

DATE 10/15/2004

Columbia County Building Permit

PERMIT

This Permit Expires One Year From the Date of Issue

000022389

APPLICANT CARMEN FAVORITO JR PHONE 497-4747  
ADDRESS 1162 SW SKYLINE LOOP FORT WHITE FL 32038  
OWNER CARMEN FAVORITO JR PHONE 497-4747  
ADDRESS 1162 SW SKYLINE LOOP FORT WHITE FL 32038  
CONTRACTOR OWNER BUILDER PHONE  
LOCATION OF PROPERTY 47 S, L HERLONG ST, TAKE THE 1ST PAVED ROAD TO RIGHT,  
FOLLOW TO LOT 51, ON CORNER OF HILLTOP & SKYLINE ON L  
TYPE DEVELOPMENT SFD, UTILITY ESTIMATED COST OF CONSTRUCTION 220500.00  
HEATED FLOOR AREA 4410.00 TOTAL AREA 5590.00 HEIGHT 23.00 STORIES 1  
FOUNDATION CONCRETE WALLS FRAMED ROOF PITCH 6/12 FLOOR SLAB  
LAND USE & ZONING A-3 MAX. HEIGHT 35  
Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00  
NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 11-6S-16-03815-151 SUBDIVISION CARDINAL FARMS  
LOT 51 BLOCK PHASE UNIT TOTAL ACRES 10.00

000000422 N  
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor  
PERMIT 04-0947-N BK JK N  
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS: CAL-TEC TESTING REPORT INCLUDED

Check # or Cash 1003

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

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

BUILDING PERMIT FEE \$ 1105.00 CERTIFICATION FEE \$ 27.95 SURCHARGE FEE \$ 27.95  
MISC. FEES \$ .00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ WASTE FEE \$  
FLOOD ZONE DEVELOPMENT FEE \$ CULVERT FEE \$ 25.00 TOTAL FEE 1235.90

INSPECTORS OFFICE CLERKS OFFICE

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

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

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVINCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

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

04-0847-N

## Columbia County Building Permit Application

For Office Use Only Application # 0409-23 Date Received 9/15/04 By G Permit # 422/22389  
 Application Approved by - Zoning Official R2K Date 24.07.03 Plans Examiner \_\_\_\_\_ Date \_\_\_\_\_  
 Flood Zone X Development Permit N/A Zoning A-3 Land Use Plan Map Category A-3  
 Comments \_\_\_\_\_

~~with letter / E4 / 1911 address~~

Applicants Name Carmen P. Favorito, JR. Phone 386-497-4747  
 Address 3112<sup>SW</sup> Herlong St. Ft. White, FL 32038  
 Owners Name Carmen P. Favorito & Marilyn Meckstroth Phone 386-497-4747  
 911 Address 1162 SW Skyline Loop, F.W. 32038  
 Contractors Name Owner builder Phone L  
 Address \_\_\_\_\_  
 Fee Simple Owner Name & Address \_\_\_\_\_  
 Bonding Co. Name & Address owner/builder  
 Architect/Engine Name & Address RFM Design US Hwy 1 Pt. St. Lucie, FL 772-337-4615  
 Mortgage Lenders Name & Address Fidelity Federal 205 Datura St. WPB, FL 561-803-9700  
Parent Parcel- 11-65-16-03815-001  
 Property ID Number 11-65-16-03815-151 (proposed) Estimated Cost of Construction 275,000  
 Subdivision Name Cardinal Farms Lot 51 Block \_\_\_\_\_ Unit \_\_\_\_\_ Phase \_\_\_\_\_  
 Driving Directions US 47 South to Herlong St. turn left 1st paved road to turn right. follow to lot 51.  
 Type of Construction SFD Number of Existing Dwellings on Property 0  
 Total Acreage 10 Lot Size \_\_\_\_\_ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive  
 Actual Distance of Structure from Property Lines - Front 167 Side 133 Side 242 Rear 498  
 Total Building Height \_\_\_\_\_ Number of Stories 1 Heated Floor Area 4410 Roof Pitch 6/12  
5590

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 COMMENCEMENT 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.

Carmen Favorito Jr.  
 Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA  
 COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this 13 day of Sept 2004.

Personally known ✓ or Produced Identification \_\_\_\_\_

Contractor Signature

Contractors License Number \_\_\_\_\_

Competency Card Number \_\_\_\_\_

NOTARY STAMP/SEAL



MARILYN MECKSTROTH  
 MY COMMISSION # DD 160060  
 EXPIRES: October 22, 2006  
 Bonded Thru Budget Notary Services

Marilyn Meckstroth  
 Notary Signature



## Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056-1625  
6919 Distribution Avenue S., Unit #5 • Jacksonville, FL 32257

Tel. (386) 755-3633 • Fax (386) 752-5456  
Tel. (904) 262-4046 • Fax (904) 262-4047

October 11, 2004

Carmen Favorito  
3112 S. W. Hurlong Street  
Fort White, Florida 32038

Reference: Proposed Favorito Residence  
Lot 51, Cardinal Farms  
Columbia County, Florida  
Cal-Tech Project No. 04-480

Dear Mr. Favorito,

Cal-Tech Testing, Inc. has completed the subsurface investigation and engineering evaluation of the site for a residence to be constructed at Lot 51 of Cardinal Farms in Columbia County, Florida. Our work was authorized by you.

We understand the residence will be single-story, and support for the residence will be provided by conventional, shallow spread footings. Anticipated foundation loads were not provided; however, we assume column and wall loads will not exceed 20 kips and 2 kips per foot, respectively.

The purposes of our investigation were to evaluate the existing subgrade soils for an allowable bearing pressure of 2,500 pounds per square foot and to provide recommendations as appropriate.

### Site Investigation

The site was investigated by performing two (2) Standard Penetration Test borings advanced to depths of 7.0 feet. The borings were performed at the approximate locations indicated on the attached Boring Location Plan. The proposed limits of construction were staked on site, and we used this staked area to locate the borings.

The Standard Penetration Test (ASTM D-1586) is performed by driving a standard split-barrel sampler into the soil by blows from a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler 1 foot, after seating 6 inches, is designated the penetration resistance, or N-value; this value is an index to soil density or consistency.

*"Excellence in Engineering & Geoscience"*

## Findings

The soil borings generally encountered three soil strata. The first layer consists of about 1.0 foot of gray sand with silt and organics (SP/SM, Pt). N-values of this layer were not determined.

The second layer consists of about 1.5 feet of very loose, grayish tan sand (SP). The N-values of this layer are on the order of 3 blows per foot.

The third layer consists of an undetermined thickness of orangish tan or gray, red and orange, clayey sand (SC). These soil range from very loose to medium dense, and N-values range from 3 to 28 blows per foot.

Groundwater was not encountered at the time of our investigation; however, the clayey soils were moist at a depth of about 2.5 feet, and we believe the wet season water table will occur as perched ground water at a depth of about 2 feet.

For a more detailed description of the subsurface conditions encountered, please refer to the attached Boring Logs.

## Discussion

We have performed a bearing capacity analysis for the immediate bearing soils and have assumed the foundations will have minimum widths of 18 inches and be embedded a minimum of 14 inches below the existing surface grade. For these foundations and the site soils as encountered, we obtained an allowable bearing capacity of 2,500 pounds per square foot with a factor of safety of about 1.05 against a bearing capacity failure. Based upon this evaluation the subgrade soils within the proposed building area are suitable for shallow foundations and an allowable bearing capacity of 2,500 pounds per square foot; however, the factor of safety is unsuitably low, and we recommend the site be improved before construction. We also recommend the site be re-evaluated following this improvement.

Initially, the organic surface layer should be stripped from the site. Excavation should then be performed as required to establish site grading, and the subgrade should then be thoroughly proof-rolled using heavy, rubber-tired equipment (a large, loaded, front-end loader, for example). All bearing areas should then be proof-compacted to a minimum of 95% of the Modified Proctor maximum dry density to a minimum depth of 2 feet below the bottoms of the foundations and 1 foot below the bottoms of floor slabs. This preparation of the bearing soils will increase the factor of safety against foundation failure, reduce settling of the foundations and slabs, and decrease the likelihood of distress in the structure at a later date.

Our evaluation is based upon the subsurface conditions encountered at this site and as presented within this report. However, subsurface conditions may exist that

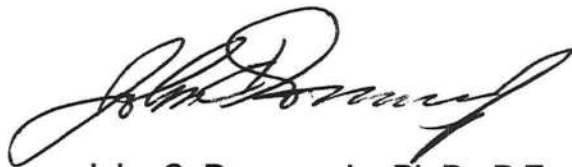
differ from our findings. We request that we be notified if substantially different subsurface conditions are encountered.

We appreciate the opportunity to be of service on this project and look forward to a continued association. Please do not hesitate to contact us should you have questions concerning this report or if we may be of further assistance.

Respectfully submitted,  
Cal-Tech Testing, Inc.



Linda Creamer  
President / CEO



John C. Dorman, Jr., Ph.D., P.E.  
Geotechnical Engineer

10/11/04

52612

## B-1

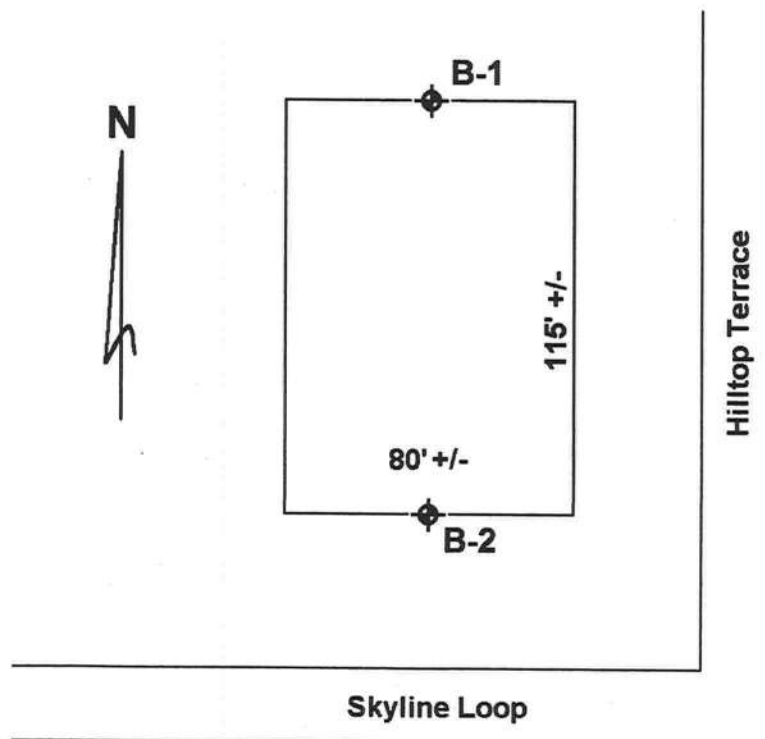
| Water Table: N/A |         | Soil  |
|------------------|---------|---|
| Depth (ft)       | N-value | Description   |
| 0                |         | Gray SAND with SILT and Organics (SP/SM)                      |
| 3                |         | Very Loose, Grayish Tan SAND (SP)                             |
| 3                |         | Very Loose, Orangish Tan, CLAYEY SAND (SC)                    |
| 5                | 10      | Loose to Medium Dense, Gray, Orange and Red, CLAYEY SAND (SC) |
|                  | 28      |   |

Wet Season Water Table: 2.0 ft.

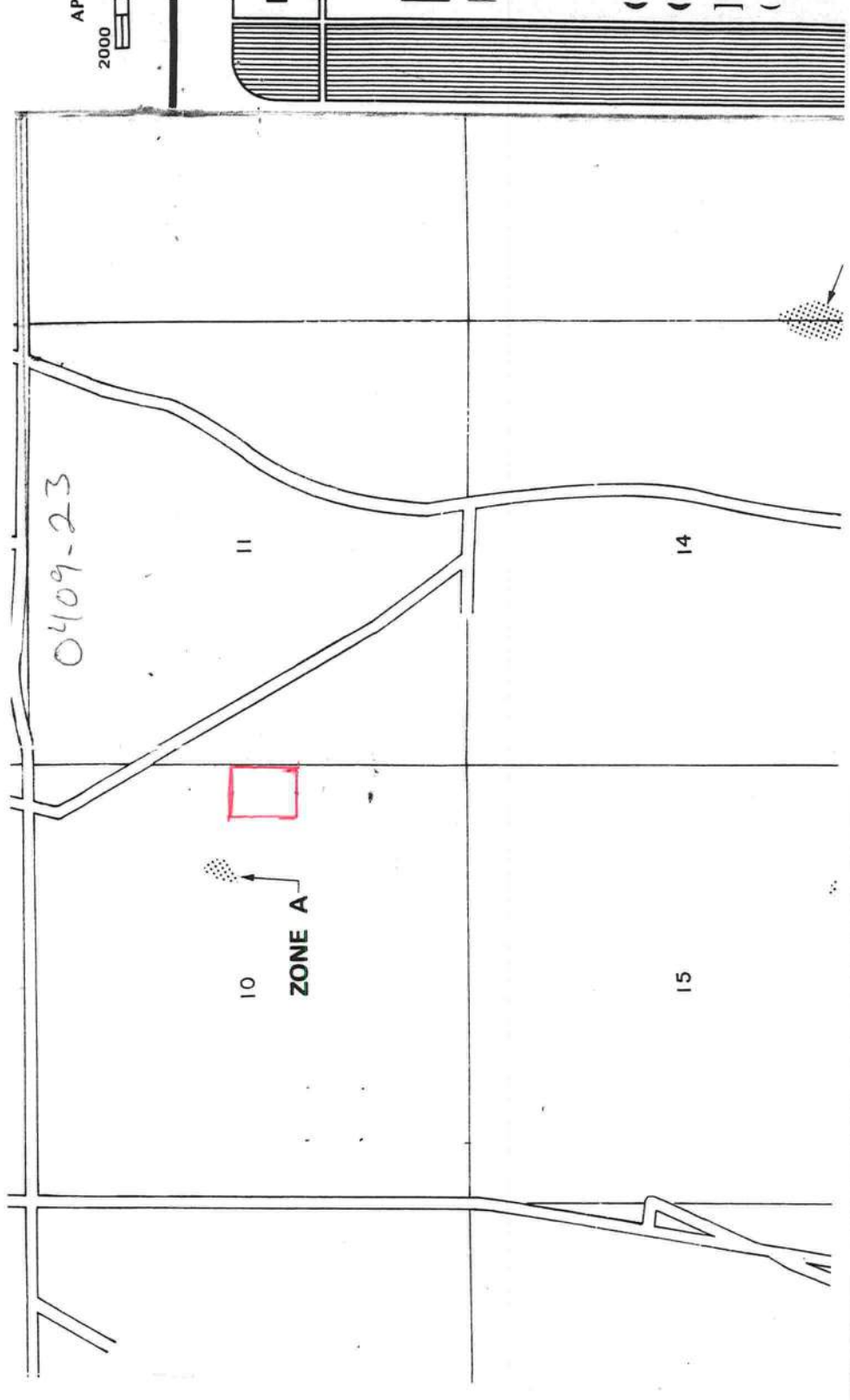
## B-2

| Water Table: N/A |         | Soil  |
|------------------|---------|---|
| Depth (ft)       | N-value | Description   |
| 0                |         | Gray SAND with SILT and Organics (SP/SM)              |
| 3                |         | Very Loose, Grayish Tan SAND (SP)                     |
| 6                |         | Loose to Medium Dense, Orangish Tan, CLAYEY SAND (SC) |
| 15               |         |   |
| 23               |         | Medium Dense, Gray, Red and Orange, CLAYEY SAND (SC)  |

Wet Season Water Table: 2.0 ft.



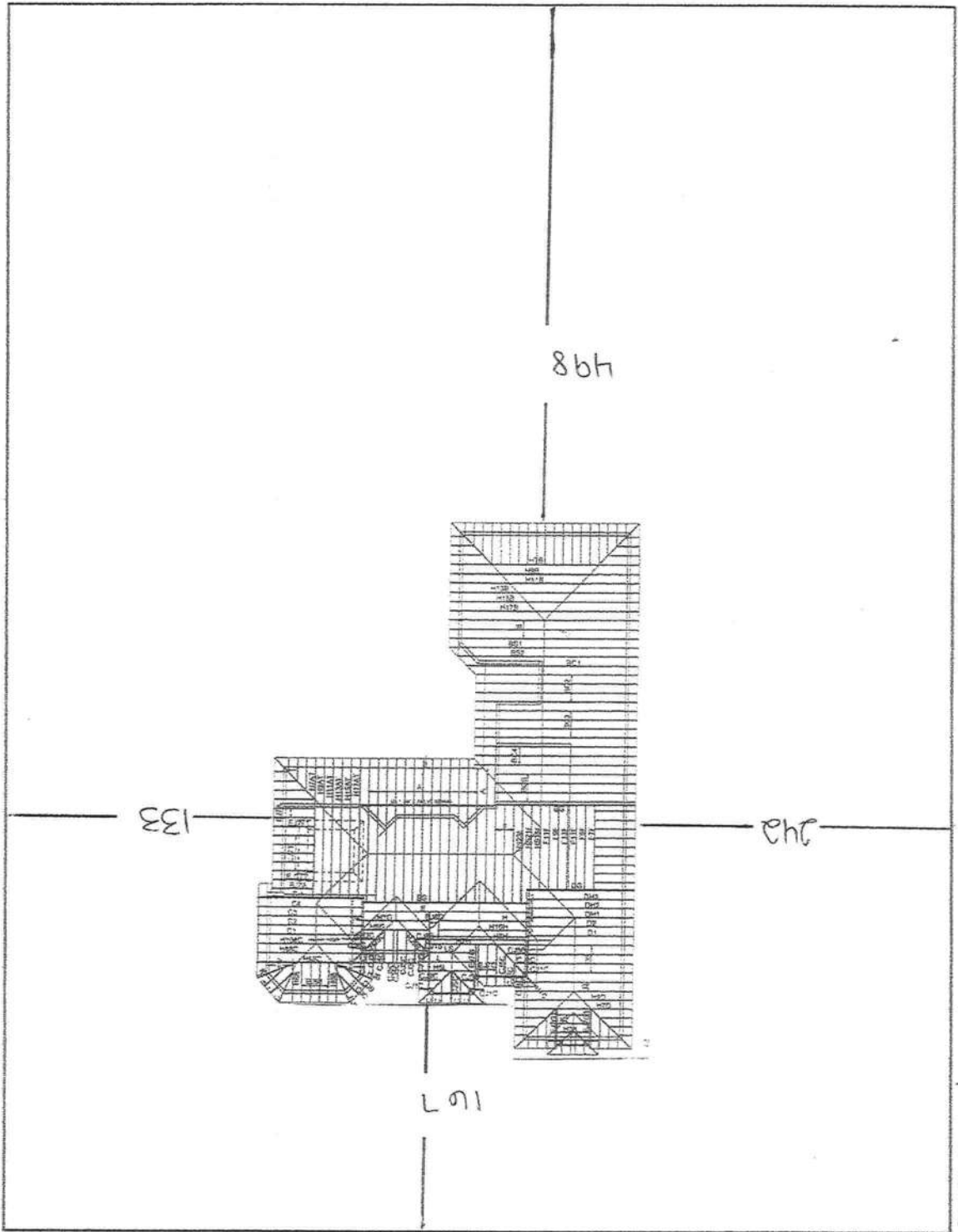
**Boring Logs and Location Plan: Lot 51, Cardinal Farms  
Favorito Residence  
Columbia County, Florida**



Cardinal Farms  
bld's  
standing  
water

22  
21  
65  
66  
64

66.42.09



549.33

498

105.6.04

242

Hilltop Terrace

57.6.16

Skyline Loop

133

167

*This Instrument Prepared by & return to:*

Name: **Joyce Kirpach, an employee of  
TITLE OFFICES, LLC**  
Address: **1089 SW MAIN BLVD.  
LAKE CITY, FLORIDA 32025  
04Y-07108**  
Parcel I.D. #: **03811-000**

SPACE ABOVE THIS LINE FOR PROCESSING DATA

SPACE ABOVE THIS LINE FOR RECORDING DATA

**THIS WARRANTY DEED** Made the 3rd day of August, A.D. 2004, by

**SUBRANDY LIMITED PARTNERSHIP**, having its principal place of business at

**P.O. BOX 513, LAKE CITY, FLORIDA 32056**, hereinafter called the grantor, to

**CARMEN P. FAVORITO, A SINGLE MAN and MARILYN M. MECKSTROTH, A SINGLE WOMAN, AS JOINT**

**TENANTS WITH RIGHTS OF SURVIVORSHIP** whose post office address is

**3112 SW HERLONG ROAD, FORT WHITE, FLORIDA 32038**, hereinafter called the grantees:

*(Wherever used herein the terms "grantor" and "grantees" include all the parties to this instrument, singular and plural, the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations, wherever the context so admits or requires.)*

**Witnesseth:** That the grantor, for and in consideration of the sum of \$10.00 and other valuable consideration, receipt whereof is hereby acknowledged, does hereby grant, bargain, sell, alien, remise, release, convey and confirm unto the grantees all that certain land situate in **Columbia County, State of FLORIDA**, viz:

Lot 51, Cardinal Farms, Unrecorded

A parcel of land in Section 10, Township 6 South, Range 16 East, Columbia County, Florida, being more particularly described as follows:

COMMENCE at the Southeast corner of Section 11, Township 6 South, Range 16 East, Columbia County, Florida and run thence South 88°19'59" West along the South line of said Section 11 a distance of 5311.34 feet to the Southwest corner of Section 11; thence North 01°22'42" West along the West line of Section 11, being also the East line of Section 10 a distance of 1995.16 feet; thence South 88°38'56" West a distance of 60.18 feet to the POINT OF BEGINNING; thence continue South 88°38'56" West a distance of 549.33 feet; thence North 01°21'04" West a distance of 656.04 feet to a point on the South line of the Northeast ¼ of Section 10; thence continue North 01°21'04" West a distance of 108.05 feet; thence North 87°03'34" East a distance of 576.16 feet; thence South 01°21'04" East a distance of 115.62 feet to a point on the North line of the Southeast ¼; thence continue South 01°21'04" East a distance of 22.02 feet; thence South 01°01'15" West a distance of 642.99 feet to the POINT OF BEGINNING.

SUBJECT TO: An Easement for ingress and egress across the Easterly 30.00 feet and the Southerly 30.00 feet thereof.

Subject to declaration of covenants, conditions and restrictions as recorded in Official Records Book 1012 Page 905, but omitting any covenant or restrictions as to race, color, religion, sex, handicap, familial status or national origin.

Easement, recorded in Official Records Book 836, Page 1284, of the Public Records of Columbia County, Florida.

Restrictions or reservations affecting rights in Oil, Gas or any other Minerals, lying upon or beneath the lands insured hereby, pursuant to that instrument recorded in Official Records Book 220, at Page 318, rerecorded in Official Records Book 610, Page 785 of the Public Records of Columbia County, Florida. (No

SUBJECT TO: An Easement for ingress and egress across the Easterly 30.00 feet and the Southerly 30.00 feet thereof.

Subject to declaration of covenants, conditions and restrictions as recorded in Official Records Book 1012 Page 905, but omitting any covenant or restrictions as to race, color, religion, sex, handicap, familial status or national origin.

Easement, recorded in Official Records Book 836, Page 1284, of the Public Records of Columbia County, Florida.

*Restrictions or reservations affecting rights in Oil, Gas or any other Minerals, lying upon or beneath the lands insured hereby, pursuant to that instrument recorded in Official Records Book 220, at Page 318, rerecorded in Official Records Book 619, Page 785 of the Public Records of Columbia County, Florida. [No determination has been made as to the current record owner of the oil, gas and mineral interests excepted herein.]*

Subject to easement for utilities.

Subject to road right-of-way in favor of Columbia County, Florida.

*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 grantees that it is lawfully seized of said land in fee simple; that it has good right and lawful authority to sell and convey said land, and 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, 2003.*

## DISCLOSURE STATEMENT

### FOR OWNER/BUILDER WHEN ACTING AS THEIR OWN CONTRACTOR AND CLAIMING EXEMPTION OF CONTRACTOR LICENSING REQUIREMENTS IN ACCORDANCE WITH FLORIDA STATUTES, ss. 489.103(7).

State law requires construction to be done by licensed contractors. You have applied for a permit under an exemption to that law. The exemption allows you, as the owner of your property, to act as your own contractor with certain restrictions even though you do not have a license. You must provide direct, onsite supervision of the construction yourself. You may build or improve a one-family or two-family residence or a farm outbuilding. You may also build or improve a commercial building, provided your costs do not exceed \$25,000. The building or residence must be for your own use or occupancy. It may not be built or substantially improved for sale or lease. If you sell or lease a building you have built or substantially improved yourself within 1 year after the construction is complete, the law will presume that you built or substantially improved it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person to act as your contractor or to supervise people working on your building. It is your responsibility to make sure that people employed by you have licenses required by state law and by county or municipal licensing ordinances. You may not delegate the responsibility for supervising work to a licensed contractor who is not licensed to perform the work being done. Any person working on your building who is not licensed must work under your direct supervision and must be employed by you, which means that you must deduct F.I.C.A. and withholding tax and provide workers' compensation for that employee, all as prescribed by law. Your construction must comply with all applicable laws, ordinances, building codes, and zoning regulations.

#### TYPE OF CONSTRUCTION

- ☒ Single Family Dwelling  
☐ Farm Outbuilding  
☐ New Construction

- ☐ Two-Family Residence  
☐ Other \_\_\_\_\_

☐ Addition, Alteration, Modification or other Improvement

#### NEW CONSTRUCTION OR IMPROVEMENT

I Carmen P. FAVORITO, JR., have been advised of the above disclosure statement for exemption from contractor licensing as an owner/builder. I agree to comply with all requirements provided for in Florida Statutes ss.489.103(7) allowing this exception for the construction permitted by Columbia County Building Permit Number 22389

Signature

Date

#### FOR BUILDING USE ONLY

I hereby certify that the above listed owner/builder has been notified of the disclosure statement in Florida Statutes ss 489.103(7).

Date 10-15-04 Building Official/Representative L. P. S.



## COMMITMENT OF TITLE INSURANCE

### SCHEDULE A (continued)

File No. 04Y-07108

#### LEGAL DESCRIPTION

Lot 51, Cardinal Farms, Unrecorded

A parcel of land in Section 10, Township 6 South, Range 16 East, Columbia County, Florida, being more particularly described as follows:

COMMENCE at the Southeast corner of Section 11, Township 6 South, Range 16 East, Columbia County, Florida and run thence South 88°19'59" West along the South line of said Section 11 a distance of 5311.34 feet to the Southwest corner of Section 11; thence North 01°22'42" West along the West line of Section 11, being also the East line of Section 10 a distance of 1995.16 feet; thence South 88°38'56" West a distance of 60.18 feet to the POINT OF BEGINNING; thence continue South 88°38'56" West a distance of 549.33 feet; thence North 01°21'04" West a distance of 656.04 feet to a point on the South line of the Northeast ¼ of Section 10; thence continue North 01°21'04" West a distance of 108.05 feet; thence North 87°03'34" East a distance of 576.16 feet; thence South 01°21'04" East a distance of 115.62 feet to a point on the North line of the Southeast ¼; thence continue South 01°21'04" East a distance of 22.02 feet; thence South 01°01'15" West a distance of 642.99 feet to the POINT OF BEGINNING.

SUBJECT TO: An Easement for ingress and egress across the Easterly 30.00 feet and the Southerly 30.00 feet thereof.

**Columbia County Building Department  
Culvert Permit**

**Culvert Permit No.  
000000422**

DATE 10/15/2004 PARCEL ID # 11-6S-16-03815-151  
APPLICANT CARMEN FAVORITO, JR PHONE 497-4747  
ADDRESS 3112 HERLOGST FT. WHITE FL 32038  
OWNER CARMEN FAVORITO & MARILYN MECKSTROTH PHONE 497-4747  
ADDRESS 1162 SW SKYLINE LOOP FT. WHITE FL 32038  
CONTRACTOR OWNER BUILDER PHONE \_\_\_\_\_  
LOCATION OF PROPERTY 47S, TL ON HERLONG ST, TR ON SKYLINE LOOP, TO LOT 51

SUBDIVISION/LOT/BLOCK/PHASE/UNIT CARDINAL FARMS 51

SIGNATURE 

**INSTALLATION REQUIREMENTS**

☒

Culvert size will be 18 inches in diameter with a total length of 32 feet, leaving 24 feet of driving surface. Both ends will be mitered 4 foot with a 4 : 1 slope and poured with a 4 inch thick reinforced concrete slab.

INSTALLATION NOTE: Turnouts will be required as follows:

- a) a majority of the current and existing driveway turnouts are paved, or;
  - b) the driveway to be served will be paved or formed with concrete.
- Turnouts shall be concrete or paved a minimum of 12 feet wide or the width of the concrete or paved driveway, whichever is greater. The width shall conform to the current and existing paved or concreted turnouts.

☐

Culvert installation shall conform to the approved site plan standards.

☐

Department of Transportation Permit installation approved standards.

☐

Other \_\_\_\_\_

ALL PROPER SAFETY REQUIREMENTS SHOULD BE FOLLOWED  
DURING THE INSTALATION OF THE CULVERT.

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

Amount Paid 25.00



FLORIDA ENERGY EFFICIENCY CODE  
FOR BUILDING CONSTRUCTION

Florida Department of Community Affairs  
Residential Whole Building Performance Method A

|               |                 |                      |                 |
|---------------|-----------------|----------------------|-----------------|
| Project Name: | FAVOR RESIDENCE | Builder:             | OWNER           |
| Address:      |                 | Permitting Office:   | Columbia County |
| City, State:  |                 | Permit Number:       | 22389           |
| Owner:        | FAVORITO        | Jurisdiction Number: | 221000          |
| Climate Zone: | North           |                      |                 |

|                                     |                         |  |                   |
|-------------------------------------|-------------------------|--|-------------------|
| 1. New construction or existing     | New                     | 12. Cooling systems                    |                   |
| 2. Single family or multi-family    | Single family           | a. Central Unit                        | Cap: 61.5 kBtu/hr |
| 3. Number of units, if multi-family | 1                       |  | SEER: 12.85       |
| 4. Number of Bedrooms               | 5                       | b. Central Unit                        | Cap: 30.0 kBtu/hr |
| 5. Is this a worst case?            | Yes                     |  | SEER: 12.50       |
| 6. Conditioned floor area (ft²)     | 4410 ft²                | c. N/A                                 |                   |
| 7. Glass area & type                | Single Pane Double Pane | 13. Heating systems                    |                   |
| a. Clear glass, default U-factor    | 16.0 ft² 0.0 ft²        | a. Electric Heat Pump                  | Cap: 74.0 kBtu/hr |
| b. Default tint                     | 652.8 ft² 0.0 ft²       |  | HSPF: 7.00        |
| c. Labeled U or SHGC                | 0.0 ft² 0.0 ft²         | b. Electric Heat Pump                  | Cap: 30.0 kBtu/hr |
| 8. Floor types                      |                         |  | HSPF: 7.00        |
| a. Slab-On-Grade Edge Insulation    | R=1.0, 384.0(p) ft      | c. N/A                                 |                   |
| b. N/A                              |                         | 14. Hot water systems                  |                   |
| c. N/A                              |                         | a. Electric Resistance                 | Cap: 60.0 gallons |
| 9. Wall types                       |                         |  | EF: 0.97          |
| a. Frame, Wood, Exterior            | R=11.0, 258.0 ft²       | b. Electric Resistance                 | Cap: 40.0 gallons |
| b. Concrete, Int Insul, Exterior    | R=7.0, 2742.0 ft²       |  | EF: 0.97          |
| c. N/A                              |                         | c. Conservation credits                |                   |
| d. N/A                              |                         | (HR-Heat recovery, Solar               |                   |
| e. N/A                              |                         | DHP-Dedicated heat pump)               |                   |
| 10. Ceiling types (IRCC)            |                         | 15. HVAC credits                       | PT, CF,           |
| a. Under Attic                      | R=33.0, 4409.9 ft²      | (CF-Ceiling fan, CV-Cross ventilation, |                   |
| b. N/A                              |                         | HF-Whole house fan,                    |                   |
| c. N/A                              |                         | PT-Programmable Thermostat,            |                   |
| 11. Ducts(IRCC)                     |                         | MZ-C-Multizone cooling,                |                   |
| a. Sup: Unc. Ret: Unc. AH: Garage   | Sup. R=6.0, 100.0 ft    | MZ-H-Multizone heating)                |                   |
| b. Sup: Unc. Ret: Unc. AH: Garage   | Sup. R=6.0, 30.0 ft     |  |                   |

Glass/Floor Area: 0.15

Total as-built points: 59050  
Total base points: 59236

PASS

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

PREPARED BY: Paula Sanchez

DATE: 04/01/04

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: \_\_\_\_\_



# ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE SCORE\* = 83.7

The higher the score, the more efficient the home.

FAVORITO, \_\_\_\_\_, \_\_\_\_\_, FL,

|  |                                |                     |  |                       |
|--|--------------------------------|---------------------|--|-----------------------|
| 1. New construction or existing              | New                            | ___                 | 12. Cooling systems                    | ___                   |
| 2. Single family or multi-family             | Single family                  | ___                 | a. Central Unit                        | Cap: 61.5 kBtu/hr ___ |
| 3. Number of units, if multi-family          | 1                              | ___                 |  | SEER: 12.85 ___       |
| 4. Number of Bedrooms                        | 5                              | ___                 | b. Central Unit                        | Cap: 30.0 kBtu/hr ___ |
| 5. Is this a worst case?                     | Yes                            | ___                 |  | SEER: 12.50 ___       |
| 6. Conditioned floor area (ft <sup>2</sup> ) | 4410 ft <sup>2</sup>           | ___                 | c. N/A                                 | ___                   |
| 7. Glass area & type                         | Single Pane                    | Double Pane         | ___                                    | ___                   |
| a. Clear - single pane                       | 16.0 ft <sup>2</sup>           | 0.0 ft <sup>2</sup> | ___                                    | ___                   |
| b. Clear - double pane                       | 652.8 ft <sup>2</sup>          | 0.0 ft <sup>2</sup> | 13. Heating systems                    | ___                   |
| c. Tint/other SHGC - single pane             | 0.0 ft <sup>2</sup>            | 0.0 ft <sup>2</sup> | a. Electric Heat Pump                  | Cap: 74.0 kBtu/hr ___ |
| d. Tint/other SHGC - double pane             | ___                            | ___                 |  | HSPF: 7.00 ___        |
| 8. Floor types                               | ___                            | ___                 | b. Electric Heat Pump                  | Cap: 30.0 kBtu/hr ___ |
| a. Slab-On-Grade Edge Insulation             | R=1.0, 384.0(p) ft             | ___                 |  | HSPF: 7.00 ___        |
| b. N/A                                       | ___                            | ___                 | c. N/A                                 | ___                   |
| c. N/A                                       | ___                            | ___                 | 14. Hot water systems                  | ___                   |
| 9. Wall types                                | ___                            | ___                 | a. Electric Resistance                 | Cap: 60.0 gallons ___ |
| a. Frame, Wood, Exterior                     | R=11.0, 258.0 ft <sup>2</sup>  | ___                 |  | EF: 0.97 ___          |
| b. Concrete, Int Insul, Exterior             | R=7.0, 2742.0 ft <sup>2</sup>  | ___                 | b. Electric Resistance                 | Cap: 40.0 gallons ___ |
| c. N/A                                       | ___                            | ___                 |  | EF: 0.97 ___          |
| d. N/A                                       | ___                            | ___                 | c. Conservation credits                | ___                   |
| e. N/A                                       | ___                            | ___                 | (HR-Heat recovery, Solar               | ___                   |
| 10. Ceiling types (IRCC)                     | ___                            | ___                 | DHP-Dedicated heat pump)               | ___                   |
| a. Under Attic                               | R=33.0, 4409.9 ft <sup>2</sup> | ___                 | 15. HVAC credits                       | PT, CF, ___           |
| b. N/A                                       | ___                            | ___                 | (CF-Ceiling fan, CV-Cross ventilation, | ___                   |
| c. N/A                                       | ___                            | ___                 | HF-Whole house fan,                    | ___                   |
| 11. Ducts(IRCC)                              | ___                            | ___                 | PT-Programmable Thermostat,            | ___                   |
| a. Sup: Unc. Ret: Unc. AH: Garage            | Sup. R=6.0, 100.0 ft           | ___                 | MZ-C-Multizone cooling,                | ___                   |
| b. Sup: Unc. Ret: Unc. AH: Garage            | Sup. R=6.0, 30.0 ft            | ___                 | MZ-H-Multizone heating)                | ___                   |

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](http://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.*

EnergyGauge® (Version: FLRCSB v3.30)

SUMMER CALCULATIONS  
Residential Whole Building Performance Method A - Details

ADDRESS: \_\_\_\_\_, \_\_\_\_\_, FL, PERMIT #:

| BASE   |        |        |         | AS-BUILT                        |                          |      |                           |                 |         |      |            |       |         |  |  |
|--|--------|--------|---------|---------------------------------|--------------------------|------|---------------------------|-----------------|---------|------|------------|-------|---------|--|--|
| GLASS TYPES<br>.18 X Conditioned X BSPM = Points<br>Floor Area |        |        |         | Type/SC                         | Overhang<br>Ornt Len Hgt |      | Area X SPM X SOF = Points |                 |         |      |            |       |         |  |  |
| .18  | 4410.0 | 20.04  | 15907.8 | Single, Tint                    | S                        | 9.0  | 7.0                       | 30.0            | 33.55   | 0.49 | 490.1      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 15.0 | 9.0                       | 35.0            | 33.55   | 0.46 | 542.6      |       |         |  |  |
|  |        |        |         | Single, Tint                    | SE                       | 13.0 | 7.5                       | 13.8            | 40.24   | 0.41 | 229.3      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 13.0 | 7.5                       | 33.0            | 33.55   | 0.46 | 507.3      |       |         |  |  |
|  |        |        |         | Single, Tint                    | SW                       | 0.0  | 0.0                       | 13.8            | 37.77   | 1.00 | 521.3      |       |         |  |  |
|  |        |        |         | Single, Tint                    | E                        | 2.0  | 4.0                       | 4.0             | 39.62   | 0.73 | 115.0      |       |         |  |  |
|  |        |        |         | Single, Clear                   | NE                       | 2.0  | 6.0                       | 16.0            | 33.55   | 0.87 | 464.7      |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 0.0  | 0.0                       | 4.0             | 17.28   | 1.00 | 69.1       |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 2.0  | 9.0                       | 63.0            | 17.28   | 0.95 | 1037.1     |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 12.0 | 11.5                      | 57.0            | 17.28   | 0.70 | 694.2      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 13.0 | 7.0                       | 12.5            | 33.55   | 0.45 | 190.7      |       |         |  |  |
|  |        |        |         | Single, Tint                    | SE                       | 13.0 | 7.0                       | 25.0            | 40.24   | 0.41 | 411.1      |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 2.0  | 9.0                       | 63.0            | 17.28   | 0.95 | 1037.1     |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 20.3            | 36.13   | 0.87 | 636.4      |       |         |  |  |
|  |        |        |         | Single, Tint                    | E                        | 30.0 | 10.0                      | 64.0            | 39.62   | 0.36 | 904.8      |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 20.3            | 36.13   | 0.87 | 636.4      |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 5.0                       | 9.0             | 36.13   | 0.80 | 259.9      |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 20.3            | 36.13   | 0.87 | 636.4      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 0.0  | 0.0                       | 9.0             | 33.55   | 1.00 | 302.0      |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 10.0 | 7.0                       | 15.0            | 36.13   | 0.46 | 247.6      |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 7.0                       | 15.0            | 36.13   | 0.88 | 478.8      |       |         |  |  |
|  |        |        |         | Single, Tint                    | E                        | 2.0  | 6.5                       | 27.0            | 39.62   | 0.87 | 927.1      |       |         |  |  |
|  |        |        |         | Single, Tint                    | NE                       | 2.0  | 6.5                       | 20.3            | 27.37   | 0.88 | 488.8      |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 12.0 | 9.0                       | 35.0            | 17.28   | 0.67 | 404.6      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 2.0  | 5.5                       | 10.5            | 33.55   | 0.75 | 264.7      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 2.0  | 6.5                       | 13.5            | 33.55   | 0.80 | 361.3      |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 2.0  | 4.0                       | 6.0             | 33.55   | 0.66 | 132.8      |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 13.5            | 36.13   | 0.87 | 423.2      |       |         |  |  |
|  |        |        |         |                                 |                          |      |                           | As-Built Total: |         |      |            | 668.8 | 13414.7 |  |  |
|  |        |        |         | WALL TYPES Area X BSPM = Points |                          |      |                           | Type            | R-Value |      | Area X SPM | =     | Points  |  |  |
| Adjacent   | 0.0    | 0.00   | 0.0     | Frame, Wood, Exterior           | 11.0                     |      | 258.0                     | 1.70            | 438.6   |      |            |       |         |  |  |
| Exterior   | 3000.0 | 1.70   | 5100.0  | Concrete, Int Insul, Exterior   | 7.0                      |      | 2742.0                    | 0.70            | 1919.4  |      |            |       |         |  |  |
| Base Total:  |        | 3000.0 | 5100.0  | As-Built Total:                 |                          |      |                           | 3000.0          | 2358.0  |      |            |       |         |  |  |
| DOOR TYPES Area X BSPM = Points                                |        |        |         | Type                            |                          |      | Area X SPM                | =               | Points  |      |            |       |         |  |  |
| Adjacent   | 0.0    | 0.00   | 0.0     | Exterior Wood                   |                          |      | 63.0                      | 6.10            | 384.3   |      |            |       |         |  |  |
| Exterior   | 63.0   | 6.10   | 384.3   |                                 |                          |      |                           |                 |         |      |            |       |         |  |  |
| Base Total:  |        | 63.0   | 384.3   | As-Built Total:                 |                          |      |                           | 63.0            | 384.3   |      |            |       |         |  |  |

SUMMER CALCULATIONS  
Residential Whole Building Performance Method A - Details

ADDRESS: \_\_\_\_\_, \_\_\_\_\_, FL, PERMIT #:

| BASE                                  |                     |          |                | AS-BUILT                           |             |                           |                     |                                      |         |
|---------------------------------------|---------------------|----------|----------------|------------------------------------|-------------|---------------------------|---------------------|--------------------------------------|---------|
| CEILING TYPES    Area X BSPM = Points |                     |          |                | Type (IRCC)                        | R-Value     | Area X SPM X SCM = Points |                     |                                      |         |
| Under Attic                           | 4409.9              | 1.73     | 7629.1         | Under Attic                        | 33.0        | 4409.9                    | 1.65 X 0.84         | 6182.3                               |         |
| Base Total:                           |                     | 4409.9   | 7629.1         | As-Built Total:                    |             | 4409.9                    | 6182.3              |                                      |         |
| FLOOR TYPES    Area X BSPM = Points   |                     |          |                | Type                               | R-Value     | Area X SPM = Points       |                     |                                      |         |
| Slab                                  | 384.0(p)            | -37.0    | -14208.0       | Slab-On-Grade Edge Insulation      | 1.0         | 384.0(p)                  | -39.87              | -15308.8                             |         |
| Raised                                | 0.0                 | 0.00     | 0.0            |                                    |             |                           |                     |                                      |         |
| Base Total:                           |                     | -14208.0 |                | As-Built Total:                    |             | 384.0                     | -15308.8            |                                      |         |
| INFILTRATION    Area X BSPM = Points  |                     |          |                | Area X SPM = Points                |             |                           |                     |                                      |         |
|                                       |                     | 4410.0   | 10.21          | 45026.1                            |             |                           |                     |                                      |         |
|                                       |                     | 4410.0   | 10.21          | 45026.1                            |             |                           |                     |                                      |         |
| Summer Base Points:    59839.3        |                     |          |                | Summer As-Built Points:    52056.6 |             |                           |                     |                                      |         |
| Total Summer Points                   | X System Multiplier | =        | Cooling Points | Total Component                    | X Cap Ratio | X Duct Multiplier         | X System Multiplier | X Credit Multiplier = Cooling Points |         |
|                                       |                     |          |                | (DM x DSM x AHU)                   |             |                           |                     |                                      |         |
|                                       |                     |          |                | 52056.6                            | 0.672       | (1.071 x 1.147 x 1.00)    | 0.266               | 0.902                                | 10303.0 |
|                                       |                     |          |                | 52056.6                            | 0.328       | (1.071 x 1.147 x 1.00)    | 0.273               | 0.902                                | 5166.6  |
| 59839.3                               | 0.4266              | 25527.4  |                | 52056.6                            | 1.00        | 1.228                     | 0.268               | 0.902                                | 15467.0 |

WINTER CALCULATIONS  
Residential Whole Building Performance Method A - Details

ADDRESS: \_\_\_\_\_, \_\_\_\_\_, FL, PERMIT #:

| BASE   |        |        |         | AS-BUILT                        |                          |      |                           |                 |         |      |                     |       |         |  |  |
|--|--------|--------|---------|---------------------------------|--------------------------|------|---------------------------|-----------------|---------|------|---------------------|-------|---------|--|--|
| GLASS TYPES<br>.18 X Conditioned X BWPM = Points<br>Floor Area |        |        |         | Type/SC                         | Overhang<br>Ornt Len Hgt |      | Area X WPM X WOF = Points |                 |         |      |                     |       |         |  |  |
| .18  | 4410.0 | 12.74  | 10113.0 | Single, Tint                    | S                        | 9.0  | 7.0                       | 30.0            | 22.87   | 3.12 | 2138.9              |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 15.0 | 9.0                       | 35.0            | 22.87   | 3.40 | 2725.1              |       |         |  |  |
|  |        |        |         | Single, Tint                    | SE                       | 13.0 | 7.5                       | 13.8            | 24.24   | 2.41 | 807.0               |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 13.0 | 7.5                       | 33.0            | 22.87   | 3.45 | 2603.6              |       |         |  |  |
|  |        |        |         | Single, Tint                    | SW                       | 0.0  | 0.0                       | 13.8            | 26.20   | 1.00 | 361.5               |       |         |  |  |
|  |        |        |         | Single, Tint                    | E                        | 2.0  | 4.0                       | 4.0             | 28.18   | 1.12 | 126.2               |       |         |  |  |
|  |        |        |         | Single, Clear                   | NE                       | 2.0  | 6.0                       | 16.0            | 32.04   | 1.01 | 519.0               |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 0.0  | 0.0                       | 4.0             | 34.06   | 1.00 | 136.3               |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 2.0  | 9.0                       | 63.0            | 34.06   | 1.00 | 2149.6              |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 12.0 | 11.5                      | 57.0            | 34.06   | 1.02 | 1978.1              |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 13.0 | 7.0                       | 12.5            | 22.87   | 3.48 | 994.0               |       |         |  |  |
|  |        |        |         | Single, Tint                    | SE                       | 13.0 | 7.0                       | 25.0            | 24.24   | 2.44 | 1480.6              |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 2.0  | 9.0                       | 63.0            | 34.06   | 1.00 | 2149.6              |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 20.3            | 30.32   | 1.04 | 638.3               |       |         |  |  |
|  |        |        |         | Single, Tint                    | E                        | 30.0 | 10.0                      | 64.0            | 28.18   | 1.51 | 2717.1              |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 20.3            | 30.32   | 1.04 | 638.3               |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 5.0                       | 9.0             | 30.32   | 1.06 | 289.0               |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 20.3            | 30.32   | 1.04 | 638.3               |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 0.0  | 0.0                       | 9.0             | 22.87   | 1.00 | 205.8               |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 10.0 | 7.0                       | 15.0            | 30.32   | 1.20 | 545.9               |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 7.0                       | 15.0            | 30.32   | 1.03 | 469.4               |       |         |  |  |
|  |        |        |         | Single, Tint                    | E                        | 2.0  | 6.5                       | 27.0            | 28.18   | 1.05 | 801.2               |       |         |  |  |
|  |        |        |         | Single, Tint                    | NE                       | 2.0  | 6.5                       | 20.3            | 33.05   | 1.01 | 678.2               |       |         |  |  |
|  |        |        |         | Single, Tint                    | N                        | 12.0 | 9.0                       | 35.0            | 34.06   | 1.02 | 1217.9              |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 2.0  | 5.5                       | 10.5            | 22.87   | 1.31 | 314.1               |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 2.0  | 6.5                       | 13.5            | 22.87   | 1.22 | 375.4               |       |         |  |  |
|  |        |        |         | Single, Tint                    | S                        | 2.0  | 4.0                       | 6.0             | 22.87   | 1.64 | 225.0               |       |         |  |  |
|  |        |        |         | Single, Tint                    | W                        | 2.0  | 6.5                       | 13.5            | 30.32   | 1.04 | 424.5               |       |         |  |  |
|  |        |        |         |                                 |                          |      |                           | As-Built Total: |         |      |                     | 668.8 | 28347.8 |  |  |
|  |        |        |         | WALL TYPES Area X BWPM = Points |                          |      |                           | Type            | R-Value |      | Area X WPM = Points |       |         |  |  |
| Adjacent   | 0.0    | 0.00   | 0.0     | Frame, Wood, Exterior           | 11.0                     |      | 258.0                     | 3.70            | 954.6   |      |                     |       |         |  |  |
| Exterior   | 3000.0 | 3.70   | 11100.0 | Concrete, Int Insul, Exterior   | 7.0                      |      | 2742.0                    | 4.60            | 12613.2 |      |                     |       |         |  |  |
| Base Total:  |        | 3000.0 | 11100.0 | As-Built Total:                 |                          |      |                           | 3000.0          | 13567.8 |      |                     |       |         |  |  |
| DOOR TYPES Area X BWPM = Points                                |        |        |         | Type                            |                          |      | Area X WPM = Points       |                 |         |      |                     |       |         |  |  |
| Adjacent   | 0.0    | 0.00   | 0.0     | Exterior Wood                   |                          |      | 63.0                      | 12.30           | 774.9   |      |                     |       |         |  |  |
| Exterior   | 63.0   | 12.30  | 774.9   |                                 |                          |      |                           |                 |         |      |                     |       |         |  |  |
| Base Total:  |        | 63.0   | 774.9   | As-Built Total:                 |                          |      |                           | 63.0            | 774.9   |      |                     |       |         |  |  |

WINTER CALCULATIONS

Residential Whole Building Performance Method A - Details

ADDRESS: \_\_\_\_\_, \_\_\_\_\_, FL, PERMIT #:

| BASE                               |          |                   |                  | AS-BUILT                      |             |                                    |  |
|------------------------------------|----------|-------------------|------------------|-------------------------------|-------------|------------------------------------|--|
| CEILING TYPES Area X BWPM = Points |          |                   |                  | Type (IRCC)                   | R-Value     | Area X WPM X WCM =                 | Points   |
| Under Attic                        | 4409.9   | 2.05              | 9040.3           | Under Attic                   | 33.0        | 4409.9 1.96 X 0.91                 | 7882.8   |
| Base Total:                        | 4409.9   |                   | 9040.3           | As-Built Total:               |             | 4409.9                             | 7882.8   |
| FLOOR TYPES Area X BWPM = Points   |          |                   |                  | Type                          | R-Value     | Area X WPM =                       | Points   |
| Slab                               | 384.0(p) | 8.9               | 3417.6           | Slab-On-Grade Edge Insulation | 1.0         | 384.0(p) 15.63                     | 6003.2   |
| Raised                             | 0.0      | 0.00              | 0.0              |                               |             |                                    |  |
| Base Total:                        |          |                   | 3417.6           | As-Built Total:               |             | 384.0                              | 6003.2   |
| INFILTRATION Area X BWPM = Points  |          |                   |                  | Area X WPM = Points           |             |                                    |  |
|                                    | 4410.0   | -0.59             | -2601.9          |                               |             | 4410.0 -0.59                       | -2601.9  |
| Winter Base Points:                |          | 31843.9           |                  | Winter As-Built Points:       |             | 53974.6                            |  |
| Total Winter Points                | X        | System Multiplier | = Heating Points | Total Component               | X Cap Ratio | X Duct Multiplier (DM x DSM x AHU) | X System Multiplier X Credit Multiplier = Heating Points |
|                                    |          |                   |                  | 53974.6                       | 0.712       | (1.066 x 1.169 x 1.00)             | 0.487 0.950 22148.3                                      |
|                                    |          |                   |                  | 53974.6                       | 0.288       | (1.066 x 1.169 x 1.00)             | 0.487 0.950 8979.0                                       |
| 31843.9                            |          | 0.6274            | 19978.9          | 53974.6                       | 1.00        | 1.246                              | 0.487 0.950 31127.3                                      |



Code Compliance Checklist  
Residential Whole Building Performance Method A - Details

ADDRESS: \_\_\_\_\_, \_\_\_\_\_, 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.<br>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.<br>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 6-12. 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.<br>Common ceiling & floors R-11.  |       |

*Favorito Residence*  
*HVAC Load Calculations*

for

Favorito



**RHVAC** RESIDENTIAL  
HVAC LOADS

Prepared By:  
Paulo Goncalves  
RFM Design & Associates

Thursday, April 01, 2004



### Total Building Summary Loads

| Component Description   | Area Quan | Sen Loss       | Lat Gain      | Sen Gain      | Total Gain    |
|---|-----------|----------------|---------------|---------------|---------------|
| 1A-hb-o: Glazing-Single pane, operable window, heat-absorbing, metal frame with break, outdoor insect screen with 50% coverage, light color drapes with medium weave with 50% coverage, external shade screen coefficient of 0.45 and 100% coverage | 652.5     | 28,897         | 0             | 26,382        | 26,382        |
| 7A-1: Glazing-Glass or plastic block, smooth or wide ribs or flutes, no screen, no coating, external shade screen coefficient of 0.45 and 100% coverage   | 16        | 394            | 0             | 848           | 848           |
| 11D: Door-Solid Core  | 63        | 1,008          | 0             | 714           | 714           |
| 13A-4ocb: Wall-Block, board insulation only, R-4 board insulation, open core, brick finish  | 2742      | 16,639         | 0             | 6,037         | 6,037         |
| 12B-0sw: Wall-Frame, R-11 insulation in 2 x 4 stud cavity, no board insulation, siding finish, wood studs   | 258       | 1,026          | 0             | 622           | 622           |
| 16BR-30-ml: Roof/Ceiling-Under attic or knee wall, unvented attic with radiant barrier, R-30 insulation, light metal  | 4409.9    | 5,784          | 0             | 7,480         | 7,480         |
| 22A-ph: Floor-Slab on grade, No edge insulation, no insulation below floor, any floor cover, passive, heavy moist soil  | 384       | 21,379         | 0             | 0             | 0             |
| Subtotals for structure:  |           | 75,127         | 0             | 42,083        | 42,083        |
| People:   | 8         |                | 1,840         | 2,400         | 4,240         |
| Equipment:  |           |                | 440           | 880           | 1,320         |
| Lighting:   | 2775      |                |               | 9,463         | 9,463         |
| Ductwork:   |           | 4,935          | 0             | 6,074         | 6,074         |
| Infiltration: Winter CFM: 525, Summer CFM: 300  |           | 23,561         | 10,160        | 5,910         | 16,070        |
| Ventilation: Winter CFM: 0, Summer CFM: 0   |           | 0              | 0             | 0             | 0             |
| <b>Total Building Load Totals:</b>  |           | <b>103,623</b> | <b>12,440</b> | <b>66,810</b> | <b>79,250</b> |

#### Check Figures

|                              |        |                               |       |
|------------------------------|--------|-------------------------------|-------|
| Total Building Supply CFM:   | 3,054  | CFM Per Square ft.:           | 1.394 |
| Square ft. of Room Area:     | 4,410  | Square ft. Per Ton:           | 610   |
| Volume (ft³) of Cond. Space: | 45,020 | Air Turnover Rate (per hour): | 8.6   |

#### Building Loads

|  |              |  |
|--|--------------|--|
| Total Heating Required With Outside Air: | 103,623 Btuh | 103.623 MBH                                |
| Total Sensible Gain:                     | 66,810 Btuh  | 84 %                                       |
| Total Latent Gain:                       | 12,440 Btuh  | 16 %                                       |
| Total Cooling Required With Outside Air: | 79,250 Btuh  | 6.60 Tons (Based On Sensible + Latent)     |
|  |              | 7.23 Tons (Based On 77% Sensible Capacity) |

#### Notes

Calculations are based on 8th edition of ACCA Manual J.  
 All computed results are estimates as building use and weather may vary.  
 Be sure to select a unit that meets both sensible and latent loads.



### System 1 (Imported) Summary Loads (Peak Method)

| Component Description   | Area Quan | Sen Loss | Lat Gain | Sen Gain | Total Gain |
|---|-----------|----------|----------|----------|------------|
| 1A-hb-o: Glazing-Single pane, operable window, heat-absorbing, metal frame with break, outdoor insect screen with 50% coverage, light color drapes with medium weave with 50% coverage, external shade screen coefficient of 0.45 and 100% coverage | 496.8     | 21,999   | 0        | 19,351   | 19,351     |
| 7A-1: Glazing-Glass or plastic block, smooth or wide ribs or flutes, no screen, no coating, external shade screen coefficient of 0.45 and 100% coverage   | 16        | 394      | 0        | 848      | 848        |
| 11D: Door-Solid Core  | 42        | 672      | 0        | 476      | 476        |
| 13A-4ocb: Wall-Block, board insulation only, R-4 board insulation, open core, brick finish  | 1771.2    | 10,749   | 0        | 3,796    | 3,796      |
| 12B-0sw: Wall-Frame, R-11 insulation in 2 x 4 stud cavity, no board insulation, siding finish, wood studs   | 258       | 1,026    | 0        | 622      | 622        |
| 16BR-30-ml: Roof/Ceiling-Under attic or knee wall, unvented attic with radiant barrier, R-30 insulation, light metal  | 3151.4    | 4,133    | 0        | 5,345    | 5,345      |
| 22A-ph: Floor-Slab on grade, No edge insulation, no insulation below floor, any floor cover, passive, heavy moist soil  | 254       | 14,141   | 0        | 0        | 0          |
| Subtotals for structure:  |           | 53,114   | 0        | 30,438   | 30,438     |
| People:   | 5         |          | 1,150    | 1,500    | 2,650      |
| Equipment:  |           |          | 220      | 440      | 660        |
| Lighting:   | 1825      |          |          | 6,223    | 6,223      |
| Ductwork:   |           | 3,537    | 0        | 4,302    | 4,302      |
| Infiltration: Winter CFM: 393, Summer CFM: 225  |           | 17,632   | 7,604    | 4,423    | 12,027     |
| Ventilation: Winter CFM: 0, Summer CFM: 0   |           | 0        | 0        | 0        | 0          |
| System 1 (Imported) Load Totals:  |           | 74,283   | 8,974    | 47,326   | 56,300     |

#### Check Figures

|   |        |                               |       |
|---|--------|-------------------------------|-------|
| Supply CFM:                               | 2,163  | CFM Per Square ft.:           | 0.686 |
| Square ft. of Room Area:                  | 3,152  | Square ft. Per Ton:           | 615   |
| Volume (ft <sup>3</sup> ) of Cond. Space: | 33,694 | Air Turnover Rate (per hour): | 3.9   |

#### System Loads

|  |             |  |
|--|-------------|--|
| Total Heating Required With Outside Air: | 74,283 Btuh | 74.283 MBH                                 |
| Total Sensible Gain:                     | 47,326 Btuh | 84 %                                       |
| Total Latent Gain:                       | 8,974 Btuh  | 16 %                                       |
| Total Cooling Required With Outside Air: | 56,300 Btuh | 4.69 Tons (Based On Sensible + Latent)     |
|  |             | 5.12 Tons (Based On 77% Sensible Capacity) |

#### Notes

Calculations are based on 8th edition of ACCA Manual J.  
All computed results are estimates as building use and weather may vary.  
Be sure to select a unit that meets both sensible and latent loads.



### System 2 (Imported) Summary Loads (Peak Method)

| Component Description   | Area Quan | Sen Loss | Lat Gain | Sen Gain | Total Gain |
|---|-----------|----------|----------|----------|------------|
| 1A-hb-o: Glazing-Single pane, operable window, heat-absorbing, metal frame with break, outdoor insect screen with 50% coverage, light color drapes with medium weave with 50% coverage, external shade screen coefficient of 0.45 and 100% coverage | 155.8     | 6,898    | 0        | 7,031    | 7,031      |
| 11D: Door-Solid Core  | 21        | 336      | 0        | 238      | 238        |
| 13A-4ocb: Wall-Block, board insulation only, R-4 board insulation, open core, brick finish  | 970.8     | 5,890    | 0        | 2,241    | 2,241      |
| 16BR-30-ml: Roof/Ceiling-Under attic or knee wall, unvented attic with radiant barrier, R-30 insulation, light metal  | 1258.5    | 1,651    | 0        | 2,135    | 2,135      |
| 22A-ph: Floor-Slab on grade, No edge insulation, no insulation below floor, any floor cover, passive, heavy moist soil  | 130       | 7,238    | 0        | 0        | 0          |
| Subtotals for structure:  |           | 22,013   | 0        | 11,645   | 11,645     |
| People:   | 3         |          | 690      | 900      | 1,590      |
| Equipment:  |           |          | 220      | 440      | 660        |
| Lighting:   | 950       |          |          | 3,240    | 3,240      |
| Ductwork:   |           | 1,398    | 0        | 1,772    | 1,772      |
| Infiltration: Winter CFM: 132, Summer CFM: 76   |           | 5,929    | 2,556    | 1,487    | 4,043      |
| Ventilation: Winter CFM: 0, Summer CFM: 0   |           | 0        | 0        | 0        | 0          |
| System 2 (Imported) Load Totals:  |           | 29,340   | 3,466    | 19,484   | 22,950     |

#### Check Figures

|                              |        |                               |       |
|------------------------------|--------|-------------------------------|-------|
| Supply CFM:                  | 890    | CFM Per Square ft.:           | 0.708 |
| Square ft. of Room Area:     | 1,258  | Square ft. Per Ton:           | 597   |
| Volume (ft³) of Cond. Space: | 11,326 | Air Turnover Rate (per hour): | 4.7   |

#### System Loads

|  |             |  |
|--|-------------|--|
| Total Heating Required With Outside Air: | 29,340 Btuh | 29.340 MBH                                 |
| Total Sensible Gain:                     | 19,484 Btuh | 85 %                                       |
| Total Latent Gain:                       | 3,466 Btuh  | 15 %                                       |
| Total Cooling Required With Outside Air: | 22,950 Btuh | 1.91 Tons (Based On Sensible + Latent)     |
|  |             | 2.11 Tons (Based On 77% Sensible Capacity) |

#### Notes

Calculations are based on 8th edition of ACCA Manual J.  
All computed results are estimates as building use and weather may vary.  
Be sure to select a unit that meets both sensible and latent loads.

# CERTIFICATE OF OCCUPANCY

## 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 11-6S-16-03815-151

Building permit No. 000022389

Use Classification SFD, UTILITY

Fire: 74.34

Permit Holder OWNER BUILDER

Waste: 110.25

Owner of Building CARMEN FAVORITO JR

Total: 184.59

Location: 1162 SW SKYLINE LOOP(CARDINAL FARMS, LOT 51)

Date: 01/25/2006

*ful*

Building Inspector

POST IN A CONSPICUOUS PLACE  
(Business Places Only)





## Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056-1625  
6919 Distribution Avenue S., Unit #5 • Jacksonville, FL 32257

Tel. (386) 755-3633 • Fax (386) 752-5456  
Tel. (904) 262-4046 • Fax (904) 262-4047

22389

October 25, 2004

Carmen Favorito  
3112 S. W. Hurlong Street  
Fort White, Florida 32038

Reference: Proposed Favorito Residence  
Lot 51, Cardinal Farms  
Columbia County, Florida  
Cal-Tech Project No. 04-480

Dear Mr. Favorito,

Cal-Tech Testing, Inc. has performed a follow-up investigation and evaluation of the site for a proposed residence to be constructed at Lot 51 of Cardinal Farms in Columbia County, Florida. Our work was authorized by you.

The purposes of our investigation were to reevaluate the existing subgrade soils for an allowable bearing pressure of 2,500 pounds per square foot and to provide recommendations as appropriate.

### Site Investigation

The building area was investigated by performing one (1) additional Standard Penetration Test boring (B-3) advanced to a depth of 7.0 feet. This boring was performed at the approximate location indicated on the attached Location Plan. The proposed limits of construction were cleared on site, and we used this delineated area to locate the boring.

The Standard Penetration Test (ASTM D-1586) is performed by driving a standard split-barrel sampler into the soil by blows from a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler 1 foot, after seating 6 inches, is designated the penetration resistance, or N-value; this value is an index to soil density or consistency.

### Findings

Soil boring B-3 generally encountered three soil strata. The first layer consists of about 2.5 feet of loose, tan and gray sand (SP). The N-values of this layer are on the order of 6 blows per foot.

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The second layer consists of about 2.5 feet of loose to medium dense, tan or tan, orange and red, clayey sand (SC). The N-values of this layer range from 8 to 27 blows per foot.

The third layer consists of an undetermined thickness of medium dense to dense, gray, orange and red, clayey sand (SC). The N-values of this layer range from 27 to 39 blows per foot.

Groundwater was not encountered at the time of our investigation. For a more detailed description of the subsurface conditions encountered, please refer to the attached Boring Log. Note that the boring logs from the previous investigation are included with the current boring log for comparison.

#### Discussion

Based upon our current findings, we have performed a bearing capacity analysis for the immediate bearing soils and have assumed the foundations will have minimum widths of 18 inches and be embedded a minimum of 14 inches below the existing surface grade. For these foundations and the site soils as encountered, we obtained an allowable bearing capacity of 2,500 pounds per square foot with a factor of safety of about 1.3 against a bearing capacity failure. Based upon this evaluation the subgrade soils within the proposed building area are suitable for shallow foundations and an allowable bearing capacity of 2,500 pounds per square foot

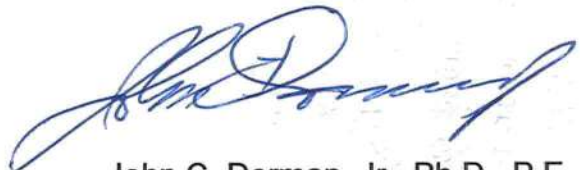
Our evaluation is based upon the subsurface conditions encountered at this site and as presented within this report. However, subsurface conditions may exist that differ from our findings. We request that we be notified if substantially different subsurface conditions are encountered.

We appreciate the opportunity to be of service on this project and look forward to a continued association. Please do not hesitate to contact us should you have questions concerning this report or if we may be of further assistance.

Respectfully submitted,  
Cal-Tech Testing, Inc.



Linda Creamer  
President / CEO



John C. Dorman, Jr., Ph.D., P.E.  
Geotechnical Engineer

10/25/04  
52612

## B-1

| Water Table: N/A |         | Soil  |
|------------------|---------|---|
| Depth (ft)       | N-value | Description   |
| 0                |         | Gray SAND with SILT and Organics (SP/SM)                      |
| 3                | 3       | Very Loose, Grayish Tan SAND (SP)                             |
| 3                | 3       | Very Loose, Orangish Tan, CLAYEY SAND (SC)                    |
| 5                | 10      | Loose to Medium Dense, Gray, Orange and Red, CLAYEY SAND (SC) |
| 28               | 28      |   |

Wet Season Water Table: 2.0 ft.

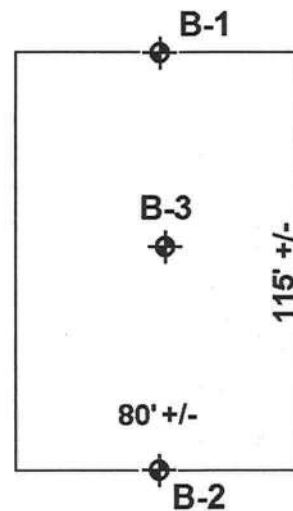
## B-2

| Water Table: N/A |         | Soil  |
|------------------|---------|---|
| Depth (ft)       | N-value | Description   |
| 0                |         | Gray SAND with SILT and Organics (SP/SM)              |
| 3                | 3       | Very Loose, Grayish Tan SAND (SP)                     |
| 6                | 6       | Loose to Medium Dense, Orangish Tan, CLAYEY SAND (SC) |
| 15               | 15      |   |
| 23               | 23      | Medium Dense, Gray, Red and Orange, CLAYEY SAND (SC)  |

Wet Season Water Table: 2.0 ft.

## B-3

| Water Table: N/A |         | Soil  |
|------------------|---------|---|
| Depth (ft)       | N-value | Description   |
| 0                |         | Loose, Tan and Gray SAND (SP)                                 |
| 6                | 6       | Loose, Tan, CLAYEY SAND (SC)                                  |
| 8                | 8       | Loose to Medium Dense, Tan, Orange and Red, CLAYEY SAND (SC)  |
| 27               | 27      |   |
| 39               | 39      | Medium Dense to Dense, Gray, Red and Orange, CLAYEY SAND (SC) |



Hilltop Terrace

Skyline Loop

N

**Boring Logs and Location Plan: Lot 51, Cardinal Farms  
Favorito Residence  
Columbia County, Florida**

22389

NOTICE OF COMMENCEMENT FORM  
COLUMBIA COUNTY, FLORIDA

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.

Tax Parcel ID Number 11-6S-16-03815-151

1. Description of property: (legal description of the property and street address or 911 address)

Cardinal Farms Lot 51

Inst:2004026083 Date:11/22/2004 Time:09:23  
YMK DC,P.Dewitt Cason,Columbia County B:1031 P:740

2. General description of improvement: single family dwelling

3. Owner Name & Address Caermen P. Favorito - 1162 SW Skyline Loop Ft. White, FL 3203  
Interest in Property \_\_\_\_\_

4. Name & Address of Fee Simple Owner (if other than owner): \_\_\_\_\_

5. Contractor Name owner-builder Phone Number 386-497-4747  
Address 3112 SW Herlong St Ft. White FL 32038

6. Surety Holders Name \_\_\_\_\_ Phone Number \_\_\_\_\_

Address \_\_\_\_\_

Amount of Bond \_\_\_\_\_

7. Lender Name Fidelity Federal Phone Number 561-803-9900  
Address Datura St. WPB, FL

8. Persons within the State of Florida designated by the Owner upon whom notices or other documents may be served as provided by section 718.13 (1)(a) 7; Florida Statutes:

Name \_\_\_\_\_ Phone Number \_\_\_\_\_

Address \_\_\_\_\_

9. In addition to himself/herself the owner designates \_\_\_\_\_ of  
Fidelity Federal to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) –  
(a) 7. Phone Number of the designee \_\_\_\_\_

10. Expiration date of the Notice of Commencement (the expiration date is 1 (one) year from the date of recording,  
(Unless a different date is specified) \_\_\_\_\_

NOTICE AS PER CHAPTER 713, Florida Statutes:

The owner must sign the notice of commencement and no one else may be permitted to sign in his/her stead.

Sworn to (or affirmed) and subscribed before  
day of Nov. 22, 2004

NOTARY STAMP/SEAL

MAUDLYN MECKSTROTH  
MY COMMISSION # 00116000  
EXPIRES: October 22, 2008  
Became Notary Public

Marilyn Meckstroth  
Signature of Notary

Caermen P. Favorito  
Signature of Owner



# Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

P.O. Box 1625 • Lake City, FL 32056-1625  
8919 Distribution Avenue S., Unit #5 • Jacksonville, FL 32257

Tel. (386) 755-3633 • Fax (386) 752-5456  
Tel. (904) 262-4046 • Fax (904) 262-4047

## #22389

JOB NO.: 04-480  
DATE TESTED: 12/08/04  
DATE REPORTED: 12/08/04

## REPORT OF IN-PLACE DENSITY TEST

|                                 |  |               |
|---------------------------------|--|---------------|
| PROJECT:                        | Proposed Favorite Residence, Columbia County, Florida        |               |
| CLIENT:                         | Carmen Favorito, 3112 SW Hurlong Street, Ft. White, FL 32038 |               |
| GENERAL CONTRACTOR:             | Carmen Favorito  |               |
| EARTHWORK CONTRACTOR:           | Carmen Favorito  |               |
| INSPECTOR:                      | Mike Stalvey   |               |
| ASTM METHOD                     |  | SOIL USE      |
| (D-2922) Nuclear                |  | BUILDING FILL |
| SPECIFICATION REQUIREMENTS: 95% |  |               |

| TEST NO. | TEST LOCATION    | TEST DEPTH | WET DENSITY (lb/ft <sup>3</sup> ) | MOISTURE PERCENT | DRY DENSITY (lb/ft <sup>3</sup> ) | PROCTOR TEST NO. | PROCTOR VALUE | % MAXIMUM DENSITY |
|----------|------------------|------------|-----------------------------------|------------------|-----------------------------------|------------------|---------------|-------------------|
| 1        | SW Area of Pad   | 0-6"       | 117.1                             | 8.0              | 108.4                             | 1                | 106.5         | 101.8%            |
| 2        | East Side of Pad | 0-6"       | 111.0                             | 7.6              | 103.2                             | 1                | 106.5         | 96.9%             |

REMARKS: The Above Tests Meet Specification Requirements.

| PROCTORS    |                     |   |             |                        |
|-------------|---------------------|---|-------------|------------------------|
| PROCTOR NO. | SOIL DESCRIPTION    | MAXIMUM DRY UNIT WEIGHT (lb/ft <sup>3</sup> ) | OPT. MOIST. | TYPE                   |
| 1           | Gray Sand with Silt | 106.5   | 11.2        | MODIFIED (ASTM D-1557) |

Respectfully Submitted,  
CAL-TECH TESTING, INC.

*Linda M. Creamer*  
Linda M. Creamer  
President - CEO

Reviewed By:

*John D. Dwyer*  
Date: 12/8/04

Florida Registration No: 52612

The test results presented in this report are specific only to the samples tested at the time of testing. The tests were performed in accordance with generally accepted methods and standards. Since material conditions can vary between test locations and change with time, sound judgement should be exercised with regard to the use and interpretation of the data.

Cardinal Farms Lot 51

"Excellence in Engineering & Geoscience"



## Cal-Tech Testing, Inc.

- Engineering
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- Environmental

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Tel. (386) 755-3633 • Fax (386) 752-5456  
Tel. (904) 262-4046 • Fax (904) 262-4047

October 11, 2004

Carmen Favorito  
3112 S. W. Hurlong Street  
Fort White, Florida 32038

Reference: Proposed Favorito Residence  
Lot 51, Cardinal Farms  
Columbia County, Florida  
Cal-Tech Project No. 04-480

Dear Mr. Favorito,

Cal-Tech Testing, Inc. has completed the subsurface investigation and engineering evaluation of the site for a residence to be constructed at Lot 51 of Cardinal Farms in Columbia County, Florida. Our work was authorized by you.

We understand the residence will be single-story, and support for the residence will be provided by conventional, shallow spread footings. Anticipated foundation loads were not provided; however, we assume column and wall loads will not exceed 20 kips and 2 kips per foot, respectively.

The purposes of our investigation were to evaluate the existing subgrade soils for an allowable bearing pressure of 2,500 pounds per square foot and to provide recommendations as appropriate.

### Site Investigation

The site was investigated by performing two (2) Standard Penetration Test borings advanced to depths of 7.0 feet. The borings were performed at the approximate locations indicated on the attached Boring Location Plan. The proposed limits of construction were staked on site, and we used this staked area to locate the borings.

The Standard Penetration Test (ASTM D-1586) is performed by driving a standard split-barrel sampler into the soil by blows from a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler 1 foot, after seating 6 inches, is designated the penetration resistance, or N-value; this value is an index to soil density or consistency.

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## Findings

The soil borings generally encountered three soil strata. The first layer consists of about 1.0 foot of gray sand with silt and organics (SP/SM, Pt). N-values of this layer were not determined.

The second layer consists of about 1.5 feet of very loose, grayish tan sand (SP). The N-values of this layer are on the order of 3 blows per foot.

The third layer consists of an undetermined thickness of orangish tan or gray, red and orange, clayey sand (SC). These soil range from very loose to medium dense, and N-values range from 3 to 28 blows per foot.

Groundwater was not encountered at the time of our investigation; however, the clayey soils were moist at a depth of about 2.5 feet, and we believe the wet season water table will occur as perched ground water at a depth of about 2 feet.

For a more detailed description of the subsurface conditions encountered, please refer to the attached Boring Logs.

## Discussion

We have performed a bearing capacity analysis for the immediate bearing soils and have assumed the foundations will have minimum widths of 18 inches and be embedded a minimum of 14 inches below the existing surface grade. For these foundations and the site soils as encountered, we obtained an allowable bearing capacity of 2,500 pounds per square foot with a factor of safety of about 1.05 against a bearing capacity failure. Based upon this evaluation the subgrade soils within the proposed building area are suitable for shallow foundations and an allowable bearing capacity of 2,500 pounds per square foot; however, the factor of safety is unsuitably low, and we recommend the site be improved before construction. We also recommend the site be re-evaluated following this improvement.

Initially, the organic surface layer should be stripped from the site. Excavation should then be performed as required to establish site grading, and the subgrade should then be thoroughly proof-rolled using heavy, rubber-tired equipment (a large, loaded, front-end loader, for example). All bearing areas should then be proof-compacted to a minimum of 95% of the Modified Proctor maximum dry density to a minimum depth of 2 feet below the bottoms of the foundations and 1 foot below the bottoms of floor slabs. This preparation of the bearing soils will increase the factor of safety against foundation failure, reduce settling of the foundations and slabs, and decrease the likelihood of distress in the structure at a later date.

Our evaluation is based upon the subsurface conditions encountered at this site and as presented within this report. However, subsurface conditions may exist that

differ from our findings. We request that we be notified if substantially different subsurface conditions are encountered.

We appreciate the opportunity to be of service on this project and look forward to a continued association. Please do not hesitate to contact us should you have questions concerning this report or if we may be of further assistance.

Respectfully submitted,  
Cal-Tech Testing, Inc.



Linda Creamer  
President / CEO



John C. Dorman, Jr., Ph.D., P.E.  
Geotechnical Engineer

10/11/04  
52612

## B-1

Water Table: N/A

| Depth (ft) | N-value | Soil Description  |
|------------|---------|---|
| 0          |         | Gray SAND with SILT and Organics (SP/SM)                      |
| 3          |         | Very Loose, Grayish Tan SAND (SP)                             |
| 3          |         | Very Loose, Orangish Tan, CLAYEY SAND (SC)                    |
| 5          | 10      | Loose to Medium Dense, Gray, Orange and Red, CLAYEY SAND (SC) |
| 28         | 28      |   |

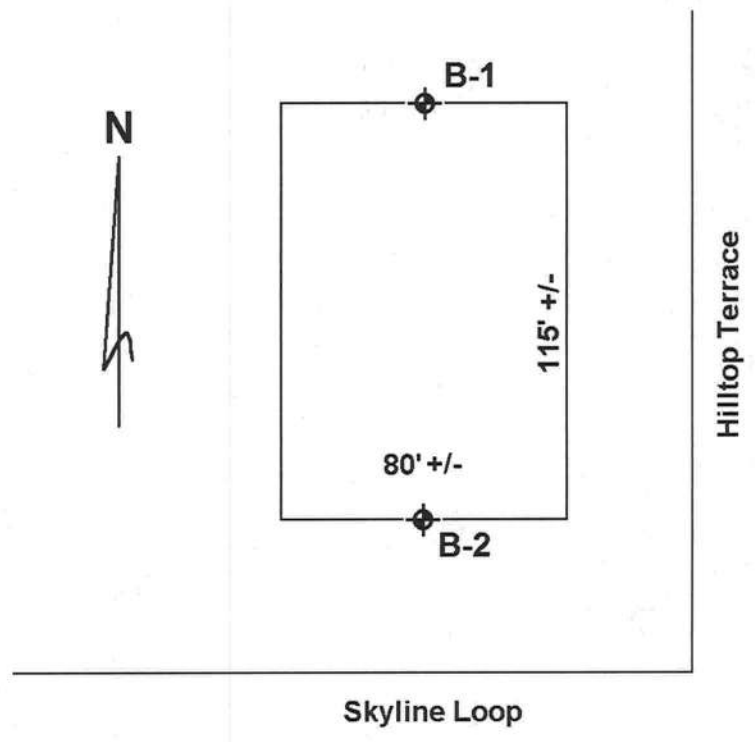
Wet Season Water Table: 2.0 ft.

## B-2

Water Table: N/A

| Depth (ft) | N-value | Soil Description                                      |
|------------|---------|---|
| 0          |         | Gray SAND with SILT and Organics (SP/SM)              |
| 3          |         | Very Loose, Grayish Tan SAND (SP)                     |
| 6          |         | Loose to Medium Dense, Orangish Tan, CLAYEY SAND (SC) |
| 15         |         |   |
| 23         |         | Medium Dense, Gray, Red and Orange, CLAYEY SAND (SC)  |

Wet Season Water Table: 2.0 ft.



**Boring Logs and Location Plan: Lot 51, Cardinal Farms  
Favorito Residence  
Columbia County, Florida**