CK # 3346

Columbia County Building Permit Application

For Office Use Only Application # 1206-2 Date Received 6-1-12 By LH Permit # 1951 / 30221

Zoning Official BLK Date 05 JUNE 2012 Flood Zone X Land Use A-3 Zoning PRRD F 30 S 25 R 25

FEMA Map # N/A Elevation N/A MFE 85.0' per plat River N/A Plans Examiner T.C. Date 6-4-12

Comments Elevation Confirmation Letter Required at Slab

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

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

IMPACT FEES: EMS _____ Fire _____ Corr _____ ☑ Sub VF Form ok

Road/Code _____ School _____ = TOTAL (Suspended) □ Ellisville Water ☑ App Fee Paid

Septic Permit No. 12-0275 Fax 758-8920

Name Authorized Person Signing Permit Bryan Zeiher Phone 752-8653

Address PO Box 815 Lake City, FL 32056

Owners Name Jim / Celeste Garrison Phone 478-737-6926

911 Address 1047 SW Mandiba Dr Lake City, FL 32024

Contractors Name Bryan Zeiher Phone 752-8653

Address PO Box 815 Lake City, FL 32056

Fee Simple Owner Name & Address —

Bonding Co. Name & Address —

Architect/Engineer Name & Address ARH Homes / Mark Disosway PO Box 868 LC FL 32056

Mortgage Lenders Name & Address Alarion Bank, ~~Lake City~~, FL Gainesville

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

Property ID Number 18-5S-17-09280-135 Estimated Cost of Construction 257,000-

Subdivision Name The Oaks of Lake City Lot 35 Block ____ Unit ____ Phase 1

Driving Directions 441 S, T/R on CR 131, go 7 miles, T/R into 2nd Oaks entrance, Mandiba, 3rd home on right

Number of Existing Dwellings on Property Ø

Construction of New Home Total Acreage 1 Lot Size ____

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 22'

Actual Distance of Structure from Property Lines - Front 50 Side 45 Side 50 Rear 152

Number of Stories 1 Heated Floor Area 2492 Total Floor Area 3467 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. **CODE:** Florida Building Code 2010 and the 2008 National Electrical Code.

- Spoke to Brian 6-6-12

COLUMBIA COUNTY BUILDING DEPARTMENT
RESIDENTIAL CHECK LIST

MINIMUM PLAN REQUIREMENTS: FLORIDA BUILDING CODE RESIDENTIAL 2010 EFFECTIVE 15 MARCH 2012 AND THE NATIONAL ELECTRICAL 2008 EFFECTIVE 1 OCTOBER 2009

ALL REQUIREMENTS ARE SUBJECT TO CHANGE

ALL BUILDING PLANS MUST INDICATE COMPLIANCE WITH THE CURRENT 2010 FLORIDA BUILDING CODES RESIDENTIAL, EFFECTIVE 15 MARCH 2012. NATIONAL ELECTRICAL CODE 2008 EFFECTIVE 1 OCTOBER 2009. 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 FLORIDA BUILDING CODE FIGURE 1609-A THROUGH 1609-C ULTIMATE DESIGN WIND SPEEDS FOR RISK CATEGORY AND BUILDINGS AND OTHER STRUCTURES

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL			Items to Include- Each Box shall be Circled as Applicable		
				Yes	No	N/A
1	Two (2) complete sets of plans containing the following:			✓		
2	All drawings must be clear, concise, drawn to scale, details that are not used shall be marked void			✓		
3	Condition space (Sq. Ft.) 2492		Total (Sq. Ft.) under roof 3467	IIIIIIII	IIIIIIII	IIIII

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:

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

Wind-load Engineering Summary, calculations and any details are required.

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
8	**Plans or specifications must show compliance with FBCR Chapter 3**	IIIIII	IIIII	IIIIII
		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/m²), to be used for the design of exterior component, cladding materials not specifally 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	Show compliance with Section FBCR 310 Emergency escape and rescue opening shown in each bedroom (net clear opening shown) and Show compliance with Section FBC 1405.13.2 where the opening of an operable window is located more than 72 inches above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches shall be fixed or have openings through which a 4-inch-diameter sphere cannot pass.	✓		
25	Safety glazing of glass where needed	✓		
26	Fireplaces types (gas appliance) (vented or non-vented) or wood burning with Hearth (see chapter 10 and chapter 24 of FBCR)			✓
27	Show stairs with dimensions (width, tread and riser and total run) details of guardrails, Handrails			✓
28	Identify accessibility of bathroom (see FBCR SECTION 320)	✓		

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 plans (see Florida product approval form)

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

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 valve of soil 1000 Pound Per Square Foot	✓		
33	Location of horizontal and vertical steel, for foundation or walls (include # size and type) **For** structures with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an grounding electrode system. Per the National Electrical Code article 250.52.3	✓		

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 318: 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. **Protection shall be provided by registered termiticides**	✓		

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 priers			✓
41	Girder type, size and spacing to load bearing walls, stem wall and/or priers			✓
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			✓
48	Show the sub-floor structural panel sheathing type, thickness and fastener schedule on the edges & inter of the areas structural panel sheathing			✓

49	Show Draftstopping, Fire caulking and Fire blocking			✓
50	Show fireproofing requirements for garages attached to living spaces, per FBCR section 302.6			✓
51	Provide live and dead load rating of floor framing systems (psf).			✓

FBCR CHAPTER 6 WOOD WALL FRAMING CONSTRUCTION

	GENERAL REQUIREMENTS: APPLICANT – PLEASE CHECK ALL APPLICABLE BOXES BEFORE SUBMITTAL	Items to Include- Each Box shall be Circled as Applicable		
		YES	**NO**	**N/A**
52	Stud type, grade, size, wall height and oc spacing for all load bearing or shear walls	✓		
53	Fastener schedule for structural members per table IRC 602.3 are to be shown	✓		
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	✓		
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	✓		
56	Show sizes, type, span lengths and required number of support jack studs, king studs for shear wall opening and girder or header per IRC Table 502.5 (1)	✓		
57	Indicate where pressure treated wood will be placed	✓		
58	Show all wall structural panel sheathing, grade, thickness and show fastener schedule for structural panel sheathing edges & intermediate areas	✓		
59	A detail showing gable truss bracing, wall balloon framing details or/ and wall hinge bracing detail	✓		

FBCR :ROOF SYSTEMS:

60	Truss design drawing shall meet section FBCR 802.1.6.1 Wood trusses	✓		
61	Include a layout and truss details, signed and sealed by Florida Professional Engineer	✓		
62	Show types of connector's assemblies' and resistance uplift rating for all trusses and rafters	✓		
63	Show gable ends with rake beams showing reinforcement or gable truss and wall bracing details	✓		
64	Provide dead load rating of trusses	✓		

FBCR 802:Conventional Roof Framing Layout

65	Rafter and ridge beams sizes, span, species and spacing			✓
66	Connectors to wall assemblies' include assemblies' resistance to uplift rating			✓
67	Valley framing and support details			✓
68	Provide dead load rating of rafter system			✓

FBCR 803 ROOF SHEATHING

69	Include all materials which will make up the roof decking, identification of structural panel sheathing, grade, thickness	✓		
70	Show fastener Size and schedule for structural panel sheathing on the edges & intermediate areas	✓		

ROOF ASSEMBLIES FRC Chapter 9

71	Include all materials which will make up the roof assembles covering	✓		
72	Submit Florida Product Approval numbers for each component of the roof assembles covering	✓		

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 chapter11 Residential buildings compliance methods. **Two of the required forms are to be submitted**, *N1100.1.1.1 As an alternative to the computerized Compliance Method A, the Alternate Residential Point System Method hand calculation, Alternate Form 600A, may be used. All requirements specific to this calculation are located in Sub appendix C to Appendix G. Buildings complying by this alternative shall meet all mandatory requirements of this chapter. Computerized versions of the Alternate Residential Point System Method shall not be acceptable for code compliance.*

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

HVAC information

77	Submit two copies of a Manual J sizing equipment or equivalent computation study	✓		
78	Exhaust fans shown in bathrooms **Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous required**	✓		
79	Show clothes dryer route and total run of exhaust duct	✓		

Plumbing Fixture layout shown

80	All fixtures waste water lines shall be shown on the foundation plan	✓		
81	Show the location of water heater	✓		

Private Potable Water

82	Pump motor horse power 1.5	✓		
83	Reservoir pressure tank gallon capacity	✓		
84	Rating of cycle stop valve if used	✓		

Electrical layout shown including

85	Show Switches, receptacles outlets, lighting fixtures and Ceiling fans	✓		
86	Show all 120-volt, single phase, 15- and 20-ampere branch circuits outlets required to be protected by **Ground-Fault Circuit Interrupter (GFCI) Article 210.8 A**	✓		
87	Show the location of smoke detectors & Carbon monoxide detectors	✓		
88	Show service panel, sub-panel, location(s) and total ampere ratings	✓		
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. **For structures** with foundation which establish new electrical utility companies service connection a Concrete Encased Electrode will be required within the foundation to serve as an Grounding electrode system. Per the National Electrical Code article 250.52.3	✓		

90	Appliances and HVAC equipment and disconnects	✓		
91	Show all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas shall be protected by a listed **Combination arc-fault circuit interrupter,** Protection device.	✓		

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.

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

THE FOLLOWING ITEMS MUST BE SUBMITTED WITH BUILDING PLANS

		YES	NO	N/A
92	**Building Permit Application** A current On-Line Building Permit Application www.ccpermit.com is to be completed, by following the Checklist all supporting documents must be submitted. There is a **$15.00** application fee.	✓		
93	**Parcel Number** The parcel number (Tax ID number) from the Property Appraisers Office (386) 758-1083 is required. A copy of property deed is also requested. www.columbiacountyfla.com	✓		
94	**Environmental Health Permit or Sewer Tap Approval** A copy of a approved Columbia County Environmental Health (386) 758-1058	✓		
95	**City of Lake City** A permit showing an approved waste water sewer tap 386-752-2031			✓
96	**Toilet facilities shall be provided for all construction sites**	✓		
97	**Town of Fort White** (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	**Flood Information:** 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	**CERTIFIED FINISHED FLOOR ELEVATIONS** will be required on any project where the approved FIRM Flood Maps show the property is in a AE, Floodway, and AH flood zones. Additionally One Foot Rise letters are required for AE and AH zones. In the Floodway Flood zones a Zero Rise letter is required.			✓
100	A Flood development permit is also required for AE, Floodway & AH. Development permit cost is **$50.00**	✓		
101	**Driveway Connection:** If the property does not have an existing access to a public road, then an application for a culvert permit (**$25.00**) must be made. County Public Works Dept. determines the size and length of every culvert before instillation and completes a final inspection before permanent power is granted. If the applicant feels that a culvert is not needed, they may apply for a culvert waiver (**$50.00**) Separate Check when issued. If the project is to be located on an F.D.O.T. maintained road, then an F.D.O.T. access permit is required.	✓		
102	**911 Address:** An application for a 911address must be applied for and **received** through the Columbia County Emergency Management Office of 911 Addressing Department (386) 758-1125 Ext. 3	✓		

Prepared by:
Elaine R. Davis
American Title Services of Lake City, Inc.
321 SW Main Boulevard, Suite 105
Lake City, Florida 32025

File Number: 12-134

Inst. 201212006187 Date:4/24/2012 Time:11:07 AM
Doc Stamp-Deed:175.00
DC,P.DeWitt Cason,Columbia County Page 1 of 1 B:1233 P:1343

WARRANTY DEED

Made this April 23rd 2012 A.D.

By **WILLIAM E. GAILEY, SR.**, whose address is: 4618 Oak Hammock Court, Ponce Inlet, Florida 32127, hereinafter called the grantor,

to **JAMES H. GARRISON and CELESTE G. GARRISON, husband and wife**, whose post office address is: 6109 Churchside Drive, Lithia, Florida 33547, hereinafter called the grantee:

(Whenever used herein the term "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)

Witnesseth, that the grantor, for and in consideration of the sum of Ten Dollars, ($10.00) and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee, all that certain land situate in Columbia County, Florida, viz:

LOT 35, OAKES OF LAKE CITY PHASE 1, a subdivision according to the Plat thereof as recorded in Plat Book 9 pages 46 - 52, Public Records of **COLUMBIA COUNTY, FLORIDA.**

Said property is not the homestead of the Grantor under the laws and constitution of the State of Florida in that neither Grantor or any members of the household reside thereon

Parcel ID Number: **09280-135**

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

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

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances except taxes accruing subsequent to December 31, 2011.

In Witness Whereof, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Printed Name Raymond M Dubois

Witness Printed Name Catherine A Mazza

WILLIAM E. GAILEY, SR. (Seal)
Address: 4618 Oak Hammock Court, Ponce Inlet, Florida 32127

(Seal)

CAROLINE HARAPAS
Notary Public - State of Florida
My Comm. Expires Dec 23, 2013
Commission # DD 948608
Bonded Through National Notary Assn.

State of FLORIDA
County of Columbia

The foregoing instrument was acknowledged before me this 13 day of April, 2012, by WILLIAM E. GAILEY, SR., who is/are personally known to me or who has produced Drivers License as identification.

Notary Public
Print Name: CAROLINE HARAPAS
My Commission Expires: DEC 23 2013

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: 4/26/2012 **DATE ISSUED:** 5/3/2012

ENHANCED 9-1-1 ADDRESS:

1047 SW MANDIBA DR

LAKE CITY FL 32024

PROPERTY APPRAISER PARCEL NUMBER:

18-5S-17-09280-135

Remarks:

ADDRESS FOR PROPOSED STRUCTURE ON PARCEL.

Address Issued By: SIGNED: / RONAL N. CROFT

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.

2269

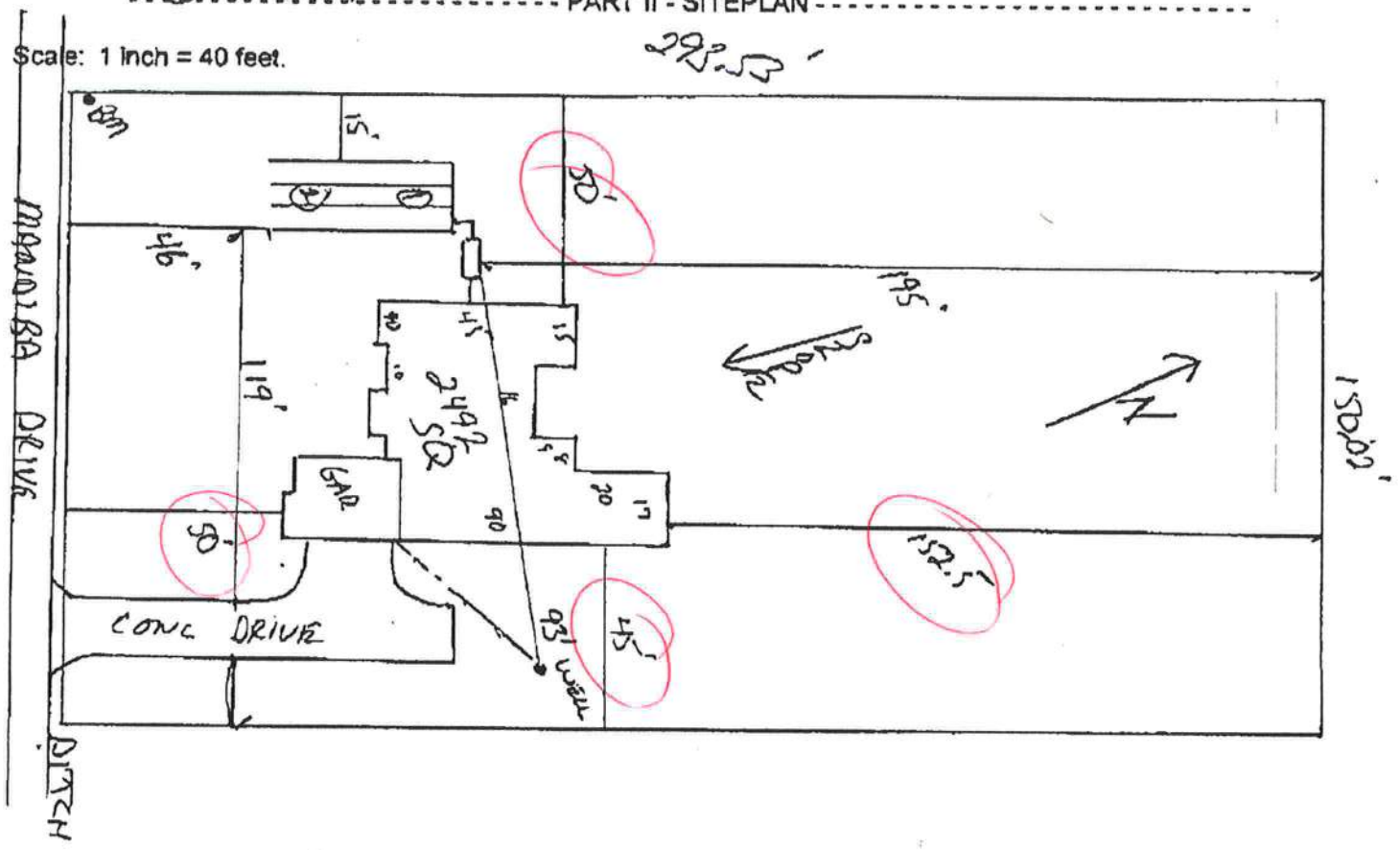
STATE OF FLORIDA
DEPARTMENT OF HEALTH
APPLICATION FOR ONSITE SEWAGE DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permit Application Number 12-0325

GARRISON

PART II - SITEPLAN

Scale: 1 inch = 40 feet.



Notes: _____

Site Plan submitted by: _____ MASTER CONTRACTOR

Plan Approved ✓ Not Approved ____ Date 5/30/12

By _____ County Health Department

ALL CHANGES MUST BE APPROVED BY THE COUNTY HEALTH DEPARTMENT

DH 4016, 08/09 (Obsoletes previous editions which may not be used) Incorporated: 64E-6.001, FAC
(Stock Number: 5744-002-4015-6)

Water Wells
Pumps & Service

Phone: (386) 752-6677
Fax: (386) 752-1477

Lynch Well Drilling, Inc.

173 SW Young Place
Lake City, FL 32025

June 1, 2012

To Whom It May Concern:

As required by building code regulations for Columbia County in order that a building permit can be issued, the following well information is provided with regard to the well for Bryan Zecher Construction (Garrison) The Oaks lot 35.

Size of Pump Motor:	1 1/2 HP 20 gallons per min.
Size of Pressure Tank:	86 -Gallon Bladder Tank - 26.4 Draw down
Cycle Stop Valve Used:	No
Constant Pressure System:	No

Should you require any additional information, please contact us.

Sincerely,

Linda Newcomb

Linda Newcomb
Lynch Well Drilling, Inc.

Columbia County Building Department
Culvert Permit

Attn: Connie

Culvert Permit No.
000001951

DATE 06/12/2012 PARCEL ID # 18-5S-17-09280-135 (30221)

APPLICANT BRYAN ZECHER PHONE 386.752.8653

ADDRESS POB 815 LAKE CITY FL 32056

OWNER JIM & CELESTE GARRISON PHONE 386.752.8653

ADDRESS POB 815 LAKE CITY FL 32056

CONTRACTOR BRYAN ZECHER PHONE 386.752.8653

LOCATION OF PROPERTY 441-S TO C-131,TR GO 7 MILES OUT TO 2ND ENTRANCE @ THE OAKS TO MANDIBA AND IT'S THE 3RD PLACE ON R.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT THE OAK OF LAKE CTY 35 1

INSTALLATION INFORMATION

SIGNATURE

(A) A culvert shall be required to be installed as part of any newly constructed private driveway or road, or public road, which connects to a county road in Columbia County. Culvert installation for residential use shall require a permit issued by the Building and Zoning Department. Prior to any culvert permit being issued, an inspection by the Public Works Department shall be required to determine the proper size, length, and location for installation. Culvert installation for commercial, industrial, and other uses shall conform to the approved site plan or to the specifications of a registered engineer. Joint use culverts will comply with Florida Department of Transportation specifications.

(B) The culvert shall comply and be installed in accordance with Columbia County Land Development Regulation, Access Control: Section 4.2.3 standards. Proper installation of the culvert shall be verified by a final inspection performed by the Public Works Department.

(C) All culverts required by this policy shall be installed prior to the Building Department granting permission to connect permanent electrical service to the facility or facilities being serviced by newly constructed private driveway or road. In cases where no electrical service exists, installation shall be completed prior to final inspection approval.

(D) Mitered-end culverts shall be used in the following applications:
(1) When the culvert is to be placed giving access to a paved street.; (2) When the road is contained within a subdivision (recorded or unrecorded) that has not reached a "build out" of fifty percent (50%) or more.; (3) In all new subdivisions for residential use. New subdivisions shall be required as part of the final plat to specify culvert diameter and length.; (4) When the predominant use already established by the use of mitered-end culverts period.

- [ ] Culvert installation shall conform to the approved site plan standards.
- [ ] Department of Transportation Permit installation approved standards.
- [x] Shall conform to Public Works Determinations as Stated Below:

18" x 32' foot long with mitred ends poured concrete

P W Inspectors Name: James Durrance Date: 6-20-12

Final Inspection Date: P W Inspectors Name: Signature:

CONTACT FOR REQUIREMENTS AND INSPECTIONS:

PUBLIC WORKS DEPARTMENT

Phone: 386-758-1019

Amount Paid 25.00

Check No. 3346

All Proper Safety Requirements Should Be Followed During The Installation Of The Culvert

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER 1206-02 CONTRACTOR Bryan Zecher PHONE 752-8653

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

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

ELECTRICAL 76	Print Name Marc Matthews License #: ER-0014352	Signature Phone #: 386-344-2029
MECHANICAL/ A/C A 487	Print Name Glenn Jones A/C License #: CAC051486	Signature Phone #: 386-752-5389
PLUMBING/ GAS	Print Name Wolf Plumbing License #:	Signature Phone #:
ROOFING	Print Name Mac Johnson Roofing License #:	Signature Phone #:
SHEET METAL	Print Name N/A License #:	Signature Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name N/A License#:	Signature Phone #:
SOLAR	Print Name N/A License #:	Signature Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON	287	~~N/A~~	
CONCRETE FINISHER		Daryl Spradley	
FRAMING	001141	Jeff Nichols	
INSULATION	000240	Will Sikes	
STUCCO		N/A	
DRYWALL	000345	Wade Heitzman	
PLASTER		N/A	
CABINET INSTALLER	CBC054575 853	~~Bryan Zecher~~	
PAINTING	000330	Bobby Touchton	
ACOUSTICAL CEILING		N/A	
GLASS		N/A	
CERAMIC TILE 853	CBC054575	Bryan Zecher	
FLOOR COVERING 853	"	"	
ALUM/VINYL SIDING	CCC000166	Mike Nicholas	
GARAGE DOOR		AD Garage Door	
METAL BLDG ERECTOR		N/A	

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.

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER _____ CONTRACTOR Bryan Zecher PHONE 752-8653

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

In Columbia County one permit will cover all trades doing work at the permitted site. It is REQUIRED that we have records of the subcontractors who actually did the trade specific work under the permit. Per Florida Statute 440 and Ordinance 89-6, a contractor shall require all subcontractors to provide evidence of workers' compensation or exemption, general liability insurance and a valid Certificate of Competency license in Columbia County.

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

ELECTRICAL	Print Name Marc Matthews License #: ER-0014352	Signature [redacted] Phone #: 344-2029
MECHANICAL/ A/C _____	Print Name [redacted] License #: [redacted]	Signature [redacted] Phone #: [redacted]
PLUMBING/ GAS	Print Name [redacted] License #: [redacted]	Signature [redacted] Phone #: [redacted]
ROOFING	Print Name Mac Johnson License #: RC0061384	Signature (see attached) Phone #: 352-472-4943
SHEET METAL	Print Name N/A License #:	Signature _____ Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name N/A License#:	Signature _____ Phone #:
SOLAR	Print Name N/A License #:	Signature _____ Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON	[redacted]	[redacted]	[redacted]
CONCRETE FINISHER	00063	Darrell Spradley	[redacted]
FRAMING	CBC054575	Bryan Zecher	
INSULATION	00240	Will Sykes	
STUCCO		N/A	
DRYWALL	[redacted]	[redacted]	[redacted]
PLASTER		N/A	
CABINET INSTALLER	CBC054575	Bryan Zecher	
PAINTING	000330	Bobby Touchton	
ACOUSTICAL CEILING		N/A	
GLASS		N/A	
CERAMIC TILE	[redacted]	[redacted]	[redacted]
FLOOR COVERING	[redacted]	[redacted]	[redacted]
ALUM/VINYL SIDING	0001166	Mike Nicholson	
GARAGE DOOR	[redacted]	[redacted]	
METAL BLDG ERECTOR			

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

ELECTRICAL	Print Name Marc Matthews License #: ER-0014352	Signature _____ Phone #: 344-2029
MECHANICAL/ A/C ✓	Print Name Glenn Jones License #: CAC-051486	Signature _____ Phone #: 867-0424
PLUMBING/ GAS	Print Name Wolfe Plumbing License #: CFC-051621	Signature _____ Phone #: 623-[illegible]98
ROOFING 187	Print Name Mac Johnson License #: RC 0061384	Signature _____ Phone #: 352-472-4943
SHEET METAL	Print Name N/A License #:	Signature _____ Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name N/A License#:	Signature _____ Phone #:
SOLAR	Print Name N/A License #:	Signature _____ Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON		[redacted]	
CONCRETE FINISHER			
FRAMING			
INSULATION	000240	Sykes Insulation (365-1404)	
STUCCO	0256	Ron Deal (623-0547)	
DRYWALL	000345	Kim Heitzman (365-0163)	
PLASTER	N/A		
CABINET INSTALLER		[redacted]	
PAINTING	000330	Bobby Touchton (466-4686)	
ACOUSTICAL CEILING	N/A		
GLASS	N/A		
CERAMIC TILE		[redacted]	
FLOOR COVERING		[redacted]	
ALUM/VINYL SIDING	000166	Mike Nicholson (623-2376)	
GARAGE DOOR		D+D Garage Drs (Kevin)	
METAL BLDG ERECTOR	N/A		

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Contractor Forms: Subcontractor form: 6/08

SUBCONTRACTOR VERIFICATION FORM

APPLICATION NUMBER _____ CONTRACTOR _____ PHONE _____

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

ELECTRICAL	Print Name Marc Matthews License #: ER0014352	Signature Phone #: 386-344-2029
MECHANICAL/ A/C ____	Print Name Glenn Jones A/C License #:	Signature WB Ltd Phone #: 752 5389
PLUMBING/ GAS 1081 dlc	Print Name Wolfe Plumbing License #: CFC051621	Signature Phone #: 386-935-0616
ROOFING	Print Name MAC Johnson Roofing License #:	Signature Phone #:
SHEET METAL	Print Name License #:	Signature Phone #:
FIRE SYSTEM/ SPRINKLER	Print Name License#:	Signature Phone #:
SOLAR	Print Name License #:	Signature Phone #:

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
dlc MASON	000287	Willie Dixon	Willie Dixon
CONCRETE FINISHER	[redacted]	[redacted]	[redacted]
FRAMING	001141	Jeff Nichols	
INSULATION	000240	Will Sykes	
STUCCO			
DRYWALL	000345	Wade Hartman	
PLASTER			
CABINET INSTALLER			
PAINTING	000330	Bobby Tarleton	
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING	CCC000166	Mike Nicholson	
dlc GARAGE DOOR 99	CBC1258205	D&D 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.

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

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

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

(Owners Must Sign All Applications Before Permit Issuance.)

X _____
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 CBC054575
Columbia County
Competency Card Number _____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 1st **day of** June **20** 12.

Personally known ✓ **or Produced Identification** _____

_____
State of Florida Notary Signature (For the Contractor)

SEAL:

LAURIE HODSON
MY COMMISSION # DD 805657
EXPIRES: July 14, 2012
Bonded Thru Notary Public Underwriters

Columbia County Building Department
Culvert Permit

SHH CONNIE

Culvert Permit No. 000001951

DATE 06/12/2012 PARCEL ID # 18-5S-17-09280-135 (30221)

APPLICANT BRYAN ZECHER PHONE 386.752.8653

ADDRESS POB 815 LAKE CITY FL 32056

OWNER JIM & CELESTE GARRISON PHONE 386.752.8653

ADDRESS POB 815 LAKE CITY FL 32056

CONTRACTOR BRYAN ZECHER PHONE 386.752.8653

LOCATION OF PROPERTY 441-S TO C-131,TR GO 7 MILES OUT TO 2ND ENTRANCE @ THE OAKS TO MANDIBA AND IT'S THE 3RD PLACE ON R.

SUBDIVISION/LOT/BLOCK/PHASE/UNIT THE OAK OF LAKE CTY 35 1

INSTALLATION INFORMATION SIGNATURE ✓

(A) A culvert shall be required to be installed as part of any newly constructed private driveway or road, or public road, which connects to a county road in Columbia County. Culvert installation for residential use shall require a permit issued by the Building and Zoning Department. Prior to any culvert permit being issued, an inspection by the Public Works Department shall be required to determine the proper size, length, and location for installation. Culvert installation for commercial, industrial, and other uses shall conform to the approved site plan or to the specifications of a registered engineer. Joint use culverts will comply with Florida Department of Transportation specifications.

(B) The culvert shall comply and be installed in accordance with Columbia County Land Development Regulation, Access Control: Section 4.2.3 standards. Proper installation of the culvert shall be verified by a final inspection performed by the Public Works Department.

(C) All culverts required by this policy shall be installed prior to the Building Department granting permission to connect permanent electrical service to the facility or facilities being serviced by newly constructed private driveway or road. In cases where no electrical service exists, installation shall be completed prior to final inspection approval.

(D) Mitered-end culverts shall be used in the following applications:
(1) When the culvert is to be placed giving access to a paved street.; (2) When the road is contained within a subdivision (recorded or unrecorded) that has not reached a "build out" of fifty percent (50%) or more.; (3) In all new subdivisions for residential use. New subdivisions shall be required as part of the final plat to specify culvert diameter and length.; (4) When the predominant use already established by the use of mitered-end culverts period.

☐ Culvert installation shall conform to the approved site plan standards.

☐ Department of Transportation Permit installation approved standards.

☒ Shall conform to Public Works Determinations as Stated Below:

18" X 32' foot long with mitred ends poured concrete

P W Inspectors Name: James Durrance Date: 6-20-12

Final Inspection Date: 10-26-12 P W Inspectors Name: James Durrance Signature: James Durrance

CONTACT FOR REQUIREMENTS AND INSPECTIONS:

PUBLIC WORKS DEPARTMENT

Phone: 386-758-1019

Amount Paid 25.00

Check No. 3346

All Proper Safety Requirements Should Be Followed During The Installation Of The Culvert

Columbia County Building Department
Culvert Permit

Culvert Permit No. 000001951

ATTN: Connie

DATE 06/12/2012 PARCEL ID # 18-5S-17-09280-135 30221

APPLICANT BRYAN ZECHER PHONE 386.752.8653

ADDRESS POB 815 LAKE CITY FL 32056

OWNER JIM & CELESTE GARRISON PHONE 386.752.8653

ADDRESS POB 815 LAKE CITY FL 32056

CONTRACTOR BRYAN ZECHER PHONE 386.752.8653

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PUBLIC WORKS DEPARTMENT

Phone: 386-758-1019

Amount Paid 25.00

Check No. 3346

All Proper Safety Requirements Should Be Followed During The Installation Of The Culvert

30221

Donald F. Lee & Associates, Inc.

140 NW Ridgewood Avenue
Lake City, Florida 32055
PH 386-755-6166 FAX 386-755-6167
email: donald@dfla.com
website: www.dfla.com

- Highway & Route Surveys
- Topographic Surveys
- Land & Subdivision Surveys
- Control Surveying

Since 1984

OK
BLK
2 Nov. 2012

DATE: Friday, June 15, 2012

TO: Columbia County Building Department

CC: Bryan Zecher Construction

FROM: Tim Delbene - Donald F. Lee & Associates

RE: Floor Elevation Check – Lot 35, Oaks of Lake City Phase 1

This is to Certify that elevations were obtained for a foundation under construction (stem walls) on the above referenced parcel of land. The results are as follows:

Proposed House slab elevation (at stem walls): 87.07 feet

The record subdivision plat for "Oaks of Lake City Phase 1" indicates that the Minimum Floor Elevation (MFE) for this lot, as set by the project engineer for the development, is 85.0 feet. Elevations are based on NAVD1988 datum.

SIGNED:

Timothy A. Delbene, PSM
Florida Reg. Cert. No. LS 5594

SUBCONTRACTOR VERIFICATION FORM

Permit APPLICATION NUMBER 30221 CONTRACTOR Bryan Zecher PHONE 386-752-8653

THIS FORM MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A PERMIT

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

Specialty License	License Number	Sub-Contractors Printed Name	Sub-Contractors Signature
MASON			
CONCRETE FINISHER			
FRAMING	CRC022354	William T Guernsey	William T Guernsey
INSULATION			
STUCCO			
DRYWALL			
PLASTER			
CABINET INSTALLER			
PAINTING			
ACOUSTICAL CEILING			
GLASS			
CERAMIC TILE			
FLOOR COVERING			
ALUM/VINYL SIDING			
GARAGE DOOR			
METAL BLDG ERECTOR			

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1/4/12

PRODUCT APPROVAL SPECIFICATION SHEET

Location: Lake City, FL **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	Thermo-Tru	Exterior Hinged doors	FL5262-R2
2. Sliding	PGT	Sliding Glass Doors	FL251-R15
3. Sectional	Clo Pay	Garage Doors	FL5675-R6
4. Roll up			
5. Automatic			
6. Other			
B. WINDOWS			
1. Single hung	PGT	Window Low E	FL236-R16
2. Horizontal Slider	PGT	Window Low E	FL242-R12
3. Casement			
4. Double Hung			
5. Fixed	PGT	Window Low E	FL243-R10
6. Awning			
7. Pass –through			
8. Projected			
9. Mullion			
10. Wind Breaker			
11 Dual Action			
12. Other			
C. PANEL WALL			
1. Siding	Certainteed	Cement Fibered Siding	FL1573-R2
2. Soffits	Kaycon	Alum soffit / Facia	FL12198-R1
3. EIFS	Sto	Stucco/accucrete finish	FL7229-R1
4. Storefronts			
5. Curtain walls			
6. Wall louver			
7. Glass block			
8. Membrane			
9. Greenhouse			
10. Other			
D. ROOFING PRODUCTS			
1. Asphalt Shingles	Certainteed	Arch Shingles 30yr	FL5444-R3
2. Underlayments	GAF	Tar paper	FL9637-R1
3. Roofing Fasteners	OMG	Roofing nails	FL699-R3
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			

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

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			
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	USPC	anchors	FL5631-R1
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			
H. NEW EXTERIOR ENVELOPE PRODUCTS			
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

Bryan Zuber
Print Name

Date

Location

FORM 405-10

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION

Florida Department of Business and Professional Regulation - Residential Performance Method

Project Name:	1205051	Builder Name:	Bryan Zecher
Street:		Permit Office:	
City, State, Zip:	, FL ,	Permit Number:	
Owner:	Garrison Residence	Jurisdiction:	
Design Location:	FL, Gainesville		

1. New construction or existing	New (From Plans)
2. Single family or multiple family	Single-family
3. Number of units, if multiple family	1
4. Number of Bedrooms	4
5. Is this a worst case?	Yes
6. Conditioned floor area above grade (ft²)	2492
Conditioned floor area below grade (ft²)	0

7. Windows(380.0 sqft.)	Description	Area
a. U-Factor:	Dbl, U=0.30	380.00 ft²
SHGC:	SHGC=0.30	
b. U-Factor:	N/A	ft²
SHGC:		
c. U-Factor:	N/A	ft²
SHGC:		
d. U-Factor:	N/A	ft²
SHGC:		
Area Weighted Average Overhang Depth:		17.616 ft.
Area Weighted Average SHGC:		0.300

8. Floor Types (2492.0 sqft.)	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	2492.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types (2452.5 sqft.)	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	2167.50 ft²
b. Frame - Wood, Adjacent	R=13.0	285.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types (3055.0 sqft.)	Insulation	Area
a. Under Attic (Vented)	R=30.0	3055.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Garage	6	498.4

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	57.0	SEER:13.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	57.0	HSPF:7.70

14. Hot water systems	
a. Electric	Cap: 40 gallons
	EF: 0.940
b. Conservation features	
None	
15. Credits	Pstat

Glass/Floor Area: 0.152

Total Proposed Modified Loads: 42.97

Total Standard Reference Loads: 53.85

PASS

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

PREPARED BY: EVAN BARNSLEY

DATE: 5/23/12

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

OWNER/AGENT:

DATE: 6/1/12

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:

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

- Compliance requires completion of a Florida Air Barrier and Insulation Inspection Checklist.

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

PROJECT

Title:	1205051	Bedrooms:	4	Address Type:	Street Address
Building Type:	FLProp2010	Conditioned Area:	2492	Lot #	
Owner:	Garrison Residence	Total Stories:	1	Block/SubDivision:	
# of Units:	1	Worst Case:	Yes	PlatBook:	
Builder Name:	Bryan Zecher	Rotate Angle:	45	Street:	
Permit Office:		Cross Ventilation:		County:	Columbia
Jurisdiction:		Whole House Fan:		City, State, Zip:	, FL ,
Family Type:	Single-family				
New/Existing:	New (From Plans)				
Comment:					

CLIMATE

√	Design Location	TMY Site	IECC Zone	Design Temp 97.5 %	Design Temp 2.5 %	Int Design Temp Winter	Int Design Temp Summer	Heating Degree Days	Design Moisture	Daily Temp Range
____	FL, Gainesville	FL_GAINESVILLE_REGI	2	32	92	70	75	1305.5	51	Medium

BLOCKS

Number	Name	Area	Volume
1	Block1	2492	22428

SPACES

Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Infil ID	Finished	Cooled	Heated
1	RoomsInBlock1	2492	22428	Yes	4	4	1	Yes	Yes	Yes

FLOORS

√	#	Floor Type	Space	Perimeter	R-Value	Area		Tile	Wood	Carpet
____	1	Slab-On-Grade Edge Insulatio	RoomsInBlock1	272.5 ft	0	2492 ft²	----	0.3	0.3	0.4

ROOF

√	#	Type	Materials	Roof Area	Gable Area	Roof Color	Solar Absor.	SA Tested	Emitt	Emitt Tested	Deck Insul.	Pitch (deg)
____	1	Hip	Composition shingles	2787 ft²	0 ft²	Dark	0.96	No	0.9	No	0	26.6

ATTIC

√	#	Type	Ventilation	Vent Ratio (1 in)	Area	RBS	IRCC
____	1	Full attic	Vented	300	2492 ft²	N	N

CEILING

√	#	Ceiling Type	Space	R-Value	Area	Framing Frac	Truss Type
____	1	Under Attic (Vented)	RoomsInBlock1	30	3055 ft²	0.11	Wood

WALLS

√	#	Ornt	Adjacent To	Wall Type	Space	Cavity R-Value	Width Ft	Width In	Height Ft	Height In	Area	Sheathing R-Value	Framing Fraction	Solar Absor.	Below Grade%
	1	N	Exterior	Frame - Wood	RoomsInBloc	13	57	8	9		519 ft²		0.23	0.75	0
	2	E	Exterior	Frame - Wood	RoomsInBloc	13	67	10	9		610.5 ft²		0.23	0.75	0
	3	S	Exterior	Frame - Wood	RoomsInBloc	13	36		9		324 ft²		0.23	0.75	0
	4	W	Exterior	Frame - Wood	RoomsInBloc	13	79	4	9		714 ft²		0.23	0.75	0
	5	N	Garage	Frame - Wood	RoomsInBloc	13	31	8	9		285 ft²		0.23	0.01	0

DOORS

√	#	Ornt	Door Type	Space	Storms	U-Value	Width Ft	Width In	Height Ft	Height In	Area
	1	N=>SE	Insulated	RoomsInBloc	None	0.4	3		8		24 ft²
	2	N=>SE	Insulated	RoomsInBloc	None	0.4	3		8		20 ft²
	3	S=>NW	Insulated	RoomsInBloc	None	0.4	3		8		16 ft²

WINDOWS

Orientation shown is the entered orientation (=>) changed to Worst Case.

√	#	Ornt	Wall ID	Frame	Panes	NFRC	U-Factor	SHGC	Storms	Area	Overhang Depth	Overhang Separation	Int Shade	Screening
	1	N=>SE	1	Metal	Low-E Double	Yes	0.3	0.3	N	108 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	2	N=>SE	1	Metal	Low-E Double	Yes	0.3	0.3	N	72 ft²	10 ft 6 in	1 ft 0 in	HERS 2006	None
	3	E=>SW	2	Metal	Low-E Double	Yes	0.3	0.3	N	18 ft²	99 ft 9 in	1 ft 0 in	HERS 2006	None
	4	E=>SW	2	Metal	Low-E Double	Yes	0.3	0.3	N	6 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	5	E=>SW	2	Metal	Low-E Double	Yes	0.3	0.3	N	30 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	6	S=>NW	3	Metal	Low-E Double	Yes	0.3	0.3	N	12 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	7	S=>NW	3	Metal	Low-E Double	Yes	0.3	0.3	N	32 ft²	6 ft 10 in	2 ft 0 in	HERS 2006	None
	8	S=>NW	3	Metal	Low-E Double	Yes	0.3	0.3	N	36 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	9	S=>NW	3	Metal	Low-E Double	Yes	0.3	0.3	N	4 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	10	W=>NE	4	Metal	Low-E Double	Yes	0.3	0.3	N	20 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	11	W=>NE	4	Metal	Low-E Double	Yes	0.3	0.3	N	6 ft²	1 ft 6 in	1 ft 0 in	HERS 2006	None
	12	W=>NE	4	Metal	Low-E Double	Yes	0.3	0.3	N	36 ft²	99 ft 9 in	1 ft 0 in	HERS 2006	None

GARAGE

√	#	Floor Area	Ceiling Area	Exposed Wall Perimeter	Avg. Wall Height	Exposed Wall Insulation
	1	774.69 ft²	774.69 ft²	86 ft	9 ft	1

INFILTRATION

#	Scope	Method	SLA	CFM 50	ELA	EqLA	ACH	ACH 50
1	BySpaces	Proposed SLA	0.000360	2353.1	129.18	242.95	0.2771	6.2952

HEATING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Block	Ducts
_____	1	Electric Heat Pump	None	HSPF: 7.7	57 kBtu/hr	1	sys#1

COOLING SYSTEM

√	#	System Type	Subtype	Efficiency	Capacity	Air Flow	SHR	Block	Ducts
_____	1	Central Unit	None	SEER: 13	57 kBtu/hr	1710 cfm	0.75	1	sys#1

HOT WATER SYSTEM

√	#	System Type	SubType	Location	EF	Cap	Use	SetPnt	Conservation
_____	1	Electric	None	Garage	0.94	40 gal	70 gal	120 deg	None

SOLAR HOT WATER SYSTEM

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

DUCTS

√	#	---- Supply ---- Location	R-Value	Area	---- Return ---- Location	Area	Leakage Type	Air Handler	CFM 25	Percent Leakage	QN	RLF	HVAC # Heat	HVAC # Cool
_____	1	Attic	6	498.4 ft	Attic	124.6 ft	DSE=0.88	Garage	0.0 cfm	0.00 %	0.00	0.60	1	1

TEMPERATURES

Programable Thermostat: Y

Ceiling Fans:

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

Thermostat Schedule: HERS 2006 Reference

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

Florida Code Compliance Checklist

Florida Department of Business and Professional Regulations
Residential Whole Building Performance Method

ADDRESS: , FL,	PERMIT #:

MANDATORY REQUIREMENTS SUMMARY - See individual code sections for full details.

COMPONENT	SECTION	SUMMARY OF REQUIREMENT(S)	CHECK
Air leakage	402.4	To be caulked, gasketed, weatherstripped or otherwise sealed. Recessed lighting IC-rated as meeting ASTM E 283. Windows and doors = 0.30 cfm/sq.ft. Testing or visual inspection required. Fireplaces: gasketed doors & outdoor combustion air. Must complete envelope leakage report or visually verify Table 402.4.2.	
Thermostat & controls	403.1	At least one thermostat shall be provided for each separate heating and cooling system. Where forced-air furnace is primary system, programmable thermostat is required. Heat pumps with supplemental electric heat must prevent supplemental heat when compressor can meet the load.	
Ducts	403.2.2 403.3.3	All ducts, air handlers, filter boxes and building cavities which form the primary air containment passageways for air distribution systems shall be considered ducts or plenum chambers, shall be constructed and sealed in accordance with Section 503.2.7.2 of this code. Building framing cavities shall not be used as supply ducts.	
Water heaters	403.4	Heat trap required for vertical pipe risers. Comply with efficiencies in Table 403.4.3.2. Provide switch or clearly marked circuit breaker (electric) or shutoff (gas). Circulating system pipes insulated to = R-2 + accessible manual OFF switch.	
Mechanical ventilation	403.5	Homes designed to operate at positive pressure or with mechanical ventilation systems shall not exceed the minimum ASHRAE 62 level. No make-up air from attics, crawlspaces, garages or outdoors adjacent to pools or spas.	
Swimming Pools & Spas	403.9	Pool pumps and pool pump motors with a total horsepower (HP) of = 1 HP shall have the capability of operating at two or more speeds. Spas and heated pools must have vapor-retardant covers or a liquid cover or other means proven to reduce heat loss except if 70% of heat from site-recovered energy. Off/timer switch required. Gas heaters minimum thermal efficiency=78% (82% after 4/16/13). Heat pump pool heaters minimum COP= 4.0.	
Cooling/heating equipment	403.6	Sizing calculation performed & attached. Minimum efficiencies per Tables 503.2.3. Equipment efficiency verification required. Special occasion cooling or heating capacity requires separate system or variable capacity system. Electric heat >10kW must be divided into two or more stages.	
Ceilings/knee walls	405.2.1	R-19 space permitting.	

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 80

The lower the EnergyPerformance Index, the more efficient the home.

, , FL,

1. New construction or existing		New (From Plans
2. Single family or multiple family		Single-family
3. Number of units, if multiple family		1
4. Number of Bedrooms		4
5. Is this a worst case?		Yes
6. Conditioned floor area (ft²)		2492
7. Windows**	Description	Area
a. U-Factor: SHGC:	Dbl, U=0.30 SHGC=0.30	380.00 ft²
b. U-Factor: SHGC:	N/A	ft²
c. U-Factor: SHGC:	N/A	ft²
d. U-Factor: SHGC:	N/A	ft²
Area Weighted Average Overhang Depth:		17.616 ft.
Area Weighted Average SHGC:		0.300

8. Floor Types	Insulation	Area
a. Slab-On-Grade Edge Insulation	R=0.0	2492.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

9. Wall Types	Insulation	Area
a. Frame - Wood, Exterior	R=13.0	2167.50 ft²
b. Frame - Wood, Adjacent	R=13.0	285.00 ft²
c. N/A	R=	ft²
d. N/A	R=	ft²

10. Ceiling Types	Insulation	Area
a. Under Attic (Vented)	R=30.0	3055.00 ft²
b. N/A	R=	ft²
c. N/A	R=	ft²

11. Ducts	R	ft²
a. Sup: Attic, Ret: Attic, AH: Garage	6	498.4

12. Cooling systems	kBtu/hr	Efficiency
a. Central Unit	57.0	SEER:13.00

13. Heating systems	kBtu/hr	Efficiency
a. Electric Heat Pump	57.0	HSPF:7.70

14. Hot water systems	
a. Electric	Cap: 40 gallons
	EF: 0.94
b. Conservation features	
None	
15. Credits	Pstat

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: 6/1/12

Address of New Home: 1047 SW Manitoba Dr City/FL Zip: Lake City, FL 32024

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida EnergyGauge Rating. Contact the EnergyGauge Hotline at (321) 638-1492 or see the EnergyGauge web site at energygauge.com for information and a list of certified Raters. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section 303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

Residential System Sizing Calculation

Summary

Garrison Residence

, FL

Project Title:
1205051

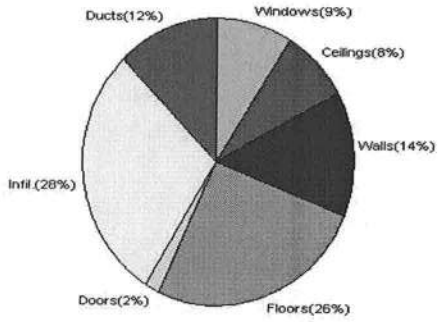
5/23/2012

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 ft.) Temp Range(M)					
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(54gr.)					
Winter design temperature(MJ8 99%)	33	F	Summer design temperature(MJ8 99%)	92	F
Winter setpoint	70	F	Summer setpoint	75	F
Winter temperature difference	37	F	Summer temperature difference	17	F
Total heating load calculation	**45992**	**Btuh**	**Total cooling load calculation**	**47961**	**Btuh**
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	123.9	57000	Sensible (SHR = 0.75)	118.8	42750
Heat Pump + Auxiliary(0.0kW)	123.9	57000	Latent	119.0	14250
			Total (Electric Heat Pump)	118.8	57000

WINTER CALCULATIONS

Winter Heating Load (for 2492 sqft)

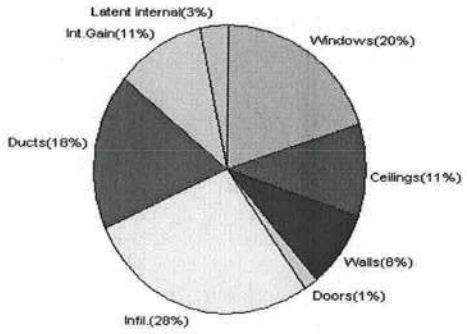
Load component			Load	
Window total	380	sqft	4218	Btuh
Wall total	2013	sqft	6609	Btuh
Door total	60	sqft	888	Btuh
Ceiling total	3055	sqft	3600	Btuh
Floor total	2492	sqft	11897	Btuh
Infiltration	322	cfm	13058	Btuh
Duct loss			5722	Btuh
Subtotal			**45992**	**Btuh**
Ventilation	0	cfm	0	Btuh
TOTAL HEAT LOSS			**45992**	**Btuh**



SUMMER CALCULATIONS

Summer Cooling Load (for 2492 sqft)

Load component			Load	
Window total	380	sqft	9503	Btuh
Wall total	2013	sqft	4045	Btuh
Door total	60	sqft	672	Btuh
Ceiling total	3055	sqft	5059	Btuh
Floor total			0	Btuh
Infiltration	242	cfm	4500	Btuh
Internal gain			5240	Btuh
Duct gain			6967	Btuh
Sens. Ventilation	0	cfm	0	Btuh
Blower Load			0	Btuh
Total sensible gain			**35986**	**Btuh**
Latent gain(ducts)			1539	Btuh
Latent gain(infiltration)			8836	Btuh
Latent gain(ventilation)			0	Btuh
Latent gain(internal/occupants/other)			1600	Btuh
Total latent gain			**11975**	**Btuh**
TOTAL HEAT GAIN			**47961**	**Btuh**



8th Edition

EnergyGauge® System Sizing
PREPARED BY: Evan Bommelyn
DATE: 5/23/12

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Garrison Residence
, FL

Project Title:
1205051
Building Type: User

5/23/2012

Reference City: Gainesville, FL (Defaults) Winter Temperature Difference: 37.0 F (MJ8 99%)
This calculation is for Worst Case. The house has been rotated 270 degrees.

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
1	2, NFRC 0.30	Metal	0.30	W	108.0	11.1	1199 Btuh
2	2, NFRC 0.30	Metal	0.30	W	72.0	11.1	799 Btuh
3	2, NFRC 0.30	Metal	0.30	N	18.0	11.1	200 Btuh
4	2, NFRC 0.30	Metal	0.30	N	6.0	11.1	67 Btuh
5	2, NFRC 0.30	Metal	0.30	N	30.0	11.1	333 Btuh
6	2, NFRC 0.30	Metal	0.30	E	12.0	11.1	133 Btuh
7	2, NFRC 0.30	Metal	0.30	E	32.0	11.1	355 Btuh
8	2, NFRC 0.30	Metal	0.30	E	36.0	11.1	400 Btuh
9	2, NFRC 0.30	Metal	0.30	E	4.0	11.1	44 Btuh
10	2, NFRC 0.30	Metal	0.30	S	20.0	11.1	222 Btuh
11	2, NFRC 0.30	Metal	0.30	S	6.0	11.1	67 Btuh
12	2, NFRC 0.30	Metal	0.30	S	36.0	11.1	400 Btuh
	Window Total				380.0(sqft)		4218 Btuh

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	315	3.28	1034 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	557	3.28	1828 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	224	3.28	736 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	652	3.28	2141 Btuh
5	Frame - Wood	- Adj	(0.089)	13.0/0.0	265	3.28	870 Btuh
	Wall Total				2013(sqft)		6609 Btuh

Doors	Type	Storm	Ueff.	Area X	HTM=	Load
1	Insulated - Exterior,	n	(0.400)	24	14.8	355 Btuh
2	Insulated - Garage,	n	(0.400)	20	14.8	296 Btuh
3	Insulated - Exterior,	n	(0.400)	16	14.8	237 Btuh
	Door Total			60(sqft)		888Btuh

Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
1	Vented Attic/D/Shing	(0.032)	30.0/0.0	3055	1.2	3600 Btuh
	Ceiling Total			3055(sqft)		3600Btuh

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
1	Slab On Grade	(1.180)	0.0	272.5 ft(perim.)	43.7	11897 Btuh
	Floor Total			2492 sqft		11897 Btuh

	Envelope Subtotal:	27212 Btuh

Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	
	Natural	0.86	22428	1.00	322.4	13058 Btuh

Duct load	Average sealed, R6.0, Supply(Att), Return(Att)	(DLM of 0.142)	5722 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Garrison Residence
, FL

Project Title:
1205051
Building Type: User

5/23/2012

All Zones	**Sensible Subtotal All Zones**	**45992 Btuh**

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sensible Heat Loss Total Heat Loss	45992 Btuh 0 Btuh 45992 Btuh

EQUIPMENT

1. Electric Heat Pump	#	57000 Btuh

Key: Window types -NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)

Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Garrison Residence

Project Title:
1205051

, FL

5/23/2012

Reference City: Gainesville, FL Temperature Difference: 17.0F(MJ8 99%) Humidity difference: 54gr.

This calculation is for Worst Case. The house has been rotated 270 degrees.

Component Loads for Whole House

Window	Type* Panes	SHGC	U	InSh	IS	Ornt	Overhang Len	Hgt	Window Area(sqft) Gross	Shaded	Unshaded	HTM Shaded	Unshaded	Load
1	2 NFRC	0.30, 0.30		No	No	W	1.5ft	1.0ft	108.0	4.4	103.6	11	34	3575 Btuh
2	2 NFRC	0.30, 0.30		No	No	W	10.5	1.0ft	72.0	69.4	2.6	11	34	880 Btuh
3	2 NFRC	0.30, 0.30		No	No	N	99.8	1.0ft	18.0	0.0	18.0	11	11	205 Btuh
4	2 NFRC	0.30, 0.30		No	No	N	1.5ft	1.0ft	6.0	0.0	6.0	11	11	68 Btuh
5	2 NFRC	0.30, 0.30		No	No	N	1.5ft	1.0ft	30.0	0.0	30.0	11	11	342 Btuh
6	2 NFRC	0.30, 0.30		No	No	E	1.5ft	1.0ft	12.0	0.5	11.5	11	34	397 Btuh
7	2 NFRC	0.30, 0.30		No	No	E	6.8ft	2.0ft	32.0	14.7	17.3	11	34	757 Btuh
8	2 NFRC	0.30, 0.30		No	No	E	1.5ft	1.0ft	36.0	1.5	34.5	11	34	1192 Btuh
9	2 NFRC	0.30, 0.30		No	No	E	1.5ft	1.0ft	4.0	0.5	3.5	11	34	125 Btuh
10	2 NFRC	0.30, 0.30		No	No	S	1.5ft	1.0ft	20.0	20.0	0.0	11	14	228 Btuh
11	2 NFRC	0.30, 0.30		No	No	S	1.5ft	1.0ft	6.0	6.0	0.0	11	14	68 Btuh
12	2 NFRC	0.30, 0.30		No	No	S	99.8	1.0ft	36.0	36.0	0.0	11	14	411 Btuh
	Excursion													1254 Btuh
	Window Total								380 (sqft)					9503 Btuh

Walls	Type	U-Value	R-Value Cav/Sheath	Area(sqft)	HTM	Load
1	Frame - Wood - Ext	0.09	13.0/0.0	315.0	2.1	657 Btuh
2	Frame - Wood - Ext	0.09	13.0/0.0	556.5	2.1	1161 Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	224.0	2.1	467 Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	652.0	2.1	1360 Btuh
5	Frame - Wood - Adj	0.09	13.0/0.0	265.0	1.5	400 Btuh
	Wall Total			2013 (sqft)		4045 Btuh

Doors	Type	Area (sqft)	HTM	Load
1	Insulated - Exterior	24.0	11.2	269 Btuh
2	Insulated - Garage	20.0	11.2	224 Btuh
3	Insulated - Exterior	16.0	11.2	179 Btuh
	Door Total	60 (sqft)		672 Btuh

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	0.032	30.0/0.0	3055.0	1.66	5059 Btuh
	Ceiling Total			3055 (sqft)		5059 Btuh

Floors	Type	R-Value	Size	HTM	Load
1	Slab On Grade	0.0	2492 (ft-perimeter)	0.0	0 Btuh
	Floor Total		2492.0 (sqft)		0 Btuh

	Envelope Subtotal:	19279 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Garrison Residence
, FL

Project Title: 1205051

Climate:FL_GAINESVILLE_REGIONAL_A

5/23/2012

Infiltration	Type Natural	Average ACH 0.65	Volume(cuft) 22428		Wall Ratio 1	CFM= 241.8	Load 4500	Btuh
Internal gain		Occupants 8	Btuh/occupant X 230		+	Appliance 3400	Load 5240	Btuh
					Sensible Envelope Load:		29018	Btuh
Duct load	Average sealed, Supply(R6.0-Attic), Return(R6.0-Attic)				(DGM of 0.240)		6967	Btuh
					Sensible Load All Zones		**35986**	**Btuh**

Manual J Summer Calculations

Residential Load - Component Details (continued)

Garrison Residence
, FL

Project Title: 1205051

Climate:FL_GAINESVILLE_REGIONAL_A

5/23/2012

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	**Sensible Envelope Load All Zones**	**29018 Btuh**
	Sensible Duct Load	6967 Btuh
	Total Sensible Zone Loads	**35986 Btuh**
	Sensible ventilation	0 Btuh
	Blower	0 Btuh
	Total sensible gain	**35986 Btuh**
	Latent infiltration gain (for 54 gr. humidity difference)	8836 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	1539 Btuh
	Latent occupant gain (8.0 people @ 200 Btuh per person)	1600 Btuh
	Latent other gain	0 Btuh
	Latent total gain	**11975 Btuh**
	TOTAL GAIN	**47961 Btuh**

EQUIPMENT

1. Central Unit	#	57000 Btuh

*Key: Window types (Panes - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)

Version 8