGGERTY
Comm# DD0428887
Expires 9/10/2009
Bonded thru (800)432-4254
Florida Notary Assn., Inc

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me this 11 day of October 2007.

Personally known ✓ or Produced Identification

Notary Signature

(Revised Sept. 2006)

JW called + spoke w/ WADE 10-15-07

THIS INSTRUMENT WAS PREPARED BY:

TERRY McDAVID 06-17
POST OFFICE BOX 1328
LAKE CITY, FL 32056-1328

RETURN TO:

TERRY McDAVID
POST OFFICE BOX 1328
LAKE CITY, FL 32056-1328

Property Appraiser's
Identification Number R02438-179

Inst:200712021961 Date:9/27/2007 Time:4:23 PM
Doc Stamp-Deed:157.50
DC,P.DeWitt Cason,Columbia County Page 1 of 2

WARRANTY DEED

This Warranty Deed, made this 26th day of September, 2007, BETWEEN MICHAEL S. LOGAN, JR., whose post office address is 1029 SW Rossbourgh Court, Lake City, FL 32025, of the County of Columbia, State of Florida, grantor*, and WADE WILLIS, whose post office address is 4656 S US Highway 441, Lake City, FL, of the County of Columbia, State of Florida, grantee*.

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

Witnesseth: that said grantor, for and in consideration of the sum of Ten Dollars ($10.00), and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Columbia County, Florida, to-wit:

ALL THE GRANTORS UNDIVIDED 1/2 INTEREST IN AND TO THE FOLLOWING PROPERTY:

Lot 79, EMERALD COVE, Phase 2, a subdivision according to the plat thereof as recorded in Plat Book 8, Pages 68-69 of the public records of Columbia County, Florida.

N.B.: Neither Grantor nor any member of his family live on or reside on the property described herein or any adjacent land thereto or claim any part hereof or any adjacent land thereto as their homestead.

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

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

And subject to taxes for the current year and later years and all valid easements and restrictions of record, if any, which are not hereby reimposed; and also subject to any claim, right, title or interest arising from any recorded instrument reserving, conveying, leasing, or otherwise alienating any interest in the oil, gas and other minerals. And grantor does warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever, subject only to the exceptions set forth herein.

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

Signed, sealed and delivered
in our presence:

(Signature of First Witness)
Terry McDavid
(Typed Name of First Witness)

(Signature of Second Witness)
CRYSTAL L. BRUNNER
(Typed Name of Second Witness)

(SEAL)
Grantor
MICHAEL S. LOGAN, JR.
Printed Name

STATE OF Florida
COUNTY OF Columbia

The foregoing instrument was acknowledged before me this 26th day of September, 2007, by MICHAEL S. LOGAN, JR., who is personally known to me or who have produced _____ as identification and who did not take an oath.

My Commission Expires:

Notary Public
Printed, typed, or stamped name:

TERRY MCDAVID
MY COMMISSION # DD 563788
EXPIRES: January 16, 2010
Bonded Thru Notary Public Underwriters

06·1'1

NOTICE OF COMMENCEMENT

STATE OF FLORIDA
COUNTY OF: Columbia

THE UNDERSIGNED hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement:

1. Description of Property: Lot 79 Lot 79 SW Timberland Court, Emerald Cove S/D Phase 2, Plat Book 8, Pages 68-69 Lake City, Fl 32024 Columbia County, Florida.
   Tax ID No. R02438-179
2. General Description of Improvements: Residential Construction
3. Name and Address of Owner: Wade S. Willis
   Lot 79 SW Timberland Court
   Lake City, Fl 32055

Inst:200712022260 Date:10/2/2007 Time:3:18 PM
DC,P.DeWitt Cason,Columbia County Page 1 of 1

   Interest in Property: Fee Simple

   Name and Address of Fee Simple Titleholder (if other than owner): N/A

4. Name and Address of Contractor: Wade Willis Construction, LLC.
   9858 S. US. HWY. 441
   Lake City, Fl 32025
   386-961-9962
5. Name and Address of Surety on payment bond, if any, and amount of such bond: N/A

   Amount of Bond: $0

6. Name and Address of Lender:

   MERCANTILE BANK, A DIVISION OF CAROLINA FIRST BANK
   425 22nd Avenue North
   St. Petersburg, FL 33704

   Attention: Sara P. Lopez
   727-812-2216
7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13 (1)(a)7., Florida Statutes:

   MERCANTILE BANK, A DIVISION OF CAROLINA FIRST BANK
   425 22nd Avenue North
   St. Petersburg, FL 33704

   Attention: Sara P. Lopez

8. In addition to himself, Owner designates N/A of ____________ to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

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

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

____
Signature of Owner or Owner's Authorized Officer/Director/Partner/Manager

Signatory's Title/Office____________

The foregoing instrument was acknowledged before me this 26th day of September, 2007 (year) by ____________ (name of person) as ____________ (type of authority, ... e.g. officer, trustee, attorney in fact) for ____________ (name of party on behalf of whom instrument was executed).

CRYSTAL L. BRUNNER
MY COMMISSION # DD439148
EXPIRES: June 30, 2009
1-800-NOTARY FL Notary Discount Assoc. Co.

____
Signature of Notary Public - State of Florida
Print, Type or Stamp Commissioned Name of Notary Public
Commission Number

Personally Known ________ or Produced Identification Fla D.L.

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 of Natural Person Signing Above

Residential System Sizing Calculation

Summary

Willis Wade Residence

, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

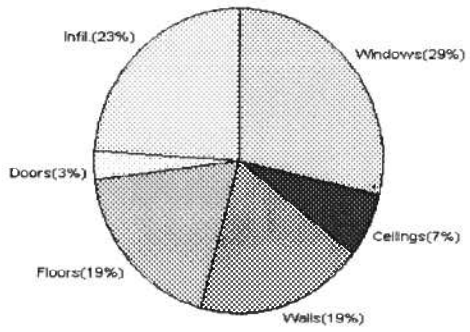
9/28/2007

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
Total heating load calculation	**48278**	**Btuh**	**Total cooling load calculation**	**45756**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	116.0	56000	Sensible (SHR = 0.75)	108.0	42000
Heat Pump + Auxiliary(0.0kW)	116.0	56000	Latent	203.8	14000
			Total (Electric Heat Pump)	122.4	56000

WINTER CALCULATIONS

Winter Heating Load (for 2828 sqft)

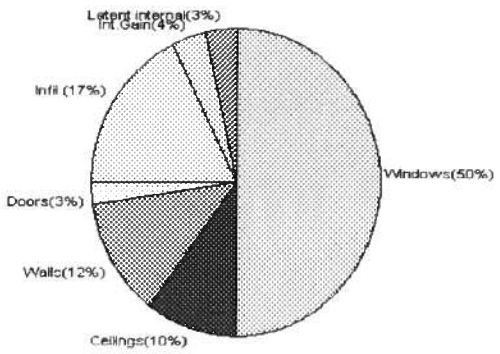
Load component			Load	
Window total	432	sqft	13906	Btuh
Wall total	2760	sqft	9064	Btuh
Door total	120	sqft	1554	Btuh
Ceiling total	2828	sqft	3332	Btuh
Floor total	208	sqft	9081	Btuh
Infiltration	280	cfm	11341	Btuh
Duct loss			0	Btuh
Subtotal			**48278**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**48278**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2828 sqft)

Load component			Load	
Window total	432	sqft	22868	Btuh
Wall total	2760	sqft	5633	Btuh
Door total	120	sqft	1176	Btuh
Ceiling total	2828	sqft	4683	Btuh
Floor total			0	Btuh
Infiltration	144	cfm	2684	Btuh
Internal gain			1840	Btuh
Duct gain			0	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Total sensible gain			**38885**	**Btuh**
Latent gain(ducts)			0	Btuh
Latent gain(infiltration)			5271	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1600	Btuh
Total latent gain			**6871**	**Btuh**
TOTAL HEAT GAIN			**45756**	**Btuh**



For Florida residences only

EnergyGauge® System Sizing
PREPARED BY:
DATE: 9-28-07

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

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

9/28/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	36.0	32.2	1159 Btuh
2	2, Clear, Metal, 0.87	NE	10.0	32.2	322 Btuh
3	2, Clear, Metal, 0.87	NW	40.0	32.2	1288 Btuh
4	2, Clear, Metal, 0.87	SW	10.0	32.2	322 Btuh
5	2, Clear, Metal, 0.87	NW	36.0	32.2	1159 Btuh
6	2, Clear, Metal, 0.87	SE	36.0	32.2	1159 Btuh
7	2, Clear, Metal, 0.87	SE	18.0	32.2	579 Btuh
8	2, Clear, Metal, 0.87	SW	9.0	32.2	290 Btuh
9	2, Clear, Metal, 0.87	SW	16.0	32.2	515 Btuh
10	2, Clear, Metal, 0.87	NW	72.0	32.2	2318 Btuh
11	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
12	2, Clear, Metal, 0.87	NE	30.0	32.2	966 Btuh
13	2, Clear, Metal, 0.87	NE	4.0	32.2	129 Btuh
14	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
15	2, Clear, Metal, 0.87	SE	20.0	32.2	644 Btuh
16	2, Clear, Metal, 0.87	SE	20.0	32.2	644 Btuh
17	2, Clear, Metal, 0.87	SE	15.0	32.2	483 Btuh
	Window Total		432(sqft)		13906 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	2546	3.3	8361 Btuh
2	Frame - Wood - Adj(0.09)	13.0	214	3.3	703 Btuh
	Wall Total		2760		9064 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		40	12.9	518 Btuh
3	Insulated - Exterior		60	12.9	777 Btuh
	Door Total		120		1554Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2828	1.2	3332 Btuh
	Ceiling Total		2828		3332Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	208.0 ft(p)	43.7	9081 Btuh
	Floor Total		208		9081 Btuh
			Zone Envelope Subtotal:		36938 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.66	25452	280.0	11341 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**48278 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

9/28/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	48278 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	48278 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)

For Florida residences only

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

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

9/28/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Panes/SHGC/Frame/U	Orientation	Area(sqft) X	HTM=	Load
1	2, Clear, Metal, 0.87	NW	36.0	32.2	1159 Btuh
2	2, Clear, Metal, 0.87	NE	10.0	32.2	322 Btuh
3	2, Clear, Metal, 0.87	NW	40.0	32.2	1288 Btuh
4	2, Clear, Metal, 0.87	SW	10.0	32.2	322 Btuh
5	2, Clear, Metal, 0.87	NW	36.0	32.2	1159 Btuh
6	2, Clear, Metal, 0.87	SE	36.0	32.2	1159 Btuh
7	2, Clear, Metal, 0.87	SE	18.0	32.2	579 Btuh
8	2, Clear, Metal, 0.87	SW	9.0	32.2	290 Btuh
9	2, Clear, Metal, 0.87	SW	16.0	32.2	515 Btuh
10	2, Clear, Metal, 0.87	NW	72.0	32.2	2318 Btuh
11	2, Clear, Metal, 0.87	NW	30.0	32.2	966 Btuh
12	2, Clear, Metal, 0.87	NE	30.0	32.2	966 Btuh
13	2, Clear, Metal, 0.87	NE	4.0	32.2	129 Btuh
14	2, Clear, Metal, 0.87	SE	30.0	32.2	966 Btuh
15	2, Clear, Metal, 0.87	SE	20.0	32.2	644 Btuh
16	2, Clear, Metal, 0.87	SE	20.0	32.2	644 Btuh
17	2, Clear, Metal, 0.87	SE	15.0	32.2	483 Btuh
	Window Total		432(sqft)		13906 Btuh
Walls	Type	R-Value	Area X	HTM=	Load
1	Frame - Wood - Ext(0.09)	13.0	2546	3.3	8361 Btuh
2	Frame - Wood - Adj(0.09)	13.0	214	3.3	703 Btuh
	Wall Total		2760		9064 Btuh
Doors	Type		Area X	HTM=	Load
1	Insulated - Adjacent		20	12.9	259 Btuh
2	Insulated - Exterior		40	12.9	518 Btuh
3	Insulated - Exterior		60	12.9	777 Btuh
	Door Total		120		1554Btuh
Ceilings	Type/Color/Surface	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shin)	30.0	2828	1.2	3332 Btuh
	Ceiling Total		2828		3332Btuh
Floors	Type	R-Value	Size X	HTM=	Load
1	Slab On Grade	0	208.0 ft(p)	43.7	9081 Btuh
	Floor Total		208		9081 Btuh
			Zone Envelope Subtotal:		36938 Btuh
Infiltration	Type	ACH X	Zone Volume	CFM=	
	Natural	0.66	25452	280.0	11341 Btuh
Ductload	Average sealed, R6.0, Supply(Attic), Return(Attic)			(DLM of 0.00)	0 Btuh
Zone #1			**Sensible Zone Subtotal**		**48278 Btuh**

Manual J Winter Calculations

Residential Load - Component Details (continued)

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

9/28/2007

WHOLE HOUSE TOTALS

	Subtotal Sensible	48278 Btuh
	Ventilation Sensible	0 Btuh
	Total Btuh Loss	48278 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)

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 9/28/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Whole House

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	7ft.	36.0	0.0	36.0	29	60	2161 Btuh
2	2, Clear, 0.87, None,N,N	NE	99ft.	7ft.	10.0	0.0	10.0	29	60	600 Btuh
3	2, Clear, 0.87, None,N,N	NW	6ft.	14ft.	40.0	0.0	40.0	29	60	2401 Btuh
4	2, Clear, 0.87, None,N,N	SW	99ft.	7ft.	10.0	10.0	0.0	29	63	290 Btuh
5	2, Clear, 0.87, None,N,N	NW	6ft.	7ft.	36.0	0.0	36.0	29	60	2161 Btuh
6	2, Clear, 0.87, None,N,N	SE	6ft.	7ft.	36.0	36.0	0.0	29	63	1043 Btuh
7	2, Clear, 0.87, None,N,N	SE	4ft.	7ft.	18.0	17.3	0.7	29	63	546 Btuh
8	2, Clear, 0.87, None,N,N	SW	1.5ft.	4ft.	9.0	4.6	4.4	29	63	409 Btuh
9	2, Clear, 0.87, None,N,N	SW	1.5ft.	6ft.	16.0	2.1	13.9	29	63	930 Btuh
10	2, Clear, 0.87, None,N,N	NW	6ft.	6.5ft.	72.0	0.0	72.0	29	60	4323 Btuh
11	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	30.0	0.0	30.0	29	60	1801 Btuh
12	2, Clear, 0.87, None,N,N	NE	1.5ft.	5.5ft.	30.0	0.0	30.0	29	60	1801 Btuh
13	2, Clear, 0.87, None,N,N	NE	1.5ft.	1.5ft.	4.0	0.0	4.0	29	60	240 Btuh
14	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	30.0	12.1	17.9	29	63	1468 Btuh
15	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	20.0	8.1	11.9	29	63	979 Btuh
16	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	20.0	8.1	11.9	29	63	979 Btuh
17	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	15.0	6.1	8.9	29	63	734 Btuh
	Window Total				432 (sqft)					22868 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	2546.0	2.1	5310 Btuh
2	Frame - Wood - Adj	13.0/0.09	214.0	1.5	323 Btuh
	Wall Total		2760 (sqft)		5633 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	40.0	9.8	392 Btuh
3	Insulated - Exterior	60.0	9.8	588 Btuh
	Door Total	120 (sqft)		1176 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2828.0	1.7	4683 Btuh
	Ceiling Total		2828 (sqft)		4683 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	208 (ft(p))	0.0	0 Btuh
	Floor Total		208.0 (sqft)		0 Btuh

	Zone Envelope Subtotal:		34360 Btuh
Infiltration	Type / SensibleNatural	ACH 0.34	Volume(cuft) 25452	CFM= 144.2	Load 2684 Btuh
Internal gain	Occupants 8	X Btuh/occupant 230	+ Appliance 0		Load 1840 Btuh
Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)			DGM = 0.00	0.0 Btuh
			Sensible Zone Load		**38885 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

9/28/2007

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**38885 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**38885 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**38885 Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	5271 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**6871 Btuh**
	TOTAL GAIN	**45756 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)

For Florida residences only

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

Reference City: Gainesville (Defaults) Summer Temperature Difference: 17.0 F 9/28/2007

This calculation is for Worst Case. The house has been rotated 315 degrees.

Component Loads for Zone #1: Main

Window	Type* Pn/SHGC/U/InSh/ExSh/IS	Ornt	Overhang Len	Overhang Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	HTM Unshaded	Load
1	2, Clear, 0.87, None,N,N	NW	1.5ft.	7ft.	36.0	0.0	36.0	29	60	2161 Btuh
2	2, Clear, 0.87, None,N,N	NE	99ft.	7ft.	10.0	0.0	10.0	29	60	600 Btuh
3	2, Clear, 0.87, None,N,N	NW	6ft.	14ft.	40.0	0.0	40.0	29	60	2401 Btuh
4	2, Clear, 0.87, None,N,N	SW	99ft.	7ft.	10.0	10.0	0.0	29	63	290 Btuh
5	2, Clear, 0.87, None,N,N	NW	6ft.	7ft.	36.0	0.0	36.0	29	60	2161 Btuh
6	2, Clear, 0.87, None,N,N	SE	6ft.	7ft.	36.0	36.0	0.0	29	63	1043 Btuh
7	2, Clear, 0.87, None,N,N	SE	4ft.	7ft.	18.0	17.3	0.7	29	63	546 Btuh
8	2, Clear, 0.87, None,N,N	SW	1.5ft.	4ft.	9.0	4.6	4.4	29	63	409 Btuh
9	2, Clear, 0.87, None,N,N	SW	1.5ft.	6ft.	16.0	2.1	13.9	29	63	930 Btuh
10	2, Clear, 0.87, None,N,N	NW	6ft.	6.5ft.	72.0	0.0	72.0	29	60	4323 Btuh
11	2, Clear, 0.87, None,N,N	NW	1.5ft.	5.5ft.	30.0	0.0	30.0	29	60	1801 Btuh
12	2, Clear, 0.87, None,N,N	NE	1.5ft.	5.5ft.	30.0	0.0	30.0	29	60	1801 Btuh
13	2, Clear, 0.87, None,N,N	NE	1.5ft.	1.5ft.	4.0	0.0	4.0	29	60	240 Btuh
14	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	30.0	12.1	17.9	29	63	1468 Btuh
15	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	20.0	8.1	11.9	29	63	979 Btuh
16	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	20.0	8.1	11.9	29	63	979 Btuh
17	2, Clear, 0.87, None,N,N	SE	1.5ft.	5.5ft.	15.0	6.1	8.9	29	63	734 Btuh
	Window Total				432 (sqft)					22868 Btuh

Walls	Type	R-Value/U-Value	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	13.0/0.09	2546.0	2.1	5310 Btuh
2	Frame - Wood - Adj	13.0/0.09	214.0	1.5	323 Btuh
	Wall Total		2760 (sqft)		5633 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Adjacent	20.0	9.8	196 Btuh
2	Insulated - Exterior	40.0	9.8	392 Btuh
3	Insulated - Exterior	60.0	9.8	588 Btuh
	Door Total	120 (sqft)		1176 Btuh

Ceilings	Type/Color/Surface	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	30.0	2828.0	1.7	4683 Btuh
	Ceiling Total		2828 (sqft)		4683 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	208 (ft(p))	0.0	0 Btuh
	Floor Total		208.0 (sqft)		0 Btuh

	Zone Envelope Subtotal:	34360 Btuh

Infiltration	Type	ACH	Volume(cuft)	CFM=	Load
	SensibleNatural	0.34	25452	144.2	2684 Btuh

Internal gain	Occupants	Btuh/occupant	Appliance	Load
	8	X 230 +	0	1840 Btuh

Duct load	Average sealed, R6.0, Supply(Attic), Return(Attic)	DGM = 0.00	0.0 Btuh
		Sensible Zone Load	**38885 Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Willis Wade Residence
, FL

Project Title:
706276WillisWade

Class 3 Rating
Registration No. 0
Climate: North

9/28/2007

WHOLE HOUSE TOTALS

	Sensible Envelope Load All Zones	**38885 Btuh**
	Sensible Duct Load	0 Btuh
	Total Sensible Zone Loads	**38885 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
Whole House	**Total sensible gain**	**38885 Btuh**
Totals for Cooling	Latent infiltration gain (for 54 gr. humidity difference)	5271 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	0 Btuh
	Latent occupant gain (8 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**6871 Btuh**
	TOTAL GAIN	**45756 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)

For Florida residences only

Residential Window Diversity

MidSummer

Willis Wade Residence

, FL

Project Title:
706276WillisWade

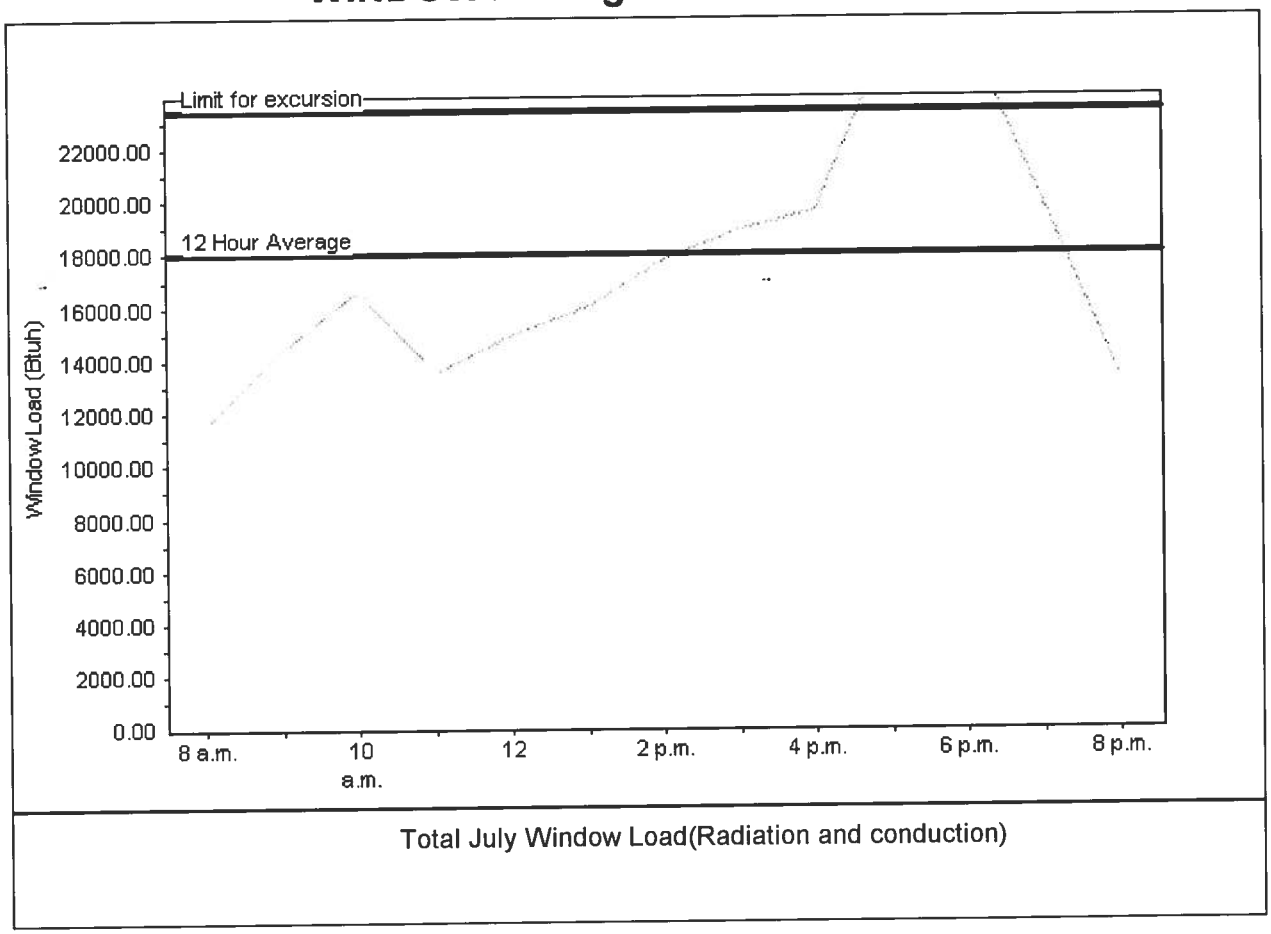
Class 3 Rating
Registration No. 0
Climate: North

9/28/2007

Weather data for: Gainesville - Defaults

Summer design temperature	92 F	Average window load for July	18049 Btu
Summer setpoint	75 F	Peak window load for July	26616 Btu
Summer temperature difference	17 F	Excusion limit(130% of Ave.)	23464 Btu
Latitude	29 North	Window excursion (July)	3152 Btuh

WINDOW Average and Peak Loads



Total July Window Load(Radiation and conduction)

Warning: This application has glass areas that produce relatively large heat gains for part of the day. Variable air volume devices may be required to overcome spikes in solar gain for one or more rooms. A zoned system may be required or some rooms may require zone control.

EnergyGauge® System Sizing for Florida residences only
PREPARED BY:
DATE: 9-28-07

FORM 600A-2004 EnergyGauge® 4.1

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs

Residential Whole Building Performance Method A

Project Name:	**706276WillisWade**	Builder:	Willis
Address:	**Lot: 79, Sub: Emerald Cove, Plat:**	Permitting Office:	Columbia
City, State:	**, FL**	Permit Number:	26355
Owner:	**Willis Wade Residence**	Jurisdiction Number:	221000
Climate Zone:	**North**		

1.	New construction or existing	New	
2.	Single family or multi-family	Single family	
3.	Number of units, if multi-family	1	
4.	Number of Bedrooms	4	
5.	Is this a worst case?	Yes	
6.	Conditioned floor area (ft²)	2828 ft²	
7.	Glass type[1] and area: (Label reqd. by 13-104.4.5 if not default)		
a.	U-factor: (or Single or Double DEFAULT)	7a. Description Area (Dble Default) 432.0 ft²	
b.	SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 432.0 ft²	
8.	Floor types		
a.	Slab-On-Grade Edge Insulation	R=0.0, 208.0(p) ft	
b.	N/A		
c.	N/A		
9.	Wall types		
a.	Frame, Wood, Exterior	R=13.0, 2546.0 ft²	
b.	Frame, Wood, Adjacent	R=13.0, 214.0 ft²	
c.	N/A		
d.	N/A		
e.	N/A		
10.	Ceiling types		
a.	Under Attic	R=30.0, 2828.0 ft²	
b.	N/A		
c.	N/A		
11.	Ducts		
a.	Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 230.0 ft	
b.	N/A		

12.	Cooling systems		
a.	Central Unit	Cap: 28.0 kBtu/hr SEER: 13.00	
b.	Central Unit	Cap: 28.0 kBtu/hr SEER: 13.00	
c.	N/A		
13.	Heating systems		
a.	Electric Heat Pump	Cap: 28.0 kBtu/hr HSPF: 7.90	
b.	Electric Heat Pump	Cap: 28.0 kBtu/hr HSPF: 7.90	
c.	N/A		
14.	Hot water systems		
a.	Electric Resistance	Cap: 80.0 gallons EF: 0.93	
b.	N/A		
c.	Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)		
15.	HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)		

Glass/Floor Area: 0.15

Total as-built points: 37003
Total base points: 41023

PASS

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

PREPARED BY: _____

DATE: 9-28-07

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

OWNER/AGENT: _____

DATE: _____

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.

BUILDING OFFICIAL: _____

DATE: _____

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 79, Sub: Emerald Cove, Plat: , , FL,** PERMIT #:

BASE				AS-BUILT								
GLASS TYPES .18 X Conditioned Floor Area	X BSPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	SPM X	SOF	= Points	
.18	**2828.0**	**20.04**	**10201.2**	Double, Clear	E	1.5	7.0	36.0	42.06	0.94	1420.9	
				Double, Clear	S	99.0	7.0	10.0	35.87	0.43	154.9	
				Double, Clear	E	6.0	14.0	40.0	42.06	0.78	1304.9	
				Double, Clear	N	99.0	7.0	10.0	19.20	0.59	113.9	
				Double, Clear	E	6.0	7.0	36.0	42.06	0.55	838.2	
				Double, Clear	W	6.0	7.0	36.0	38.52	0.56	783.0	
				Double, Clear	W	4.0	7.0	18.0	38.52	0.69	475.7	
				Double, Clear	N	1.5	4.0	9.0	19.20	0.88	152.3	
				Double, Clear	N	1.5	6.0	16.0	19.20	0.94	288.4	
				Double, Clear	E	6.0	6.5	72.0	42.06	0.54	1626.5	
				Double, Clear	E	1.5	5.5	30.0	42.06	0.90	1131.0	
				Double, Clear	S	1.5	5.5	30.0	35.87	0.83	895.4	
				Double, Clear	S	1.5	1.5	4.0	35.87	0.52	74.7	
				Double, Clear	W	1.5	5.5	30.0	38.52	0.90	1036.6	
				Double, Clear	W	1.5	5.5	20.0	38.52	0.90	691.0	
				Double, Clear	W	1.5	5.5	20.0	38.52	0.90	691.0	
				Double, Clear	W	1.5	5.5	15.0	38.52	0.90	518.3	
				As-Built Total:				**432.0**			**12196.6**	

WALL TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM	= Points
Adjacent	214.0	0.70	149.8	Frame, Wood, Exterior	13.0	2546.0	1.50	3819.0
Exterior	2546.0	1.70	4328.2	Frame, Wood, Adjacent	13.0	214.0	0.60	128.4
Base Total:	**2760.0**		**4478.0**	**As-Built Total:**		**2760.0**		**3947.4**

DOOR TYPES	Area X	BSPM	= Points	Type	Area X	SPM	= Points
Adjacent	20.0	1.60	32.0	Exterior Insulated	60.0	4.10	246.0
Exterior	100.0	4.10	410.0	Exterior Insulated	40.0	4.10	164.0
				Adjacent Insulated	20.0	1.60	32.0
Base Total:	**120.0**		**442.0**	**As-Built Total:**	**120.0**		**442.0**

CEILING TYPES	Area X	BSPM	= Points	Type	R-Value	Area X	SPM X SCM =	Points
Under Attic	1874.0	1.73	3242.0	Under Attic	30.0	2828.0	1.73 X 1.00	4892.4
Base Total:	**1874.0**		**3242.0**	**As-Built Total:**		**2828.0**		**4892.4**

SUMMER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 79, Sub: Emerald Cove, Plat: , , FL,** PERMIT #:

BASE					AS-BUILT					
FLOOR TYPES	Area X	BSPM	= Points		Type	R-Value	Area X	SPM	=	Points
Slab	208.0(p)	-37.0	-7696.0		Slab-On-Grade Edge Insulation	0.0	208.0(p	-41.20		-8569.6
Raised	0.0	0.00	0.0							
Base Total:			**-7696.0**		**As-Built Total:**		**208.0**			**-8569.6**
INFILTRATION	Area X	BSPM	= Points				Area X	SPM	=	Points
	2828.0	10.21	28873.9				2828.0	10.21		28873.9
Summer Base Points: 39541.1					**Summer As-Built Points:**					**41782.7**
Total Summer Points	X System Multiplier	=	Cooling Points		Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Cooling Points
					(sys 1: Central Unit 28000 btuh ,SEER/EFF(13.0) Ducts:Unc(S),Unc(R),Int(AH),R6.0(INS)					
					41783	0.50	(1.09 x 1.147 x 0.91)	0.263	1.000	6240.1
					(sys 2: Central Unit 28000 btuh ,SEER/EFF(13.0) Ducts: None					
					41783	0.50	(1.00 x 1.147 x 1.00	0.263	1.000	6240.1
39541.1	**0.4266**		**16868.2**		**41782.7**	**1.00**	**1.138**	**0.263**	**1.000**	**12480.2**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 79, Sub: Emerald Cove, Plat: , , FL,** PERMIT #:

BASE				AS-BUILT								
GLASS TYPES .18 X Conditioned Floor Area	X BWPM	= Points		Type/SC	Overhang Ornt	Len	Hgt	Area X	WPM X	WOF	= Points	
.18	**2828.0**	**12.74**	**6485.2**	Double, Clear	E	1.5	7.0	36.0	18.79	1.03	694.5	
				Double, Clear	S	99.0	7.0	10.0	13.30	3.66	486.7	
				Double, Clear	E	6.0	14.0	40.0	18.79	1.09	822.1	
				Double, Clear	N	99.0	7.0	10.0	24.58	1.03	252.5	
				Double, Clear	E	6.0	7.0	36.0	18.79	1.25	843.4	
				Double, Clear	W	6.0	7.0	36.0	20.73	1.15	859.1	
				Double, Clear	W	4.0	7.0	18.0	20.73	1.10	410.5	
				Double, Clear	N	1.5	4.0	9.0	24.58	1.01	222.5	
				Double, Clear	N	1.5	6.0	16.0	24.58	1.00	394.2	
				Double, Clear	E	6.0	6.5	72.0	18.79	1.26	1711.2	
				Double, Clear	E	1.5	5.5	30.0	18.79	1.04	587.1	
				Double, Clear	S	1.5	5.5	30.0	13.30	1.15	457.6	
				Double, Clear	S	1.5	1.5	4.0	13.30	2.73	145.3	
				Double, Clear	W	1.5	5.5	30.0	20.73	1.03	639.3	
				Double, Clear	W	1.5	5.5	20.0	20.73	1.03	426.2	
				Double, Clear	W	1.5	5.5	20.0	20.73	1.03	426.2	
				Double, Clear	W	1.5	5.5	15.0	20.73	1.03	319.7	
				As-Built Total:				**432.0**			**9698.1**	

WALL TYPES	Area X	BWPM	= Points	Type	R-Value	Area X	WPM	= Points
Adjacent	214.0	3.60	770.4	Frame, Wood, Exterior	13.0	2546.0	3.40	8656.4
Exterior	2546.0	3.70	9420.2	Frame, Wood, Adjacent	13.0	214.0	3.30	706.2
Base Total:	**2760.0**		**10190.6**	**As-Built Total:**		**2760.0**		**9362.6**

DOOR TYPES	Area X	BWPM	= Points	Type	Area X	WPM	= Points
Adjacent	20.0	8.00	160.0	Exterior Insulated	60.0	8.40	504.0
Exterior	100.0	8.40	840.0	Exterior Insulated	40.0	8.40	336.0
				Adjacent Insulated	20.0	8.00	160.0
Base Total:	**120.0**		**1000.0**	**As-Built Total:**	**120.0**		**1000.0**

CEILING TYPES	Area X	BWPM	= Points	Type	R-Value	Area X	WPM X WCM	= Points
Under Attic	1874.0	2.05	3841.7	Under Attic	30.0	2828.0	2.05 X 1.00	5797.4
Base Total:	**1874.0**		**3841.7**	**As-Built Total:**		**2828.0**		**5797.4**

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 79, Sub: Emerald Cove, Plat: , , FL,** PERMIT #:

BASE				AS-BUILT						
FLOOR TYPES	Area X	BWPM	= Points	Type	R-Value	Area X	WPM	=	Points	
Slab	208.0(p)	8.9	1851.2	Slab-On-Grade Edge Insulation	0.0	208.0(p	18.80		3910.4	
Raised	0.0	0.00	0.0							
Base Total:			**1851.2**	**As-Built Total:**		**208.0**			**3910.4**	
INFILTRATION	Area X	BWPM	= Points			Area X	WPM	=	Points	
	2828.0	-0.59	-1668.5			2828.0	-0.59		-1668.5	
Winter Base Points:			**21700.2**	**Winter As-Built Points:**						**28100.0**
Total Winter Points	X System Multiplier	= Heating Points		Total Component (System - Points)	X Cap Ratio	X Duct Multiplier (DM x DSM x AHU)	X System Multiplier	X Credit Multiplier	= Heating Points	
				(sys 1: Electric Heat Pump 28000 btuh ,EFF(7.9) Ducts:Unc(S),Unc(R),Int(AH),R6.0						
				28100.0	0.500	(1.069 x 1.169 x 0.93)	0.432	1.000	7048.2	
				(sys 2: Electric Heat Pump 28000 btuh ,EFF(7.9) Ducts: None						
				28100.0	0.500	(1.00 x 1.169 x 1.00)	0.432	1.000	7048.2	
21700.2	**0.6274**	**13614.7**		**28100.0**	**1.00**	**1.162**	**0.432**	**1.000**	**14096.4**	

WATER HEATING & CODE COMPLIANCE STATUS

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 79, Sub: Emerald Cove, Plat: , , FL,** PERMIT #:

BASE				AS-BUILT							
WATER HEATING											
Number of Bedrooms	X	Multiplier	= Total	Tank Volume	EF	Number of Bedrooms	X Tank Ratio	X Multiplier	X Credit Multiplier	= Total	
4		2635.00	10540.0	80.0	0.93	4	1.00	2606.67	1.00	10426.7	
				As-Built Total:						**10426.7**	

CODE COMPLIANCE STATUS

BASE				AS-BUILT			
Cooling Points +	Heating Points +	Hot Water Points =	Total Points	Cooling Points +	Heating Points +	Hot Water Points =	Total Points
16868	**13615**	**10540**	**41023**	**12480**	**14096**	**10427**	**37003**

PASS

Code Compliance Checklist

Residential Whole Building Performance Method A - Details

ADDRESS: **Lot: 79, Sub: Emerald Cove, Plat: , , FL,** PERMIT #:

6A-21 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

COMPONENTS	SECTION	REQUIREMENTS FOR EACH PRACTICE	CHECK
Exterior Windows & Doors	606.1.ABC.1.1	Maximum:.3 cfm/sq.ft. window area; .5 cfm/sq.ft. door area.	
Exterior & Adjacent Walls	606.1.ABC.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	606.1.ABC.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	606.1.ABC.1.2.3	Between walls & ceilings; penetrations of ceiling plane of 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	606.1.ABC.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 rated with < 2.0 cfm from conditioned space, tested.	
Multi-story Houses	606.1.ABC.1.2.5	Air barrier on perimeter of floor cavity between floors.	
Additional Infiltration reqts	606.1.ABC.1.3	Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air.	

6A-22 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

COMPONENTS	SECTION	REQUIREMENTS	CHECK
Water Heaters	612.1	Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required.	
Swimming Pools & Spas	612.1	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%.	
Shower heads	612.1	Water flow must be restricted to no more than 2.5 gallons per minute at 80 PSIG.	
Air Distribution Systems	610.1	All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 min. insulation.	
HVAC Controls	607.1	Separate readily accessible manual or automatic thermostat for each system.	
Insulation	604.1, 602.1	Ceilings-Min. R-19. Common walls-Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE* = 84.5

The higher the score, the more efficient the home.

Willis Wade Residence, Lot: 79, Sub: Emerald Cove, Plat: , , FL,

1.	New construction or existing	New	12.	Cooling systems	
2.	Single family or multi-family	Single family	a.	Central Unit	Cap: 28.0 kBtu/hr
3.	Number of units, if multi-family	1			SEER: 13.00
4.	Number of Bedrooms	4	b.	Central Unit	Cap: 28.0 kBtu/hr
5.	Is this a worst case?	Yes			SEER: 13.00
6.	Conditioned floor area (ft²)	2828 ft²	c.	N/A	
7.	Glass type [1] and area: (Label reqd. by 13-104.4.5 if not default)				
a.	U-factor: (or Single or Double DEFAULT)	7a. Description Area (Dble Default) 432.0 ft²	13.	Heating systems	
b.	SHGC: (or Clear or Tint DEFAULT)	7b. (Clear) 432.0 ft²	a.	Electric Heat Pump	Cap: 28.0 kBtu/hr
8.	Floor types				HSPF: 7.90
a.	Slab-On-Grade Edge Insulation	R=0.0, 208.0(p) ft	b.	Electric Heat Pump	Cap: 28.0 kBtu/hr
b.	N/A				HSPF: 7.90
c.	N/A		c.	N/A	
9.	Wall types		14.	Hot water systems	
a.	Frame, Wood, Exterior	R=13.0, 2546.0 ft²	a.	Electric Resistance	Cap: 80.0 gallons
b.	Frame, Wood, Adjacent	R=13.0, 214.0 ft²			EF: 0.93
c.	N/A		b.	N/A	
d.	N/A		c.	Conservation credits (HR-Heat recovery, Solar DHP-Dedicated heat pump)	
e.	N/A		15.	HVAC credits (CF-Ceiling fan, CV-Cross ventilation, HF-Whole house fan, PT-Programmable Thermostat, MZ-C-Multizone cooling, MZ-H-Multizone heating)	
10.	Ceiling types				
a.	Under Attic	R=30.0, 2828.0 ft²			
b.	N/A				
c.	N/A				
11.	Ducts				
a.	Sup: Unc. Ret: Unc. AH: Interior	Sup. R=6.0, 230.0 ft			
b.	N/A				

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

Builder Signature: _____ Date: _____

Address of New Home: _____ City/FL Zip: _____

**NOTE: The home's estimated energy performance score is only available through the FLA/RES computer program. This is not a Building Energy Rating. If your score is 80 or greater (or 86 for a US EPA/DOE EnergyStar™ designation), your home may qualify for energy efficiency mortgage (EEM) incentives if you obtain a Florida Energy Gauge Rating. Contact the Energy Gauge Hotline at 321/638-1492 or see the Energy Gauge web site at www.fsec.ucf.edu for information and a list of certified Raters. For information about Florida's Energy Efficiency Code For Building Construction, contact the Department of Community Affairs at 850/487-1824.*

1 Predominant glass type. For actual glass type and areas, see Summer & Winter Glass output on pages 2&4.

HALL'S PUMP & WELL SERVICE, INC.

SPECIALIZING IN 4"-8" WELLS

DONALD AND MARY HALL
OWNERS

PHONE (904) 752-1554
FAX (904) 755-7022
LAKE CITY, FLORIDA 32055
904 NW Main Blvd.

June 12, 2002

NOTICE TO ALL CONTRACTORS

Please be advised that due to the new building codes we will use a large capacity diaphram tank on all new wells. This will insure a minimum of one (1) minute draw down or one (1) minute refill. If a smaller diaphram tank is used then we will install a cycle stop valve which will produce the same results.

If you have any questions please feel free to call our office anytime.

Thank you,

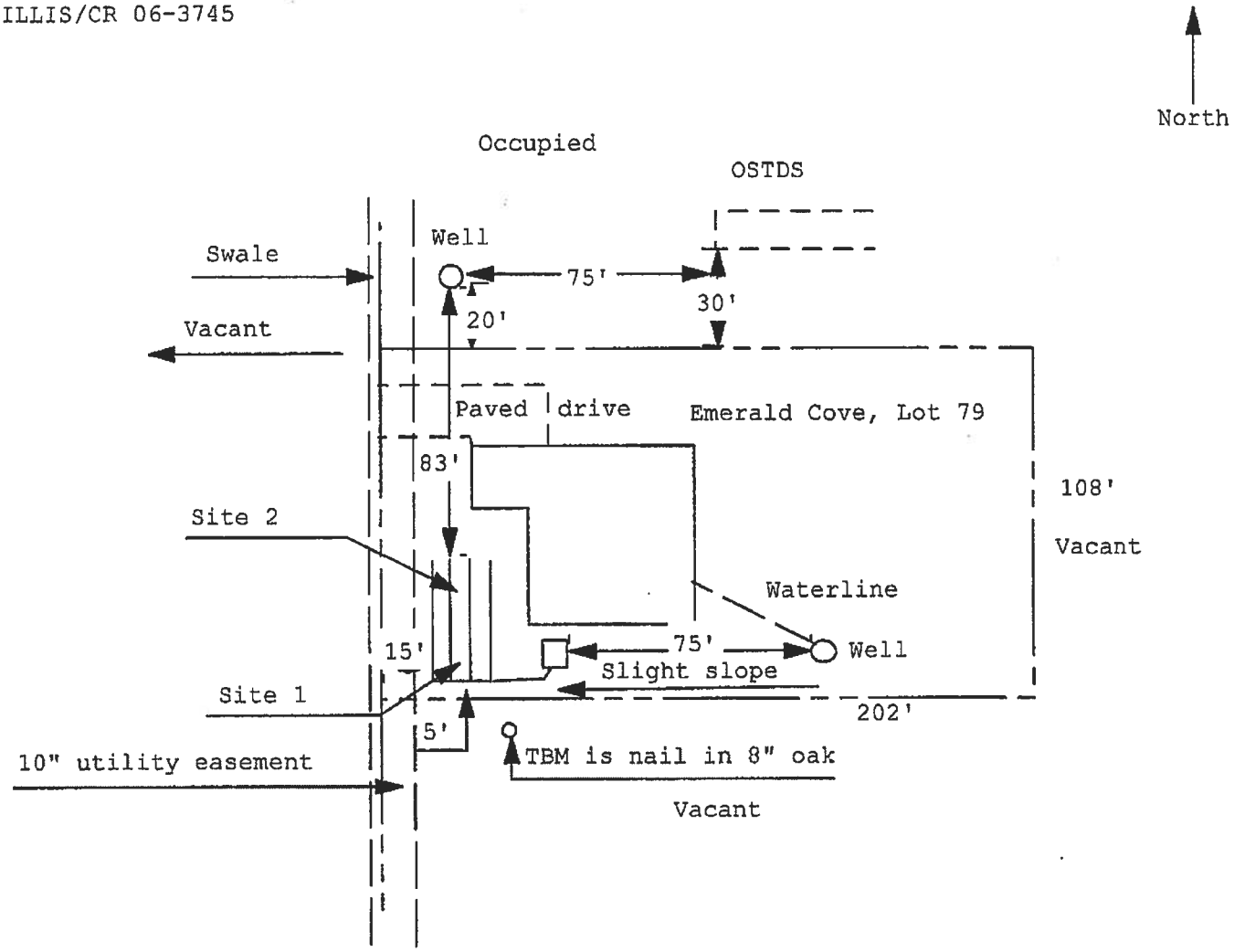
Donald D. Hall
DDH/jk

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

Permit Application Number: 07-0767

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

WILLIS/CR 06-3745



1 inch = 50 feet

Site Plan Submitted By Paul Lloyd **Date** 10/8/07

Plan Approved ✓ **Not Approved** ____ **Date** 10/9/07

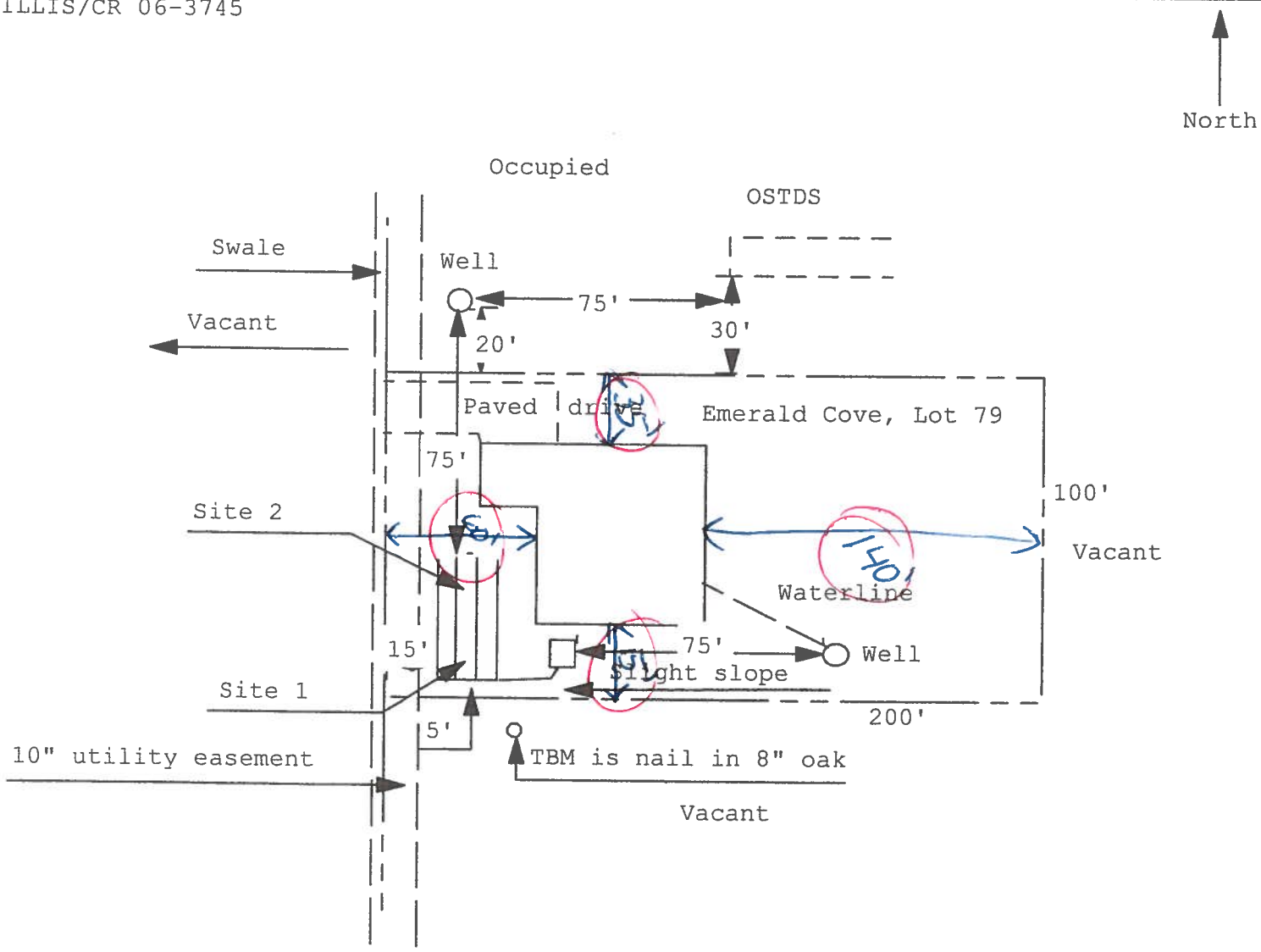
By [illegible] Columbia **CPHU**

Notes: ____

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

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH UNIT

WILLIS/CR 06-3745



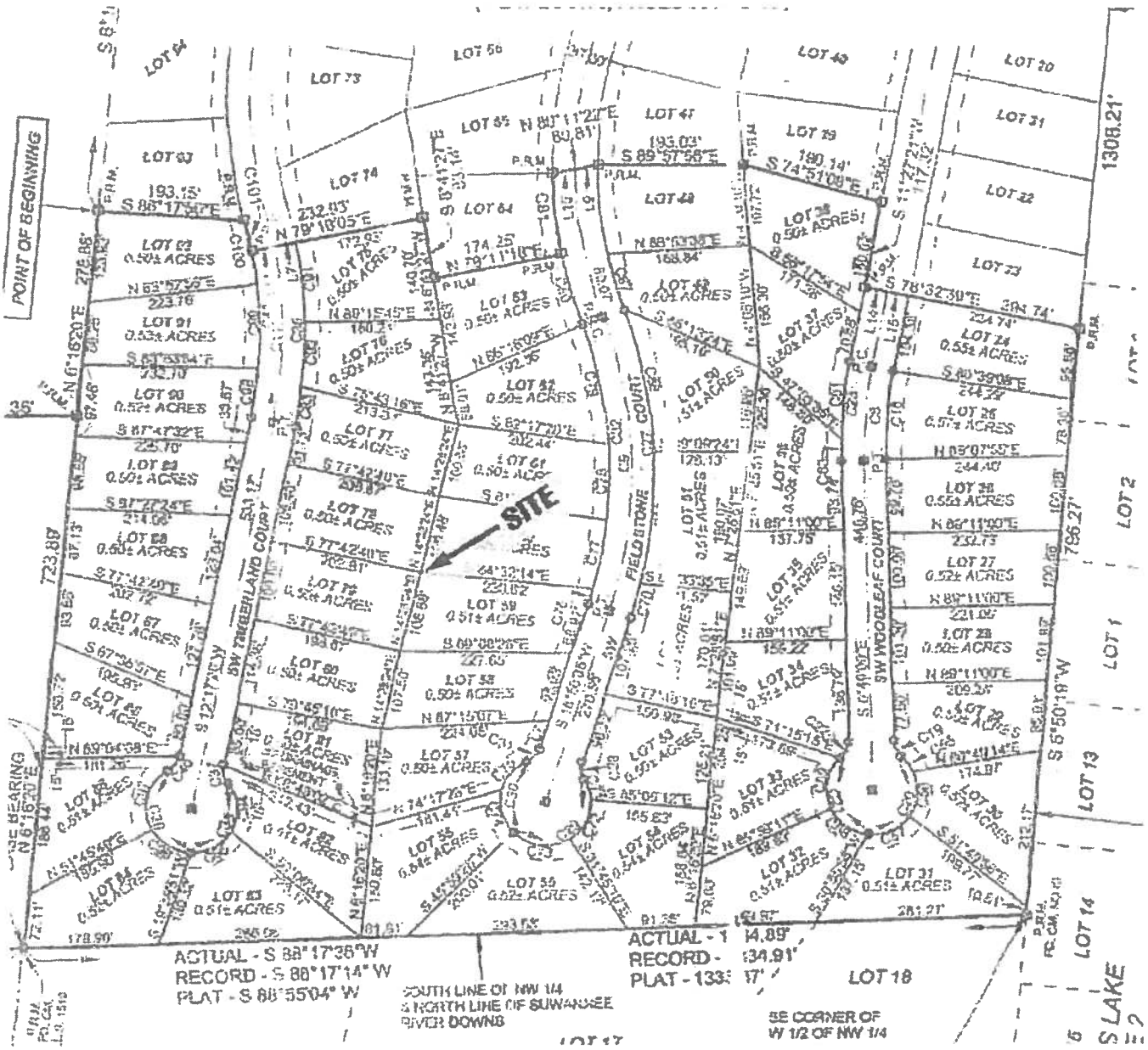
1 inch = 50 feet

Site Plan Submitted By_____ **Date**_____

Plan Approved_____ **Not Approved**_____ **Date**_____

By_____ _____**CPHU**

Notes: _____


POINT OF BEGINNING
SITE
SW TIMBERLAND COURT
SW FIELDSTONE COURT
SW WOODLEAF COURT
LOT 1
LOT 2
LOT 13
LOT 14
LOT 18
1308.21'
723.89'
786.27'
ACTUAL - S 88°17'36"W
RECORD - S 88°17'14" W
PLAT - S 88°55'04" W
SOUTH LINE OF NW 1/4
& NORTH LINE OF SUWANNEE
RIVER DOWNS
SE CORNER OF
W 1/2 OF NW 1/4
S LAKE

Take Note: Second story windows used for EMERGENCY ESCAPE

SECTION R310

EMERGENCY ESCAPE AND RESCUE OPENINGS

R310.1.1 Minimum opening area.

All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.530 m2).

Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet (0.465 m2).

R310.1.2 Minimum opening height.

The minimum net clear opening height shall be 24 inches (610 mm).

R310.1.3 Minimum opening width.

The minimum net clear opening width shall be 20 inches (508 mm).

R310.1.4 Operational constraints.

Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

PRODUCT APPROVAL SPECIFICATION SHEET

Location: _____ **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

Category/Subcategory	Manufacturer	Product Description	Approval Number(s)
A. EXTERIOR DOORS			
1. Swinging	THERMTRU	6'8" STEEL/WOOD upto 6 FT OPEN INCLUDES SIDELITES	01-0828.08
2. Sliding			
3. Sectional			
4. Roll up			
5. Automatic			
6. Other			
B. WINDOWS	CAPITAL & BETTER BILT	SINGLE HUNG	AAMA CERT BB-101/I.S.2.-97
1. Single hung	MI Products	740, 165, 3240, 4250 Series	CTLA-744W-B
2. Horizontal Slider			
3. Casement			
4. Double Hung			
5. Fixed		740 165 3240 4250 Series	01-35673.05
6. Awning			
7. Pass -through			
8. Projected			
9. Mullion	MI Products	740, 165, 3240, 4250 Series	01-35673.05
10. Wind Breaker			
11 Dual Action			
12. Other			
C. PANEL WALL			
1. Siding (Sheer Wall)	NORBOARD	8'-9'x10' OSB WALL Sheeting WIND STROM	NER 108
2. Soffits			
3. EIFS			
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7. Glass block			
8. Membrane	BARRICADE	BUILDING WRAP FED SPEC.	UU B790A
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles			
2. Underlayments	WOODLAND	15#, 30# FELT	ASTM D-4869
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			

ategory (cont.)	Manufacturer	Product Description	Approval Number(s)
Applied Roof Sys			
ents-Adhesives – atings			
Roof Tile Adhesive			
. Spray Applied Polyurethane Roof			
17. Other			
E. SHUTTERS			
1. Accordion			
2. Bahama			
3. Storm Panels			
4. Colonial			
5. Roll-up			
6. Equipment			
7. Others			
F. SKYLIGHTS			
1. Skylight			
2. Other			
G. STRUCTURAL COMPONENTS			
1. Wood connector/anchor	SIMPSON STRONG TIE	H-16, SP4, H2.5A, H-10, LSTA,	FL 2822
2. Truss plates			
3. Engineered lumber	ANTHONY	3 1/2" - 5 1/2" to 24' GLU-LAM	ASTM 7182.80
4. Railing			
5. Coolers-freezers			
6. Concrete Admixtures			
7. Material			
8. Insulation Forms			
9. Plastics			
10. Deck-Roof	NORBOARD	7/16" - 1/2" OSB	NER 108
11. Wall			
12. Sheds			
13. Other			
H. NEW EXTERIOR ENVELOPE PRODUCTS			
1.			
2.			

The products listed below did not demonstrate product approval at plan review. I understand that at the ime of inspection of these products, the following information must be available to the inspector on the obsite; 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.

understand these products may have to be removed if approval cannot be demonstrated during inspect on.

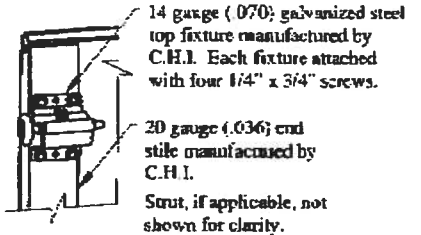
Contractor or Contractor's Authorized Agent Signature

Print Name

Date

Location

Permit # (FOR STAFF USE ONLY)



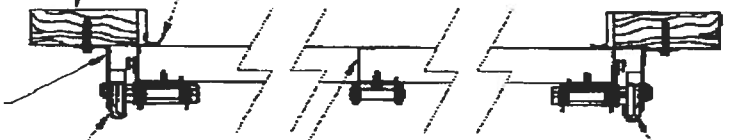
14 gauge (.070) galvanized steel top fixture manufactured by C.H.I. Each fixture attached with four 1/4" x 3/4" screws.

20 gauge (.036) end stile manufactured by C.H.I.

Strut, if applicable, not shown for clarity.

The 2x6 vertical wood jambs are to be grade 2 or better southern pine. Fasteners may be countersunk to provide a flush mounting surface.

2" x 7/16" (nominal) Stop molding required (not supplied by C.H.I.)



12 gauge (.095) galvanized steel track bracket fastened to wood jamb with one 5/16" x 1-5/8" wood lag screw per bracket.

20 gauge (.036) center stile manufactured by C.H.I.

2" steel roller

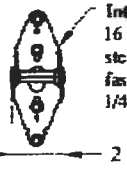
2" x .051 min. galvanized steel track fastened to track brackets. Each track bracket attached with one 1/4" x 5/8" track bolt and nut.

End Hinge
16 gauge (.058) galvanized steel end hinge fastened to section with four 1/4" x 3/4" screws.

2" steel track roller

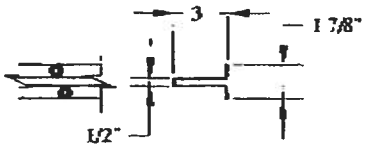
2 3/4"

3-1/2" (min.) stem



Intermediate Hinge
16 gauge (.058) galvanized steel intermediate hinge fastened to section with four 1/4" x 3/4" screws.

2 3/4"

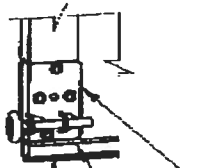


3

1 7/8"

1/2"

20 gauge (.034) 33 ksi galvanized steel 3" strut attached with two 1/4" x 3/4" screws per stile or hinge plate

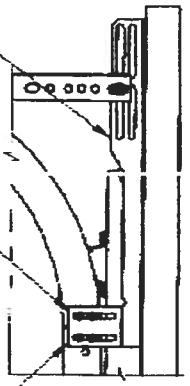


12 gauge (.102) galvanized steel bottom bracket manufactured by C.H.I. Each bracket attached with four red 1/4" x 3/4" screws.

Vinyl weatherstrip

Aluminum extrusion

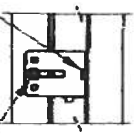
Details on some views may have been omitted for clarity.



12 gauge (.086) galvanized steel flag bracket fastened to wood jamb with three 5/16" x 1-5/8" wood lag screws

Flag bracket attached to horizontal track with two 1/4" x 5/8" track bolts and nuts.

Flag bracket attached to vertical track with two 1/4" x 5/8" track bolts and nuts.



12 gauge (.095) galvanized steel track bracket fastened to wood jamb with one 5/16" x 1-5/8" wood lag screw per bracket.

Each track bracket attached with one 1/4" x 5/8" track bolt and nut. Or two 1/4" x 11/22" rivets.

Design Load: 19.2 pos / 22.0 neg
Test Load: 28.8 pos / 33.0 neg
page 2 of 2

John E. Scales, P.E.
1411 LeMay Street #205
Carrollton, Texas 75007
Florida P.E. # 51737

Professional Engineer's seal provided only for verification of windload construction details

C.H.I.

nts

10-25-2006

Model 2250/51 (10'-0" wide)
C.H.I. Drawing: Z3-1007-01100

CERTIFICATE OF 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 33-3S-16-02438-179 **Building permit No.** 000026355

Use Classification SFD,UTILITY **Fire:** 12.84

Permit Holder WADE WILLIS **Waste:** 33.50

Owner of Building WADE WILLIS **Total:** 46.34

Location: 325 SW TIMBERLAND COURT, LAKE CITY, FL

Date: 08/20/2008

Wayne A Russ

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)