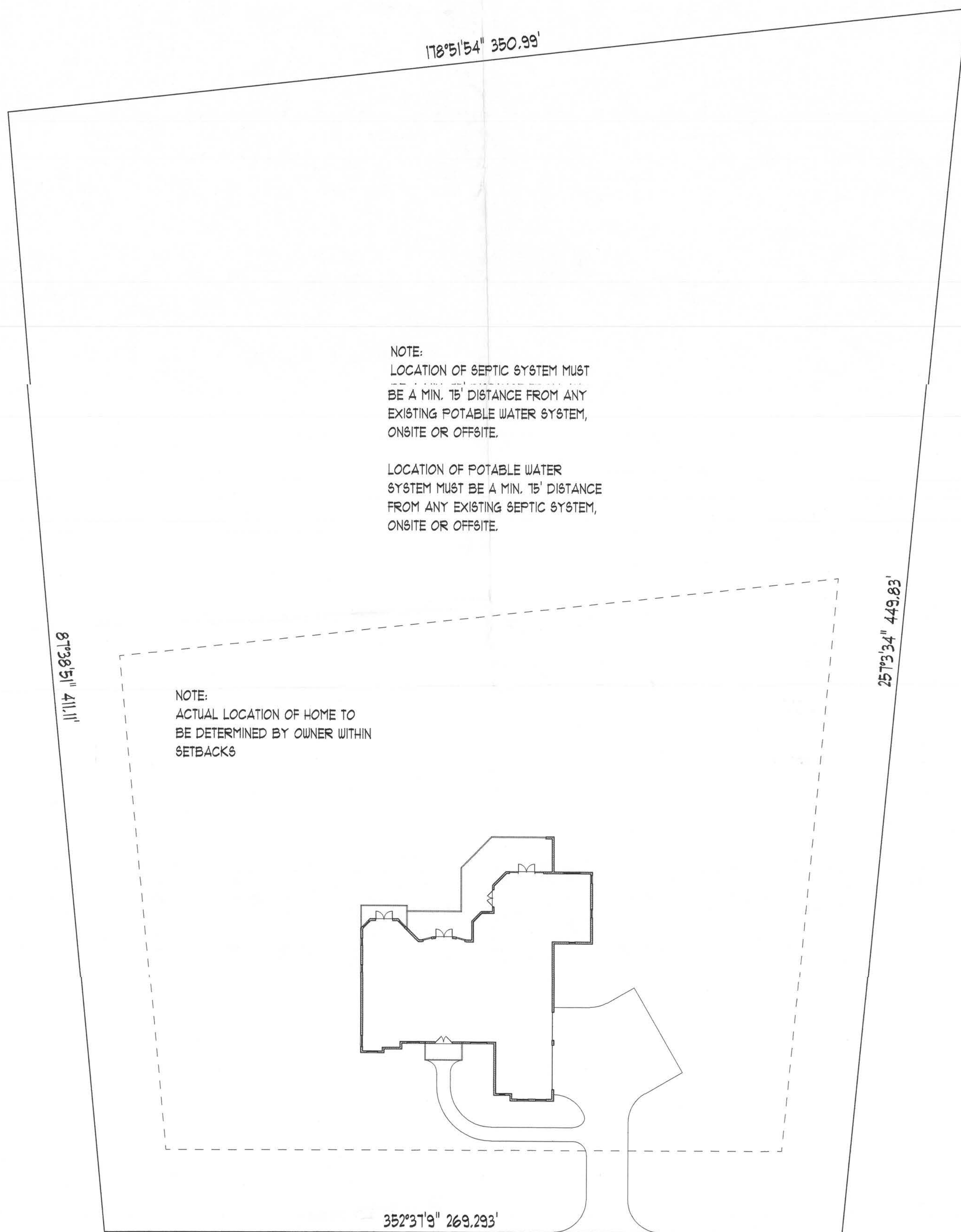


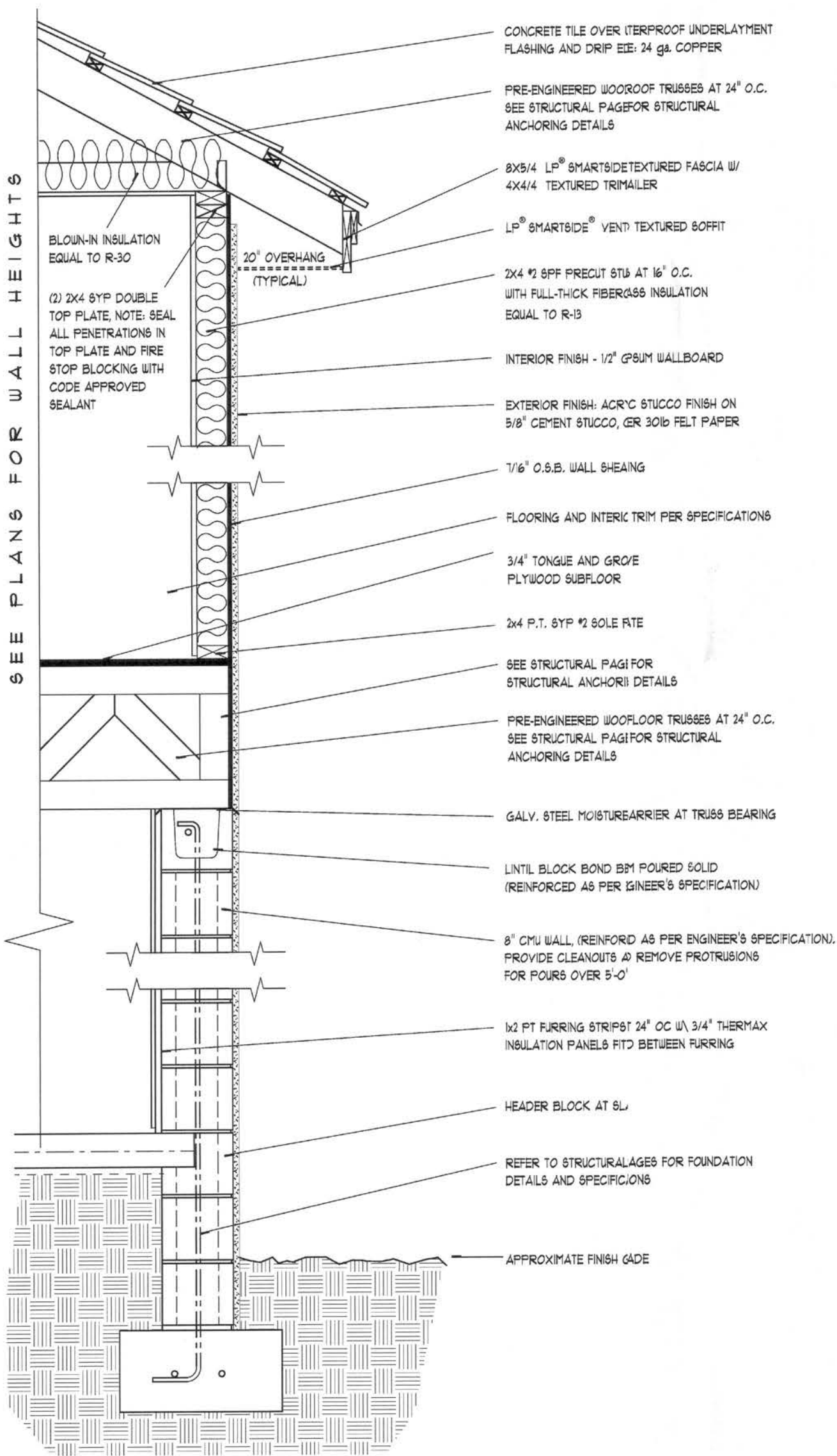


## SITE PLAN

SCALE: 1" = 25'

HILLS OF WINDSOR

LOT# 10



**TWO-STORY TYPICAL WALL SECTION**  
 SCALE: 1" = 1'  
 REFER TO STRUCTURAL PAGE FOR  
 STRUCTURAL SPECIFICATIONS



**FRONT ELEVATION**  
 SCALE: 1/4" = 1'



**REAR ELEVATION**  
 SCALE: 1/4" = 1'

January 17, 2007



ARCHITECTURAL  
 DESIGN  
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DESIGNED FOR:

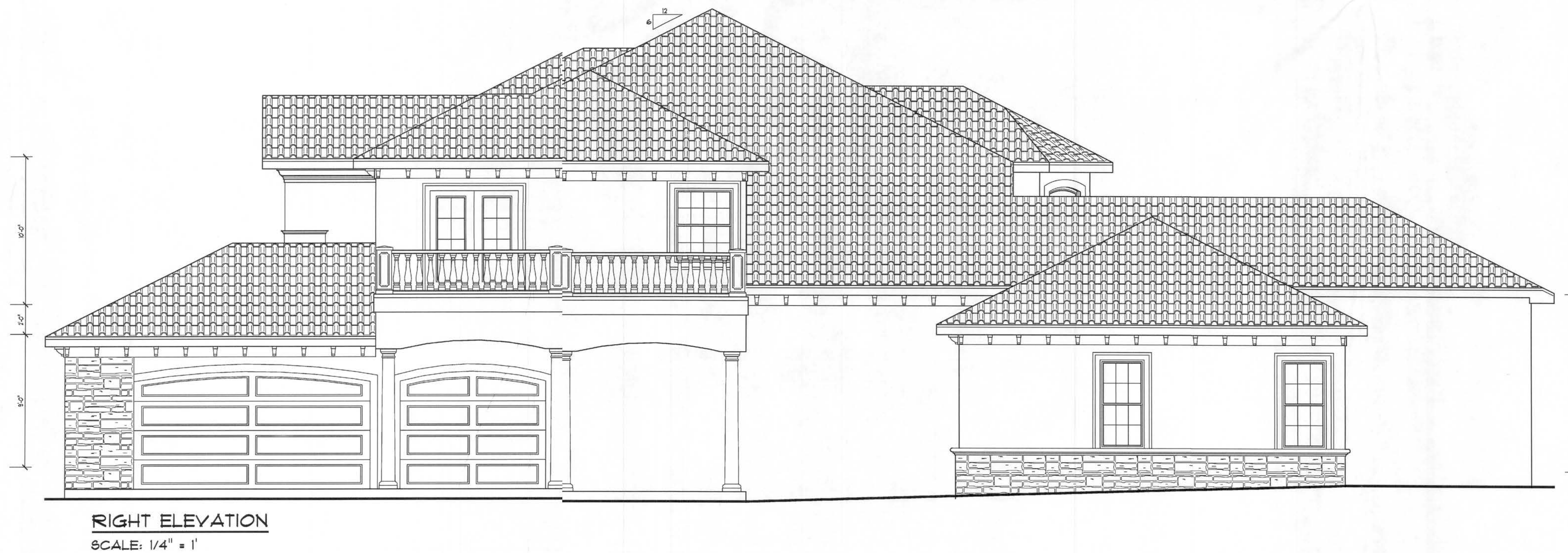
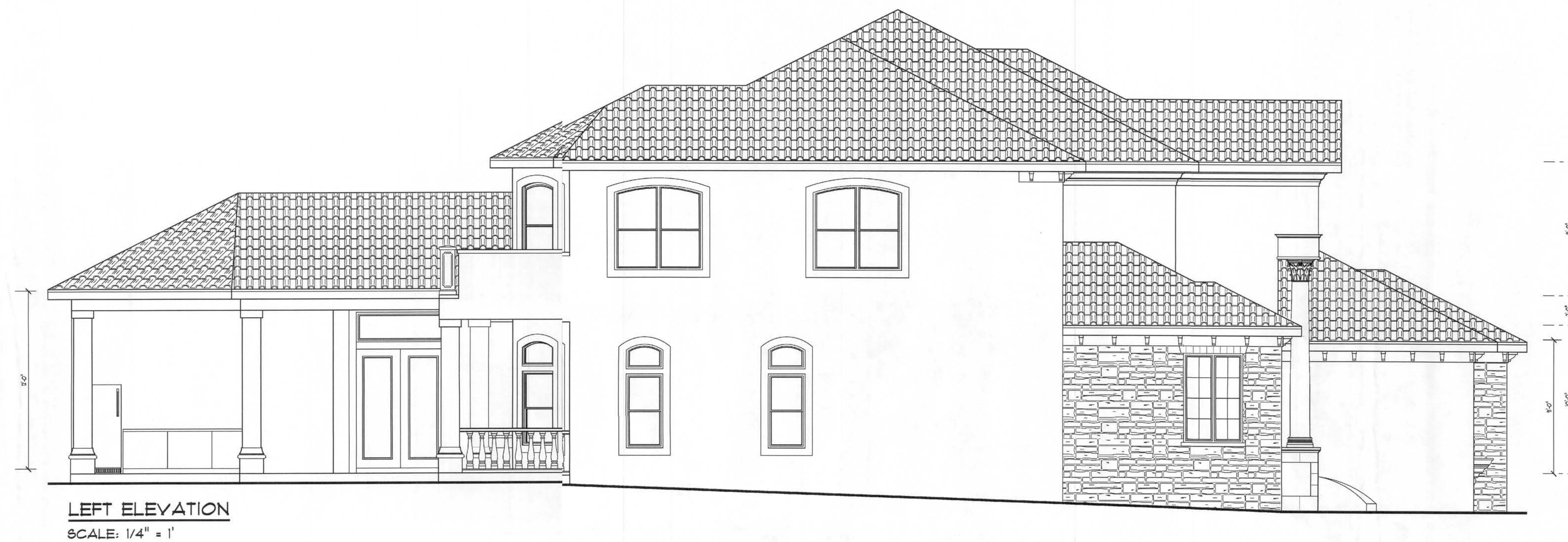
*Daniel Shaheen*  
**Daniel Shaheen**

EXTERIOR ELEVATIONS  
 TYPICAL WALL SECTION

SHEET NUMBER  
 1 of 5

All work shall comply with the standard building code and all applicable local codes and ordinances. Contractor shall verify all dimensions prior to commencing construction.





January 1, 2007

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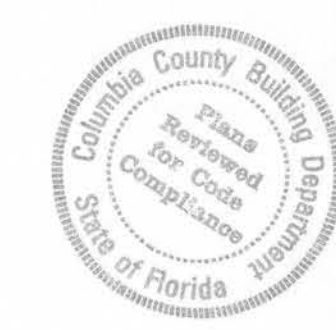
DESIGNED FOR:

*Daniel Shaheen*  
**Daniel Shaheen**

**EXTERIOR ELEVATIONS**  
**TYPICAL WALL SECTION**

SHEET NUMBER  
**2 of 5**

All work shall comply with the standard building code and all applicable local codes and ordinances.  
Contractor shall verify all dimensions prior to commencing construction.

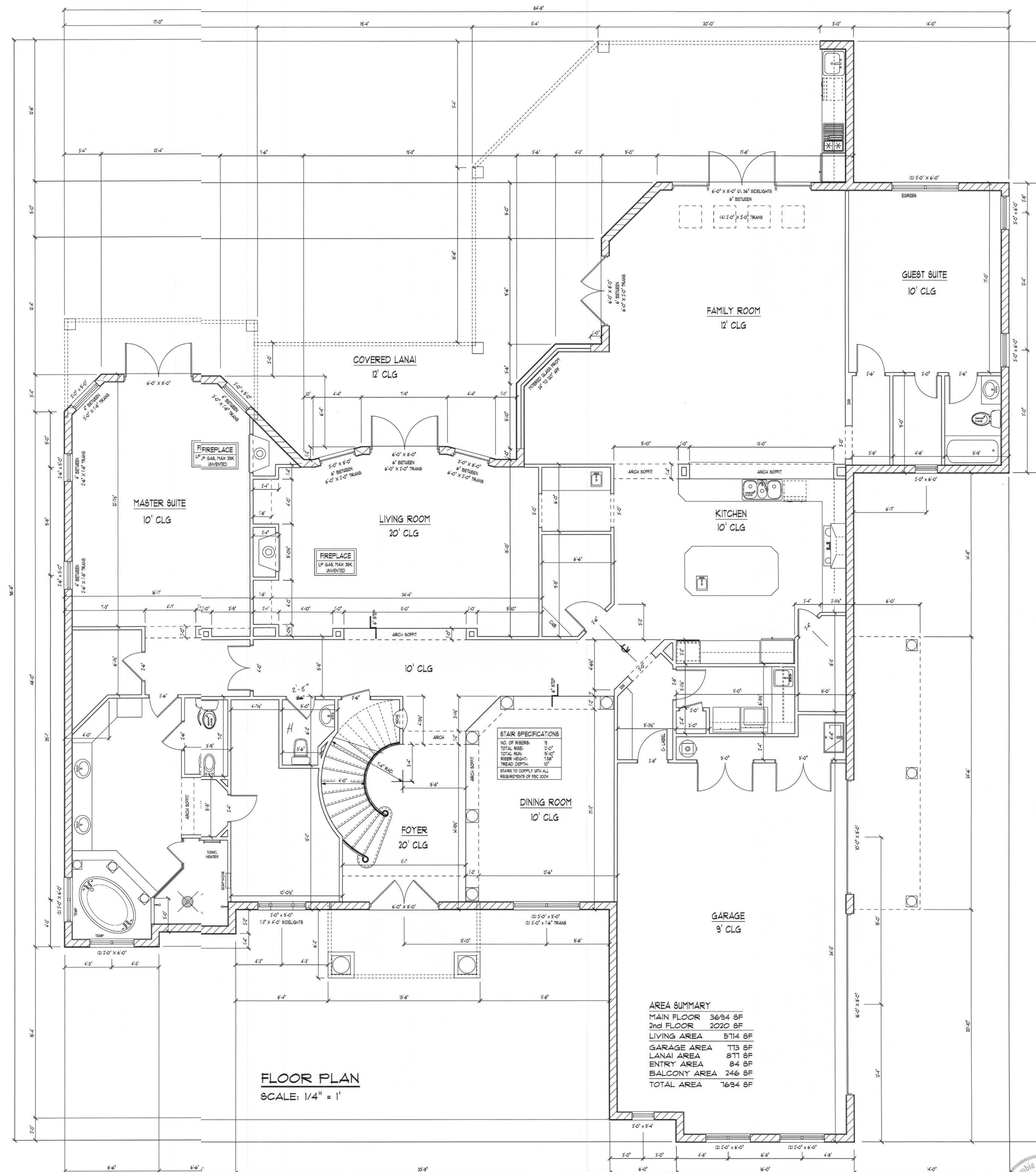
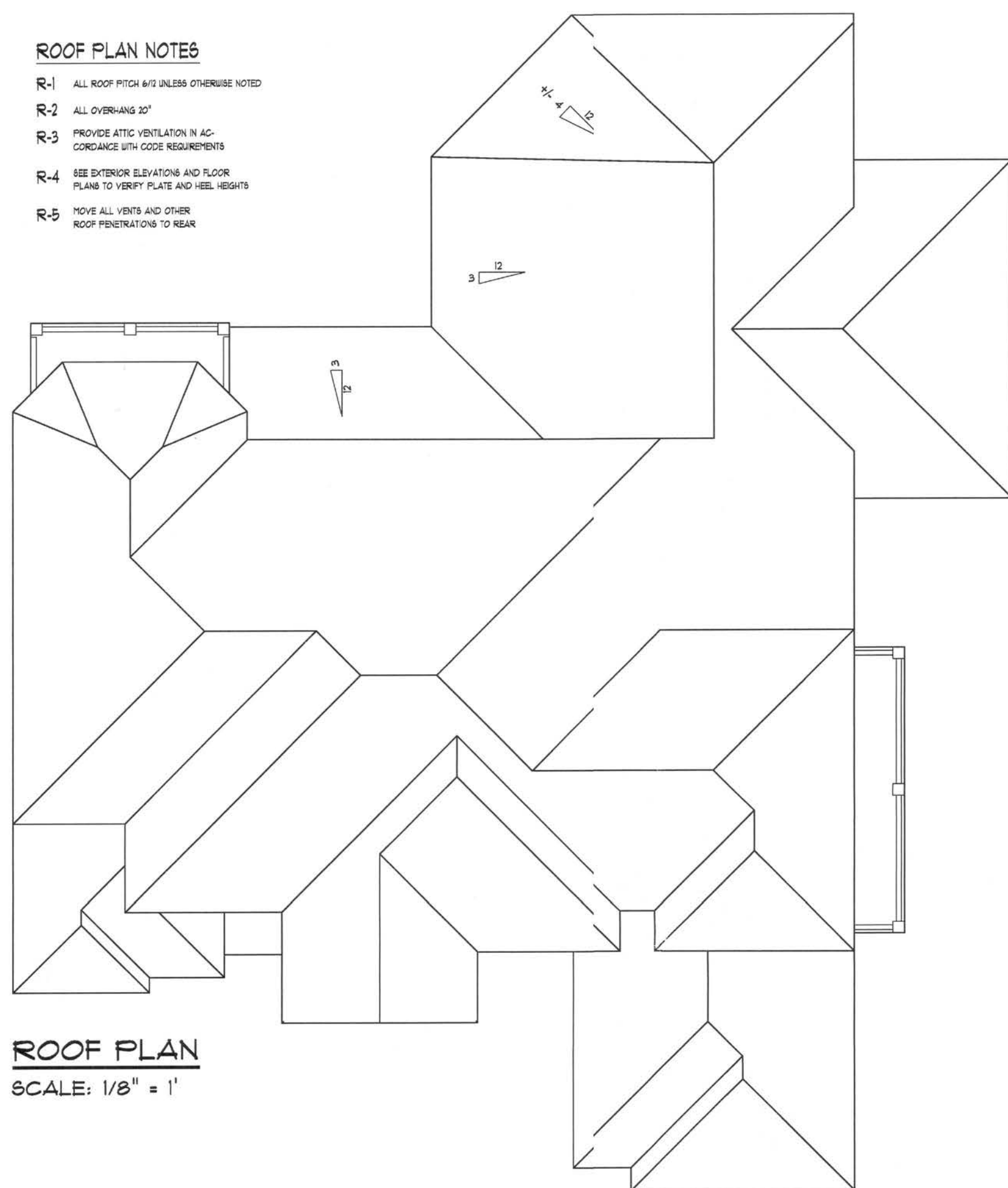


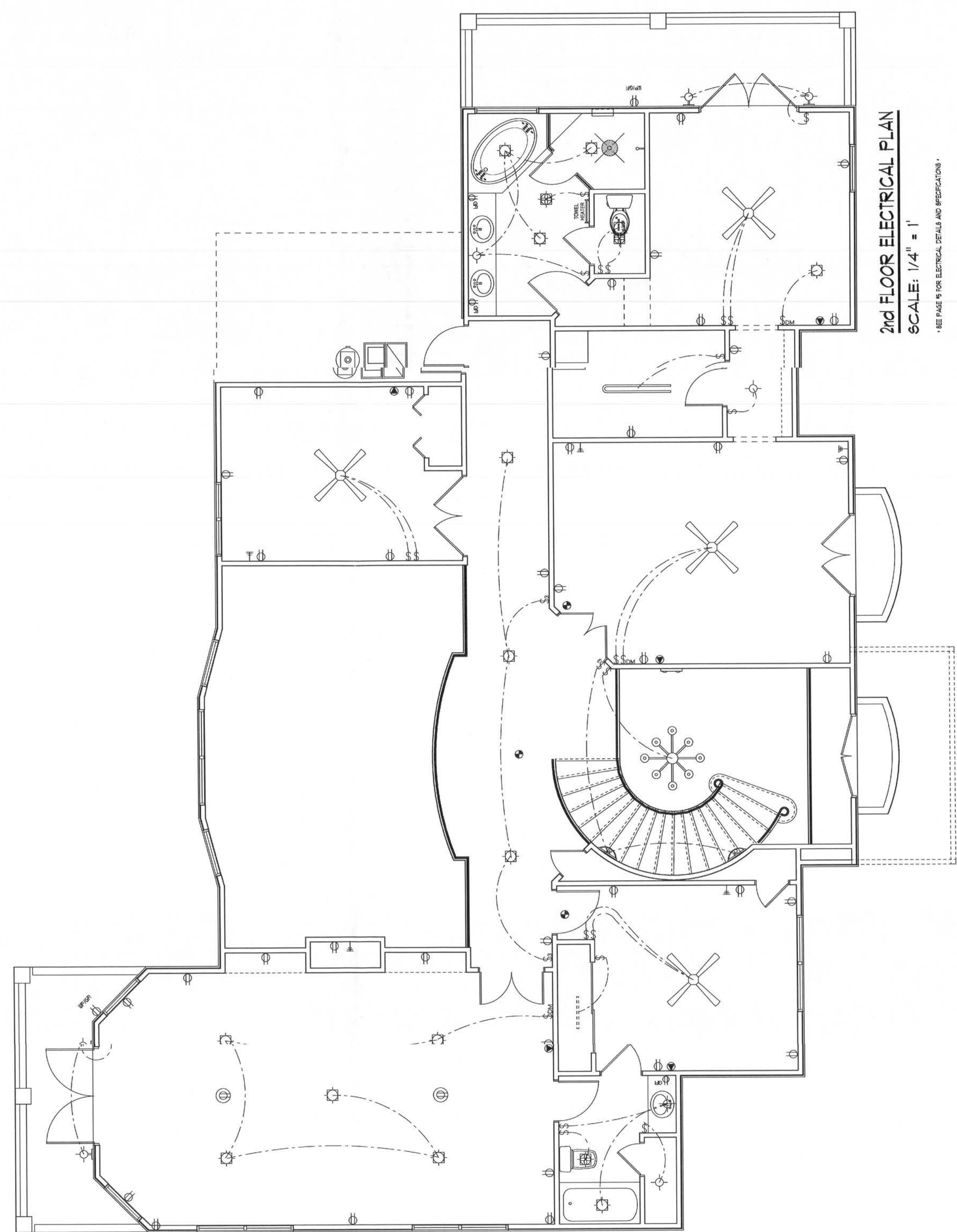
# ROOF PLAN NOTES

- R-1 ALL ROOF PITCH 4/12 UNLESS OTHERWISE NOTED
- R-2 ALL OVERHANGS 20"
- R-3 PROVIDE ATTIC VENTILATION IN ACCORDANCE WITH CODE REQUIREMENTS
- R-4 SEE EXTERIOR ELEVATIONS AND FLOOR PLANS TO VERIFY PLATE AND SILL HEIGHTS
- R-5 MOVE ALL VENTS AND OTHER ROOF PENETRATIONS TO REAR

# ROOF PLAN

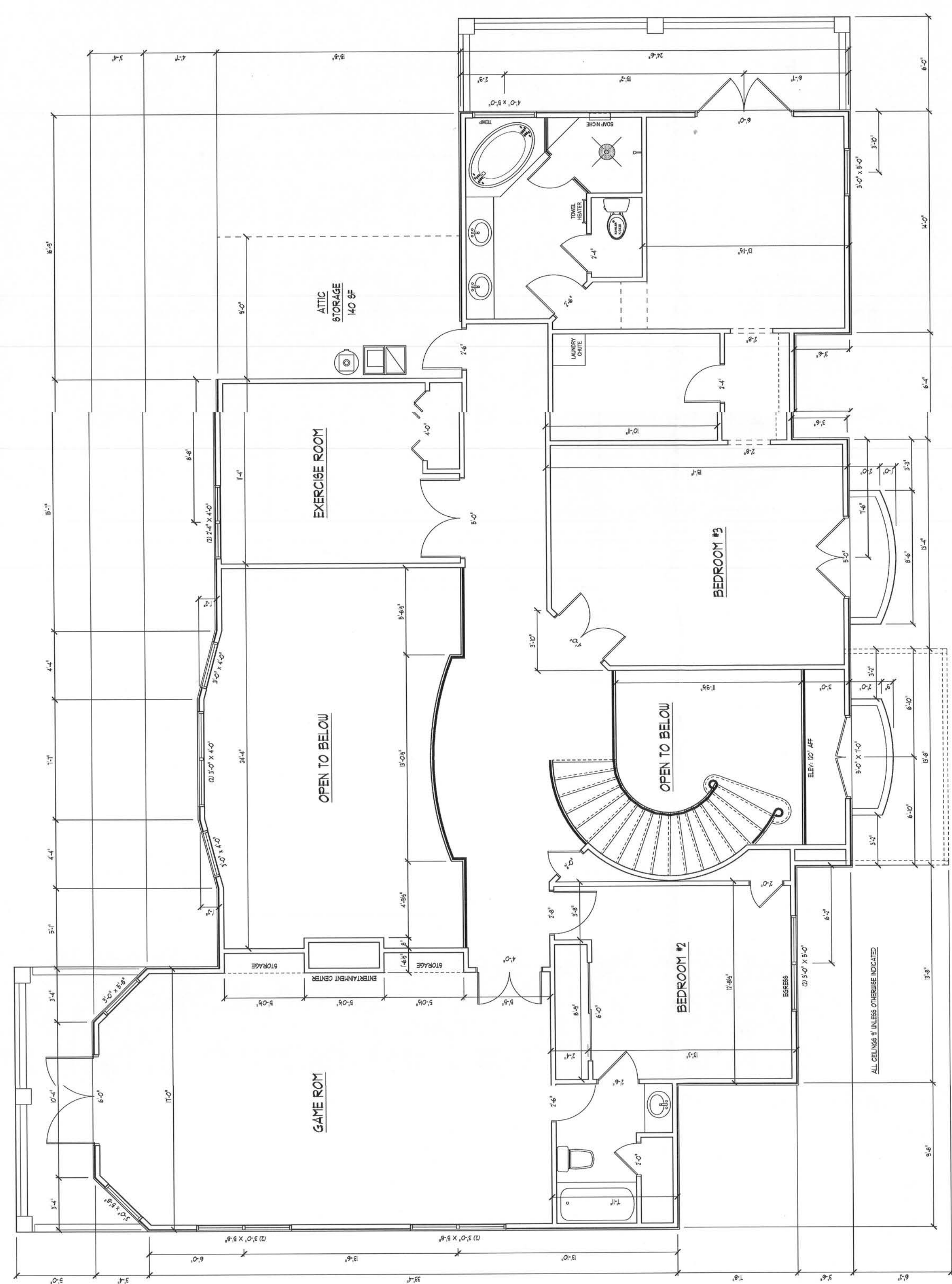
SCALE: 1/8" = 1'





2nd FLOOR ELECTRICAL PLAN  
SCALE: 1/4" = 1'

SEE PAGE 9 FOR ELECTRICAL DETAILS AND SPECIFICATIONS



2nd FLOOR PLAN  
SCALE: 1/4" = 1'

Daniel Shaheen  
Daniel Shaheen

January 17, 2007

**D.D.S. Studios**

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MAJOR PAUL  
N2 ARCHITECT  
FLORIDA

ENGINEERED BY:

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2nd FLOOR PLAN

2nd FLOOR ELECTRICAL PLAN

SHEET NUMBER  
4 of 4

All work shall comply with the standard building code, and all applicable local codes and ordinances.  
Contractor shall verify all dimensions prior to commencing construction.



January 17, 2007



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DESIGNED FOR:

*Daniel Shaheen*  
**Daniel Shaheen**

ELECTRICAL PLAN  
SITE PLAN

SHEET NUMBER  
5 of 5

All work shall comply with the standard building code and all applicable local codes and ordinances.  
Contractor shall verify all dimensions prior to commencing construction.



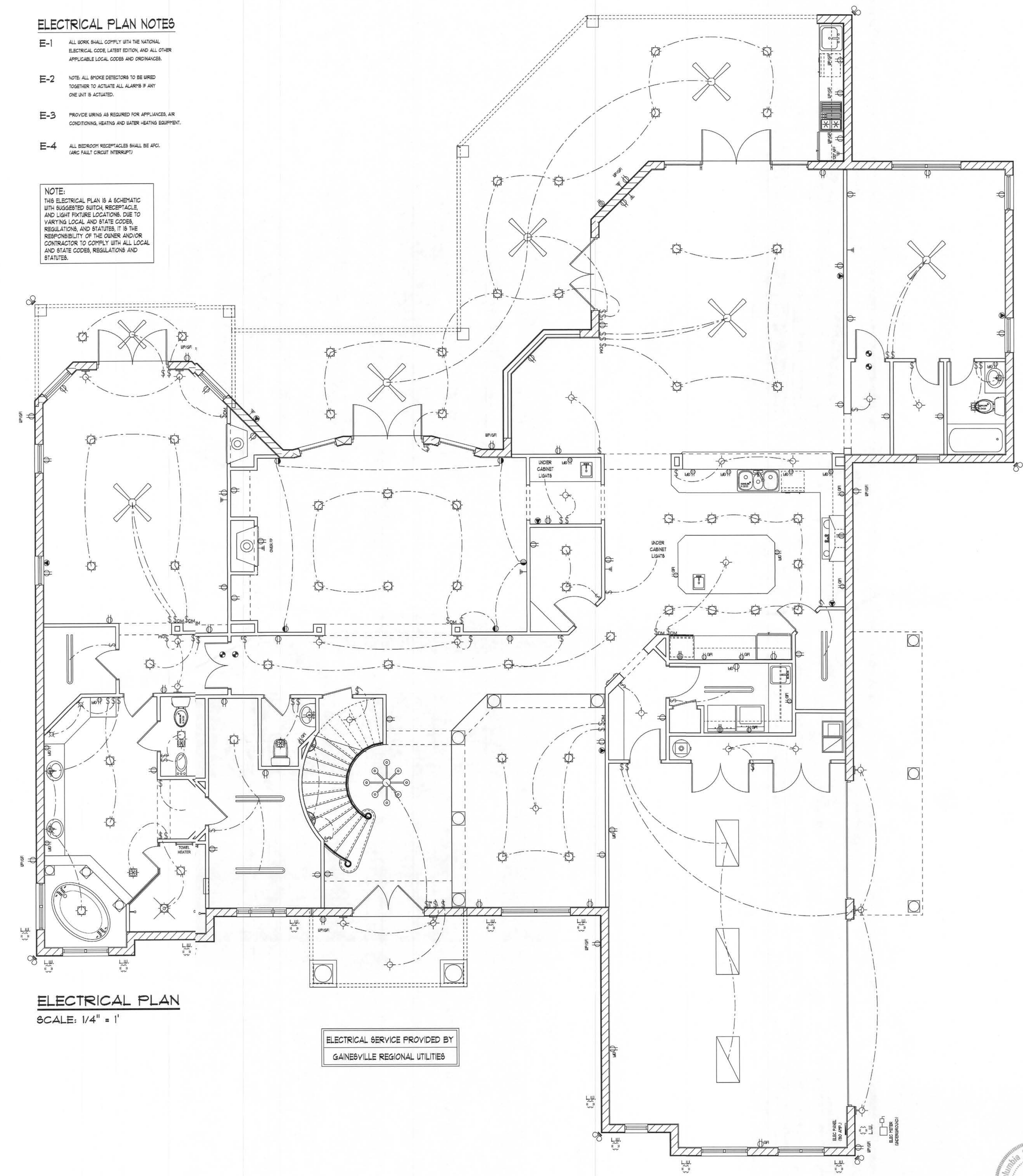
### ELECTRICAL LEGEND

- 2'x4' 4-LAMP FLUORESCENT LIGHT WITH STD. BALLAST
- EXHAUST FAN
- INCANDESCENT LIGHT FIXTURE
- EXHAUST FAN/LIGHT COMBO
- CAN LIGHT
- EYEBALL CAN LIGHT
- WALL SCONCE
- DOUBLE SPOTLIGHT
- TELEPHONE OUTLET
- TELEVISION OUTLET
- LOW WATTAGE LIGHTING
- SMOKE DETECTOR
- SWITCH
- 3-WAY SWITCH
- DIMMER SWITCH
- RECEPTACLE
- RECEPTACLE W/ GROUND FAULT INTERRUPT
- SPLIT RECEPTACLE (1 SWITCHED, 1 CONSTANT)
- 220 VOLT RECEPTACLE
- BATTERY BACKUP EMERGENCY LIGHTING

### ELECTRICAL PLAN NOTES

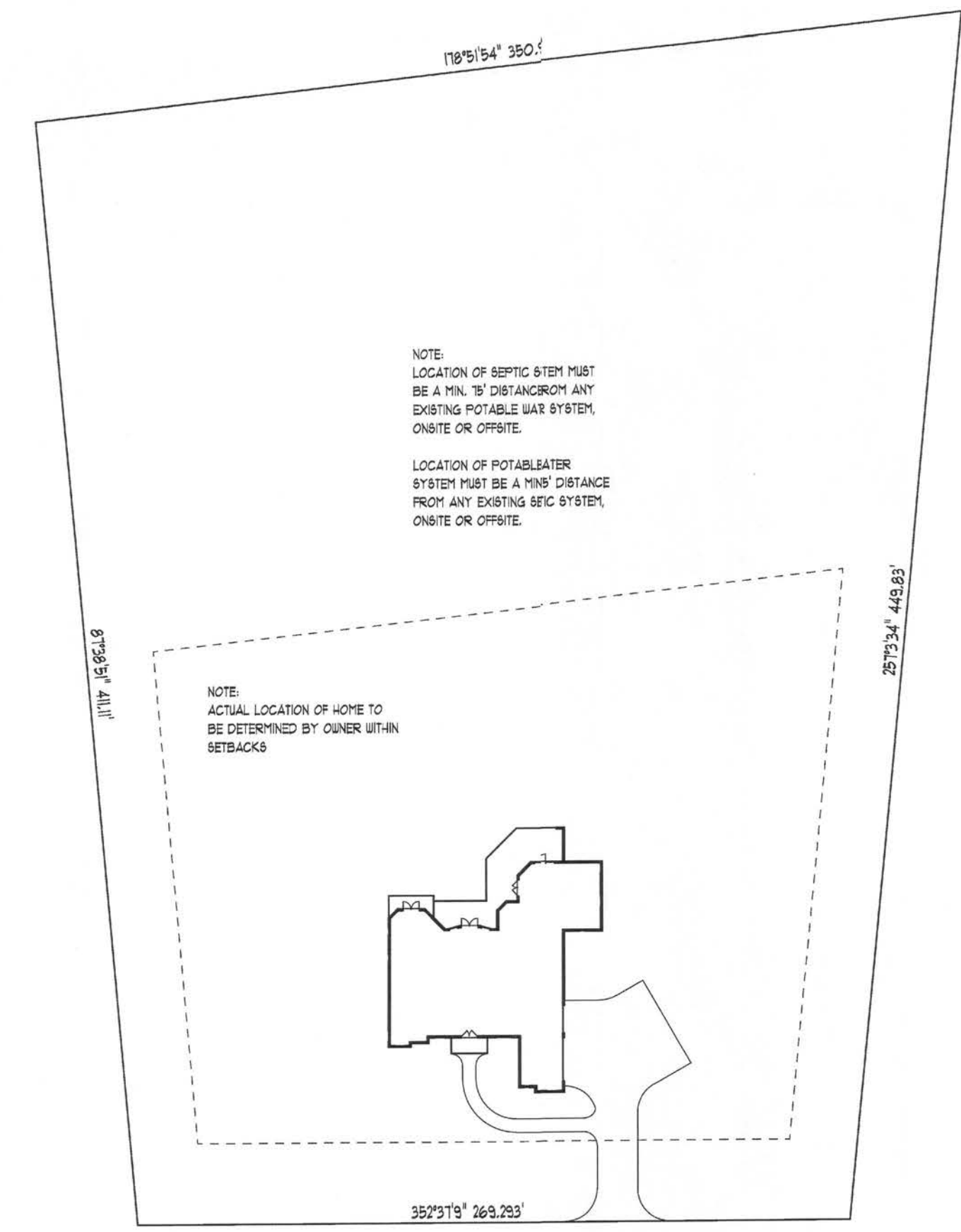
- E-1 ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, LATEST EDITION, AND ALL OTHER APPLICABLE LOCAL CODES AND ORDINANCES.
- E-2 NOTE: ALL SMOKE DETECTORS TO BE WIRED TOGETHER TO ACTIVATE ALL ALARMS IF ANY ONE UNIT IS ACTIVATED.
- E-3 PROVIDE WIRING AS REQUIRED FOR APPLIANCES, AIR CONDITIONING, HEATING AND WATER HEATING EQUIPMENT.
- E-4 ALL BEDROOM RECEPTACLES SHALL BE AFCI (ARC FAULT CIRCUIT INTERRUPT).

NOTE:  
THIS ELECTRICAL PLAN IS A SCHEMATIC WITH SUGGESTED SWITCH, RECEPTACLE, AND LIGHT FIXTURE LOCATIONS. DUE TO VARYING LOCAL AND STATE CODES, REGULATIONS, AND STATUTES, IT IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO COMPLY WITH ALL LOCAL AND STATE CODES, REGULATIONS AND STATUTES.



**ELECTRICAL PLAN**  
SCALE: 1/4" = 1'

ELECTRICAL SERVICE PROVIDED BY  
GAINESVILLE REGIONAL UTILITIES

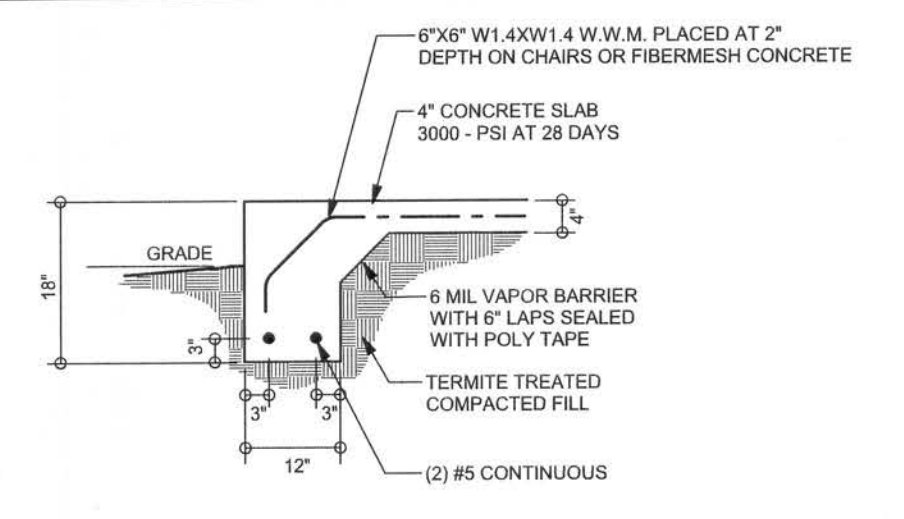


**SITE PLAN**  
SCALE: 1" = 40'  
HILLS OF WINDBOR  
LOT 10

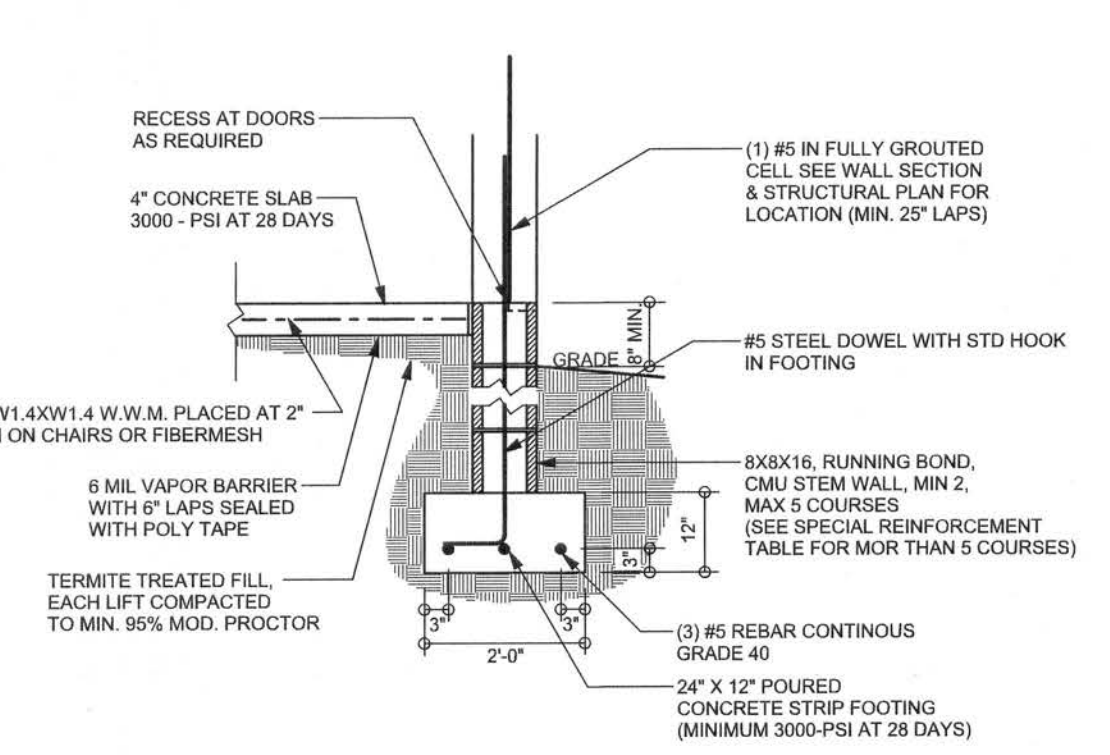


| REVISIONS |  |
|-----------|--|
|           |  |
|           |  |
|           |  |

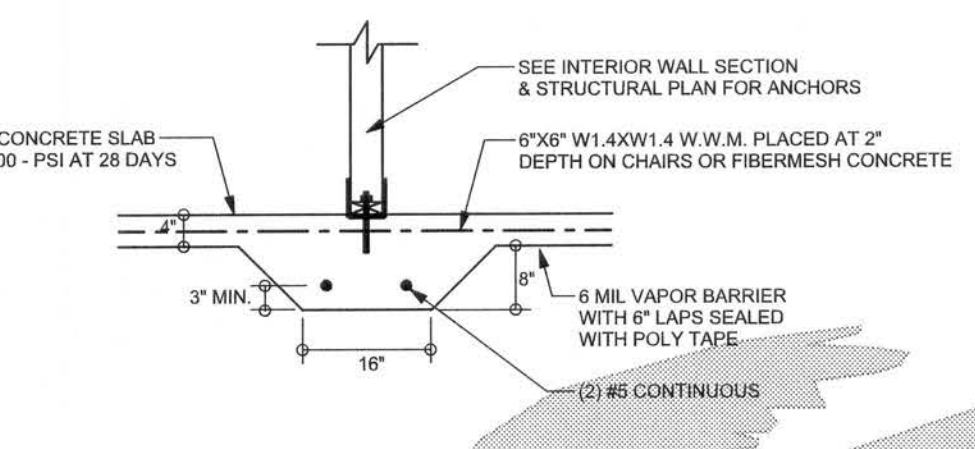
SOFTPLAN  
ARCHITECTURAL DESIGN SOFTWARE



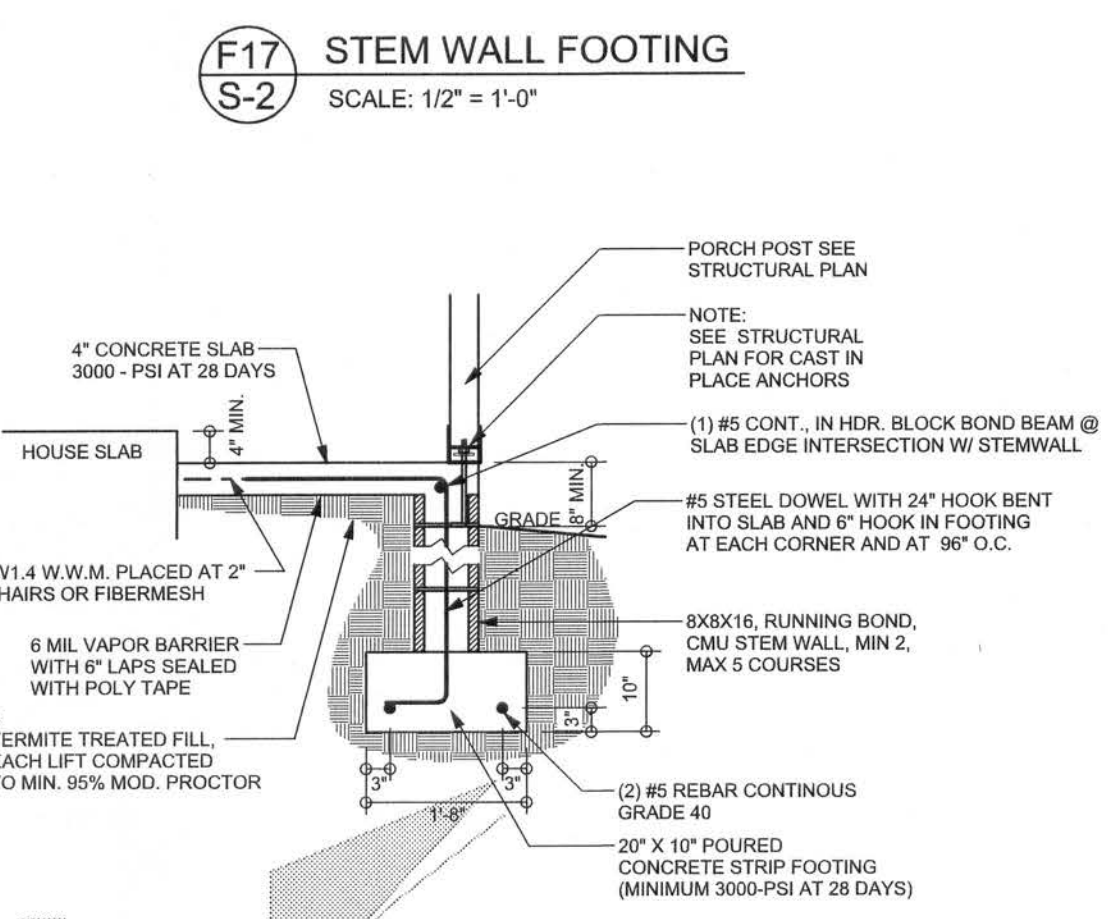
**F1 MONOLITHIC FOOTING**  
SCALE: 1/2" = 1'-0"



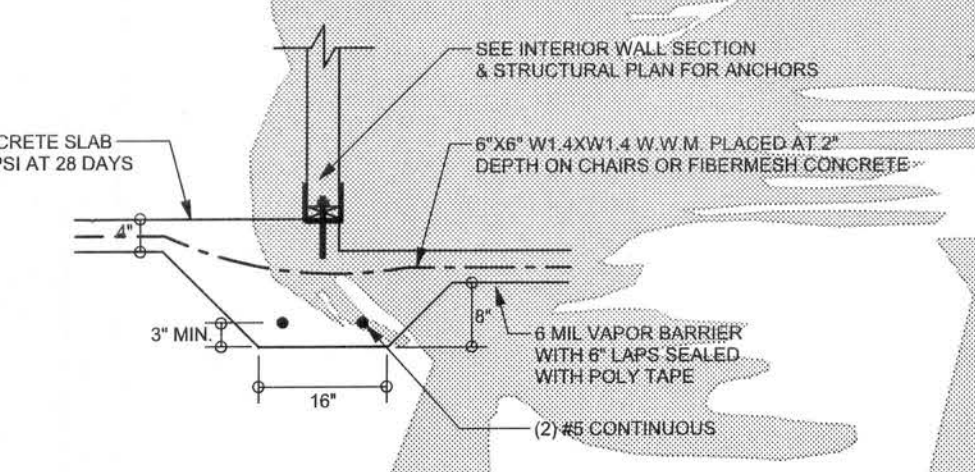
**F17 STEM WALL FOOTING**  
SCALE: 1/2" = 1'-0"



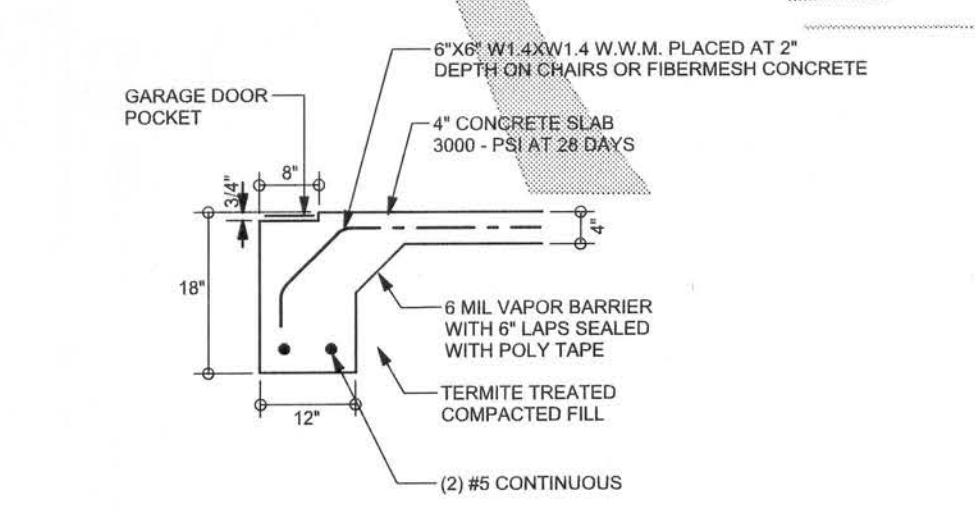
**F2 INTERIOR BEARING FOOTING**  
SCALE: 1/2" = 1'-0"



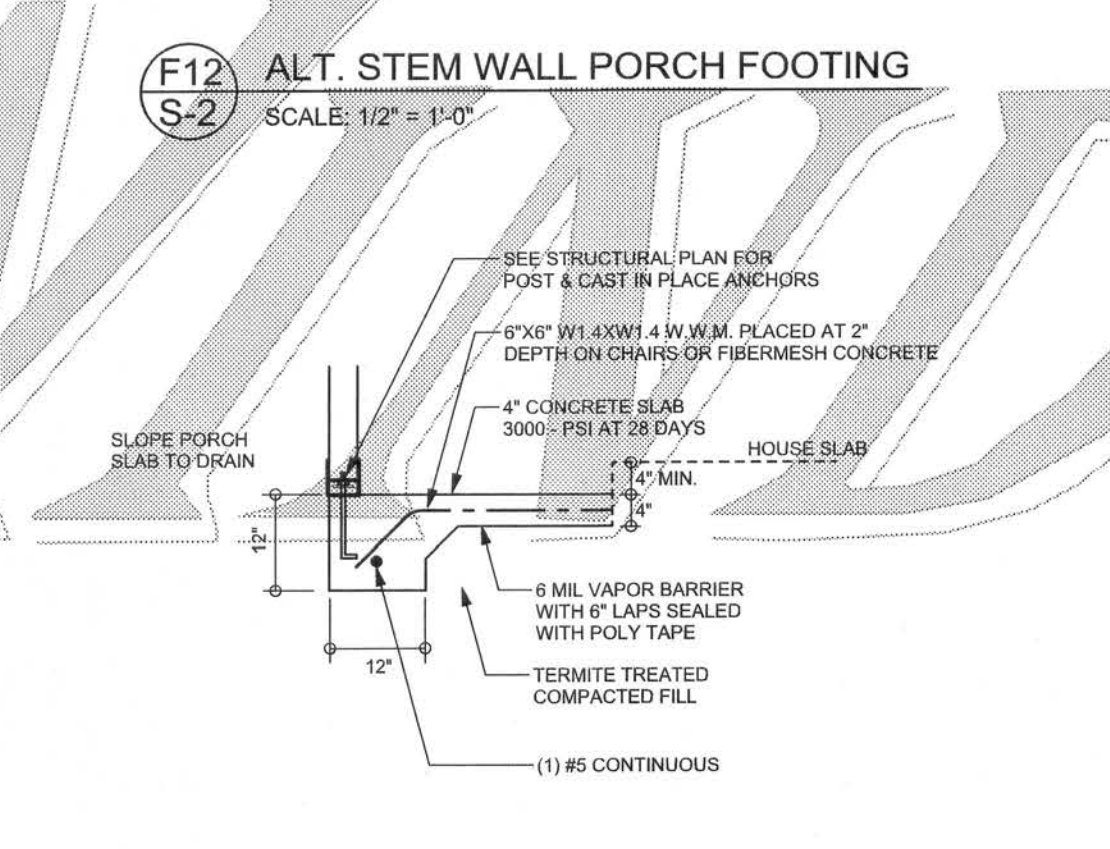
**F12 ALT. STEM WALL PORCH FOOTING**  
SCALE: 1/2" = 1'-0"



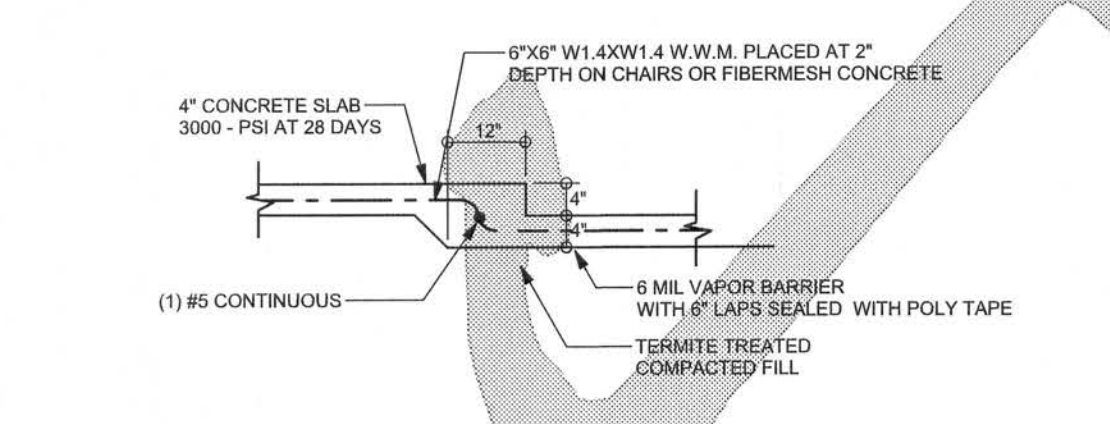
**F3 INTERIOR BEARING STEP FOOTING**  
SCALE: 1/2" = 1'-0"



**F4 GARAGE DOOR FOOTING**  
SCALE: 1/2" = 1'-0"



**F5 PORCH FOOTING**  
SCALE: 1/2" = 1'-0"

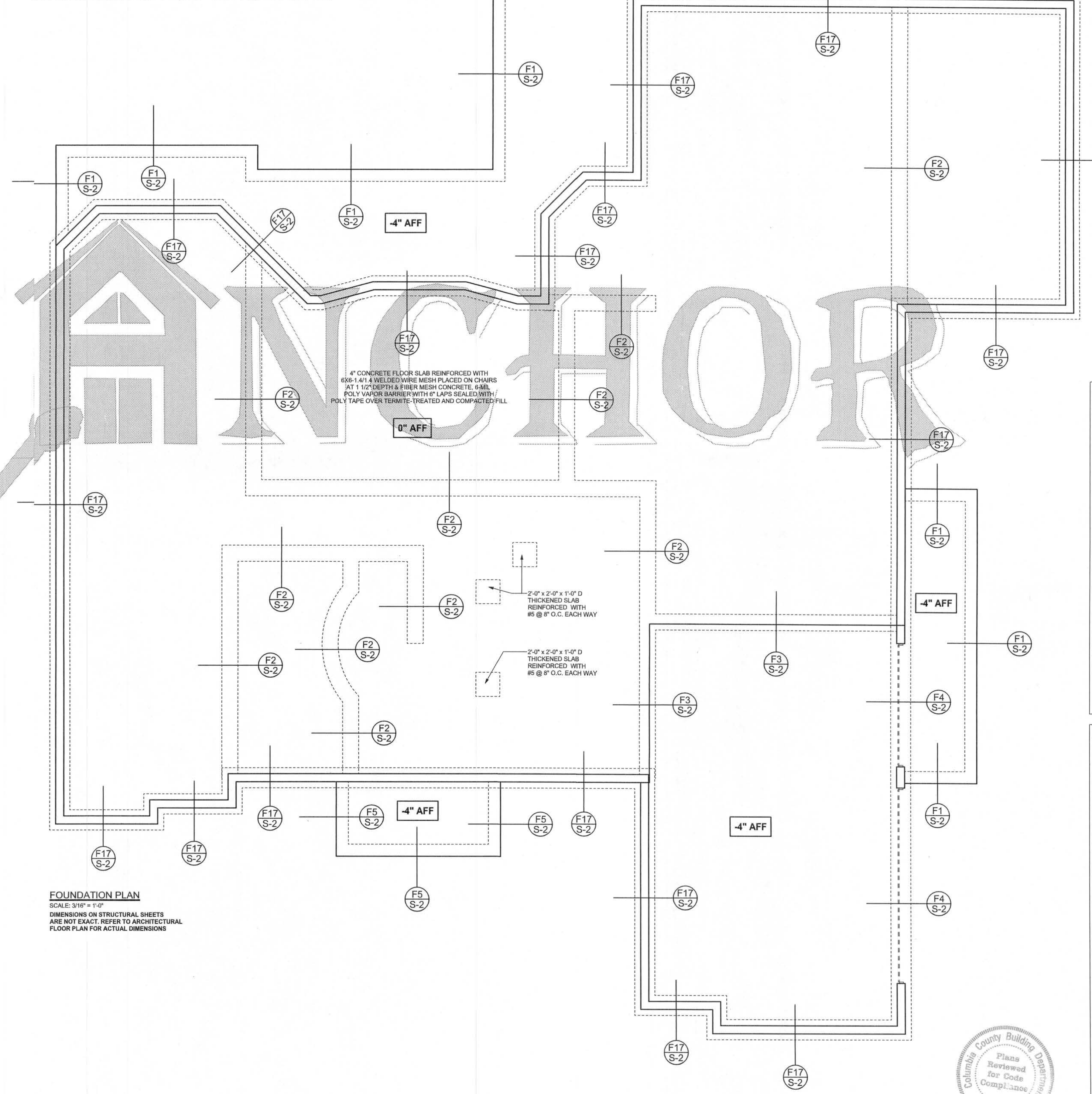


**F6 TYPICAL NON-BEARING STEP FOOTING**  
SCALE: 1/2" = 1'-0"

# **TALL STEM WALL TABLE**

The table assumes 60 ksi reinforcing bars with 6" hook in the footing and bent 24" into the masonry wall at the top. The vertical steel is to be placed toward the tension side of the CMU wall (away from the soil pressure, within 2" of the exterior side of the wall). If the wall is over 8' high, add Durowall ladder reinforcement at 16" O.C. vertically or a horizontal bond beam with 165 continuous at mid height. For higher parts of the wall 12" CMU may be used with 1 reinforcement as shown in the table below.

| STEM WALL HEIGHT (FEET) | UNBALANCED BACKFILL HEIGHT | VERTICAL REINFORCEMENT FOR 8" CMU STEM WALL (INCHES O.C.) |    |    | VERTICAL REINFORCEMENT FOR 12" CMU STEM WALL (INCHES O.C.) |    |    |
|-------------------------|----------------------------|-----------------------------------------------------------|----|----|------------------------------------------------------------|----|----|
|                         |                            | #5                                                        | #7 | #8 | #5                                                         | #7 | #8 |
| 3.3                     | 3.0                        | 96                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 4.0                     | 3.7                        | 96                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 4.7                     | 4.3                        | 88                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 5.3                     | 5.0                        | 56                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 6.0                     | 5.7                        | 40                                                        | 80 | 96 | 80                                                         | 96 | 96 |
| 6.7                     | 6.3                        | 32                                                        | 56 | 80 | 56                                                         | 96 | 96 |
| 7.3                     | 7.0                        | 24                                                        | 40 | 56 | 40                                                         | 80 | 96 |
| 8.0                     | 7.7                        | 16                                                        | 32 | 48 | 32                                                         | 64 | 80 |
| 8.7                     | 8.3                        | 8                                                         | 24 | 32 | 24                                                         | 48 | 64 |
| 9.3                     | 9.0                        | 8                                                         | 16 | 24 | 16                                                         | 40 | 48 |



**FOUNDATION PLAN**  
SCALE: 3/16" = 1'-0"  
DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

## **MASONRY NOTES:**

MASONRY CONSTRUCTION AND MATERIALS FOR THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATION FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/MAS 602). THE CONTRACTOR AND MASON MUST IMMEDIATELY, BEFORE PROCEEDING, NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN ACI 530.1-02 AND THESE DESIGN DRAWINGS. ANY EXCEPTIONS TO ACI 530.1-02 MUST BE APPROVED BY THE ENGINEER IN WRITING.

|         | ACI 530.1-02 Section             | Specific Requirements                                                                                                                                                                      |
|---------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.4A    | Compressive strength             | 8" block bearing walls F <sub>m</sub> = 1500 psi                                                                                                                                           |
| 2.1     | Mortar                           | ASTM C 270, Type N, UNO                                                                                                                                                                    |
| 2.2     | Grout                            | ASTM C 476, admixtures require approval                                                                                                                                                    |
| 2.3     | CMU standard                     | ASTM C 90-02, Normal weight, Hollow, medium surface finish, 8"x8"x16" running bond and 12"x12" or 16"x16" column block                                                                     |
| 2.3     | Clay brick standard              | ASTM C 216-02, Grade SW, Type FBS, 5.5"x2.75"x11.5"                                                                                                                                        |
| 2.4     | Reinforcing bars, #3 - #11       | ASTM 615, Grade 60, F <sub>y</sub> = 60 ksi, Lap splices min 48 bar dia. (30" for #5)                                                                                                      |
| 2.4F    | Coating for corrosion protection | Anchors, sheet metal ties completely embedded in mortar or grout, ASTM A525, Class G60, 0.60 oz/ft <sup>2</sup> or 304SS                                                                   |
| 2.4F    | Coating for corrosion protection | Joint reinforcement in walls exposed to moisture or wire ties, anchors, sheet metal ties not completely embedded in mortar or grout, ASTM A153, Class B2, 1.50 oz/ft <sup>2</sup> or 304SS |
| 3.3.E.2 | Pipes, conduits, and accessories | Any not shown on the project drawings require engineering approval.                                                                                                                        |
| 3.3.E.7 | Movement joints                  | Contractor assumes responsibility for type and location of movement joints if not detailed on project drawings.                                                                            |

WINDLOAD ENGINEER: Mark Disosway, PE N53915, POB 868, Lake City, FL 32055-386-754-5419  
DIMENSIONS: State dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.  
COPYRIGHTS AND PROPERTY RIGHTS: Mark Disosway, P.E. hereby expressly reserves all common law copyrights and property right in these instruments of service. This document is not to be reproduced, altered or copied in any form or manner without first the express written permission and consent of Mark Disosway.  
CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to the engineering work shown on section R301.2.1, Florida building code residential 2004, to the best of my knowledge.  
LIMITATION: This design is valid for one building, at specified location.

MARK DISOSWAY  
P.E. 53915  
SEAL

Isaac Construction  
Sunil & Pravina Patel Residence

ADDRESS:  
Columbia County, Florida  
Mark Disosway P.E.  
P.O. Box 868  
Lake City, Florida 32056  
Phone: (386) 754 - 5419  
fax: (386) 269 - 4871

PRINTED DATE:  
May 29, 2007  
DRAWN BY:  
Dated Disosway  
CHECKED BY:

FINALS DATE:  
28' May / 07  
JOB NUMBER:  
705155  
DRAWING NUMBER

**S-2**  
OF 4 SHEETS



# MATERIALS

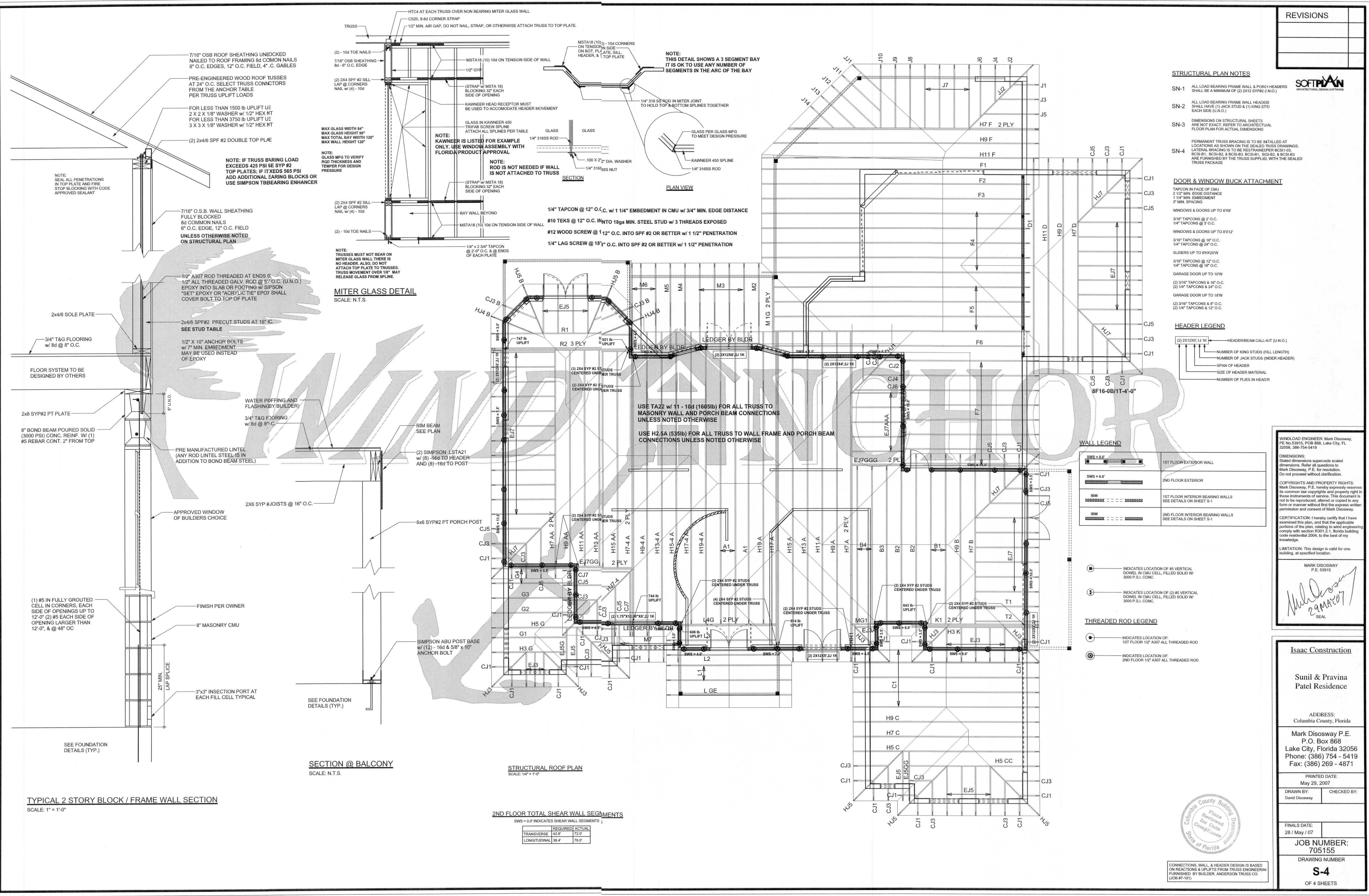
1. f<sub>c</sub> 8" precast lintel = 3500 psi
2. f<sub>c</sub> prestressed lintel = 6000 psi
3. GROUT per ASTM C476 f<sub>c</sub> = 3000 psi w/ maximum 3/8 inch aggregate & 8 to 11 inch slump
4. Concrete Masonry Units (CMU) per ASTM C90 minimum net area compressive strength = 1900 psi
5. Rebar per ASTM A615 grade 60
6. Prestressing strand per ASTM A416 grade 270 low relaxation
7. Mortar per ASTM C270 type M or S

# GENERAL NOTES

1. Provide full mortar bed and head joints.
2. Shore filled lintels as required.
3. Installation of lintel must comply with the architectural and/or structural documents.
4. U-Intels are manufactured with 5 1/2" long notches at the ends to accommodate vertical cl reinforcement and grouting.
5. All lintels meet or exceed L/360 deflection, except lintels 17'-4" and longer with a nominal height of 8" meet or exceed L/180 deflection.
6. Bottom field added rebar to be located at the bottom of the lintel cavity.
7. 7/32" diameter wire stirrups are welded to the bottom steel for mechanical anchorage.
8. Cast-in-place concrete may be provided in composite lintel in lieu of concrete masonry units.
9. Safe load rating based on rational design analysis per ACI 318 and ACI 530
10. Product Approvals: Miami-Dade County, Florida No. 03-0906-05
11. The exterior surface of lintels installed in exterior concrete masonry walls shall have a coating of stucco applied in accordance with ASTM C-226 or other approved coating.
12. Lintels loaded simultaneously with vertical (gravity or uplift) and horizontal (lateral) loads should be checked for the combined loading with the following equation:  

$$\frac{\text{Applied vertical load}}{\text{Safe vertical load}} + \frac{\text{Applied horizontal load}}{\text{Safe horizontal load}} \leq 1.0$$
13. Additional lateral load capacity can be obtained by the designer by providing additional reinforced concrete masonry above the lintel. See detail at right:

| SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-INTELS |                    |                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|----------------------------------------------------------|--------------------|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| SAFE Gravity                                             |                    | SAFE L.C.D. - POUNDS PER LINEAR FOOT |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| LENGTH                                                   | TYPE               | 8F8-0B                               | 8F10-0B | 8F12-0B | 8F14-0B | 8F16-0B | 8F18-0B | 8F20-0B | 8F22-0B | 8F24-0B | 8F26-0B | 8F28-0B | 8F30-0B | 8F32-0B | 8F34-0B | 8F36-0B | 8F38-0B | 8F40-0B | 8F42-0B |
| 2'-0"                                                    | (34") PRECAST      | 2231                                 | 3069    | 46      | 6113    | 7547    | 8974    | 10394   | 11809   |         |         |         |         |         |         |         |         |         |         |
| 3'-0"                                                    | (42") PRECAST      | 2231                                 | 3069    | 33      | 5163    | 6607    | 8054    | 9502    | 10951   |         |         |         |         |         |         |         |         |         |         |
| 4'-0"                                                    | (48") PRECAST      | 1966                                 | 2598    | 21      | 3820    | 4948    | 5961    | 7024    | 8034    | 9094    | 10204   | 11364   | 12584   |         |         |         |         |         |         |
| 4'-6"                                                    | (54") PRECAST      | 1966                                 | 2598    | 21      | 3931    | 5073    | 6144    | 7247    | 8314    | 9424    | 10584   | 11804   | 13084   |         |         |         |         |         |         |
| 5'-0"                                                    | (60") PRECAST      | 1217                                 | 1663    | 10      | 2693    | 3406    | 4120    | 4834    | 5548    | 6262    | 6976    | 7690    | 8404    | 9118    | 9832    | 10546   | 11260   | 11974   | 12688   |
| 5'-6"                                                    | (72") PRECAST      | 1062                                 | 1451    | 9       | 2430    | 3084    | 3738    | 4392    | 5046    | 5699    | 6353    | 7007    | 7661    | 8315    | 8969    | 9623    | 10277   | 10931   | 11585   |
| 6'-0"                                                    | (78") PRECAST      | 908                                  | 1238    | 27      | 3480    | 4380    | 5280    | 6180    | 7080    | 7980    | 8880    | 9780    | 10680   | 11580   | 12480   | 13380   | 14280   | 15180   | 16080   |
| 6'-6"                                                    | (90") PRECAST      | 743                                  | 1011    | 10      | 2632    | 3356    | 4080    | 4804    | 5528    | 6252    | 6976    | 7700    | 8424    | 9148    | 9872    | 10596   | 11320   | 12044   | 12768   |
| 8'-0"                                                    | (112") PRECAST     | 554                                  | 752     | 15      | 1843    | 2564    | 3286    | 4008    | 4730    | 5452    | 6174    | 6896    | 7618    | 8340    | 9062    | 9784    | 10506   | 11228   | 11950   |
| 10'-0"                                                   | (126") PRECAST     | 445                                  | 535     | 9       | 1247    | 2093    | 2777    | 3461    | 4145    | 4829    | 5513    | 6197    | 6881    | 7565    | 8249    | 8933    | 9617    | 10301   | 10985   |
| 11'-0"                                                   | (132") PRECAST     | 362                                  | 543     | 10      | 1533    | 2093    | 2717    | 3418    | 4094    | 4770    | 5446    | 6122    | 6798    | 7474    | 8150    | 8826    | 9502    | 10178   | 10854   |
| 12'-0"                                                   | (144") PRECAST     | 337                                  | 540     | 9       | 1254    | 1684    | 2114    | 2544    | 2974    | 3404    | 3834    | 4264    | 4694    | 5124    | 5554    | 5984    | 6414    | 6844    | 7274    |
| 13'-0"                                                   | (160") PRECAST     | 296                                  | 421     | 9       | 1012    | 1428    | 1844    | 2260    | 2676    | 3092    | 3508    | 3924    | 4340    | 4756    | 5172    | 5588    | 6004    | 6420    | 6836    |
| 14'-0"                                                   | (168") PRECAST     | 276                                  | 442     | 9       | 1002    | 1326    | 1698    | 2117    | 2536    | 2955    | 3374    | 3793    | 4212    | 4631    | 5050    | 5469    | 5888    | 6307    | 6726    |
| 14'-6"                                                   | (176") PRESTRESSED | N.R.                                 | 458     | 9       | 1370    | 1966    | 2245    | 2577    | 2910    | 3242    | 3574    | 3907    | 4239    | 4571    | 4904    | 5236    | 5568    | 5900    | 6232    |
| 15'-0"                                                   | (184") PRESTRESSED | N.R.                                 | 412     | 9       | 1250    | 1733    | 2058    | 2320    | 2573    | 2835    | 3097    | 3359    | 3621    | 3883    | 4145    | 4407    | 4669    | 4931    | 5193    |
| 17'-4"                                                   | (208") PRESTRESSED | N.R.                                 | 300     | 9       | 950     | 1326    | 1609    | 1848    | 2047    | 2246    | 2445    | 2644    | 2843    | 3042    | 3241    | 3440    | 3639    | 3838    | 4037    |
| 19'-4"                                                   | (232") PRESTRESSED | N.R.                                 | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      |
| 21'-4"                                                   | (256") PRESTRESSED | N.R.                                 | 160     | 9       | 886     | 845     | 1114    | 1359    | 1468    | 1577    | 1686    | 1795    | 1904    | 2013    | 2122    | 2231    | 2340    | 2449    | 2558    |
| 22'-0"                                                   | (264") PRESTRESSED | N.R.                                 | NR      | 9       | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      | NR      |
| 24'-0"                                                   | (288") PRESTRESSED | N.R.                                 | 125     | 9       | 450     | 654     | 884     | 1092    | 1222    | 1352    | 1482    | 1612    | 1742    | 1872    | 2002    | 2132    | 2262    | 2392    | 2522    |



| REVISIONS |  |
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**SOFTPLAN**  
ARCHITECTURAL DESIGN SOFTWARE

**STRUCTURAL PLAN NOTES**

- SN-1 ALL LOAD BEARING FRAME WALL & PORCH HEADERS SHALL BE A MINIMUM OF (2) 2X12 SYP#2 (U.N.O.)
- SN-2 ALL LOAD BEARING FRAME WALL HEADERS SHALL HAVE (1) JACK STUD & (1) KING STD EACH SIDE (U.N.O.)
- SN-3 DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS
- SN-4 PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWINGS. LATERAL BRACING IS TO BE RESTRAINED PER BC31-03, BC31-81, BC31-82, & BC31-83. BC31-81, BC31-82, & BC31-83 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE

**DOOR & WINDOW BUCK ATTACHMENT**

- TAPCON IN FACE OF CMU 2 1/2" MIN. EDGE DISTANCE 1 1/4" MIN. EMBEDMENT 3" MIN. SPACING
- WINDOWS & DOORS UP TO 6'x8"
- 3/16" TAPCONS @ 2" O.C.
- 1/4" TAPCONS @ 3" O.C.
- WINDOWS & DOORS UP TO 6'x12"
- 3/16" TAPCONS @ 16" O.C.
- 1/4" TAPCONS @ 24" O.C.
- SLIDERS UP TO 8'x10'20"
- 3/16" TAPCONS @ 12" O.C.
- 1/4" TAPCONS @ 18" O.C.
- GARAGE DOOR UP TO 10'W
- (2) 3/16" TAPCONS & 16" O.C.
- (2) 1/4" TAPCONS & 24" O.C.
- GARAGE DOOR UP TO 18'W
- (2) 3/16" TAPCONS & 8" O.C.
- (2) 1/4" TAPCONS & 12" O.C.

**HEADER LEGEND**

- (2) 2X12X7' 1/16" - HEADER BEAM CALL-OUT (U.N.O.)
- NUMBER OF KING STUDS (FULL LENGTH)
- NUMBER OF JACK STUDS (UNDER HEADER)
- SPAN OF HEADER
- SIZE OF HEADER MATERIAL
- NUMBER OF PILES IN HEADER

**WALL LEGEND**

|             |                                                              |
|-------------|--------------------------------------------------------------|
| SWWS = 0.0' | 1ST FLOOR EXTERIOR WALL                                      |
| SWWS = 0.0' | 2ND FLOOR EXTERIOR                                           |
| IBW         | 1ST FLOOR INTERIOR BEARING WALLS<br>SEE DETAILS ON SHEET S-1 |
| IBW         | 2ND FLOOR INTERIOR BEARING WALLS<br>SEE DETAILS ON SHEET S-1 |

**THREADED ROD LEGEND**

- INDICATES LOCATION OF #5 VERTICAL DOWEL IN CMU CELL, FILLED SOLID W/ 3000 P.S.I. CONC.
- INDICATES LOCATION OF (2) #5 VERTICAL DOWEL IN CMU CELL, FILLED SOLID W/ 3000 P.S.I. CONC.
- INDICATES LOCATION OF 1ST FLOOR 1/2" A307 ALL THREADED ROD
- INDICATES LOCATION OF 2ND FLOOR 1/2" A307 ALL THREADED ROD

WINDLOAD ENGINEER: Mark Disosway, P.E. No. 53915, P.O. Box 868, Lake City, FL 32056, (386) 754-5419

**DIMENSIONS:**  
Stated dimensions supersede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

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**CERTIFICATION:** I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section RS01.2.1, Florida building code residential 2004, to the best of my knowledge.

**LIMITATION:** This design is valid for one building, at specified location.

MARK DISOSWAY  
P.E. 53915  
*Mark Disosway*  
29MAR07  
SEAL

Isaac Construction

Sunil & Pravina Patel Residence

ADDRESS:  
Columbia County, Florida  
Mark Disosway P.E.  
P.O. Box 868  
Lake City, Florida 32056  
Phone: (386) 754 - 5419  
Fax: (386) 269 - 4871

PRINTED DATE:  
May 29, 2007

DRAWN BY:  
David Disosway

CHECKED BY:

FINALS DATE:  
28 / May / 07

JOB NUMBER:  
705155

DRAWING NUMBER

**S-4**  
OF 4 SHEETS



CONNECTIONS, WALL & HEADER DESIGN IS BASED ON REACTIONS & UPLIFTS FROM TRUSS ENGINEERING FURNISHED BY BUILDER, ANDERSON TRUSS CO. (JOB #7-101)

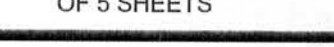
**SECTION @ BALCONY**  
SCALE: N.T.S.

**STRUCTURAL ROOF PLAN**  
SCALE: 1/4" = 1'-0"

**2ND FLOOR TOTAL SHEAR WALL SEGMENTS**

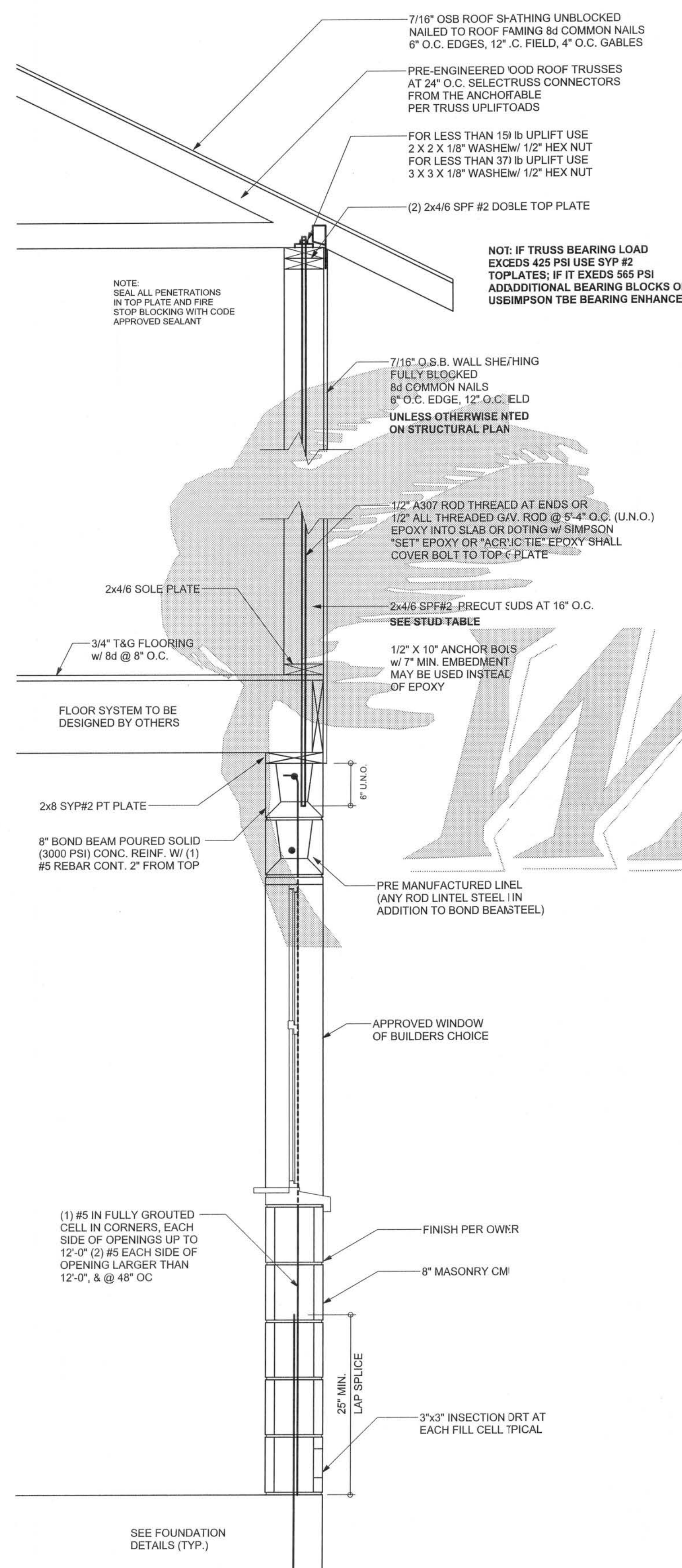
|              | REQUIRED | ACTUAL |
|--------------|----------|--------|
| TRANSVERSE   | 42.6'    | 72.0'  |
| LONGITUDINAL | 38.4'    | 78.0'  |

**TYPICAL 2 STORY BLOCK / FRAME WALL SECTION**  
SCALE: 1" = 1'-0"

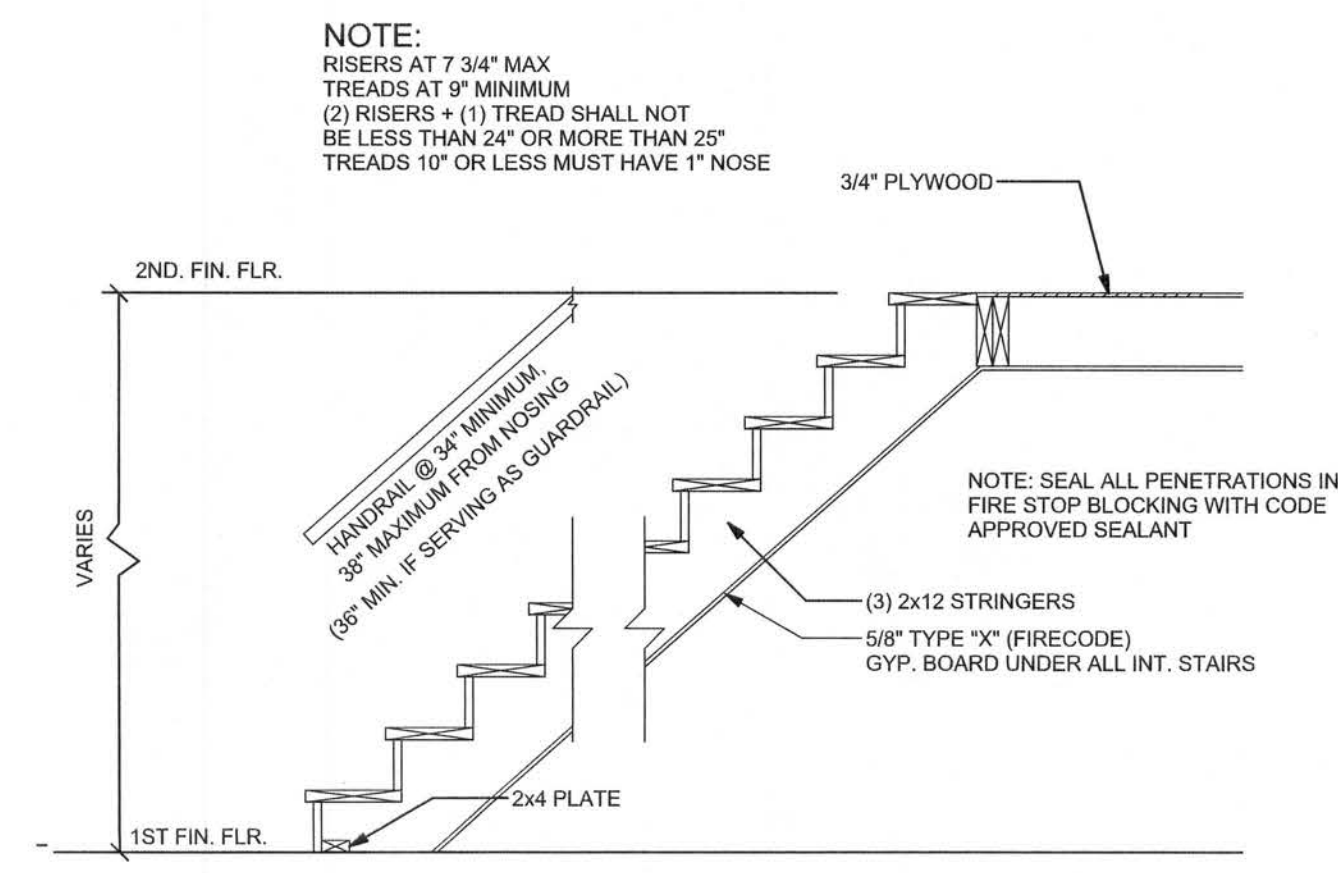
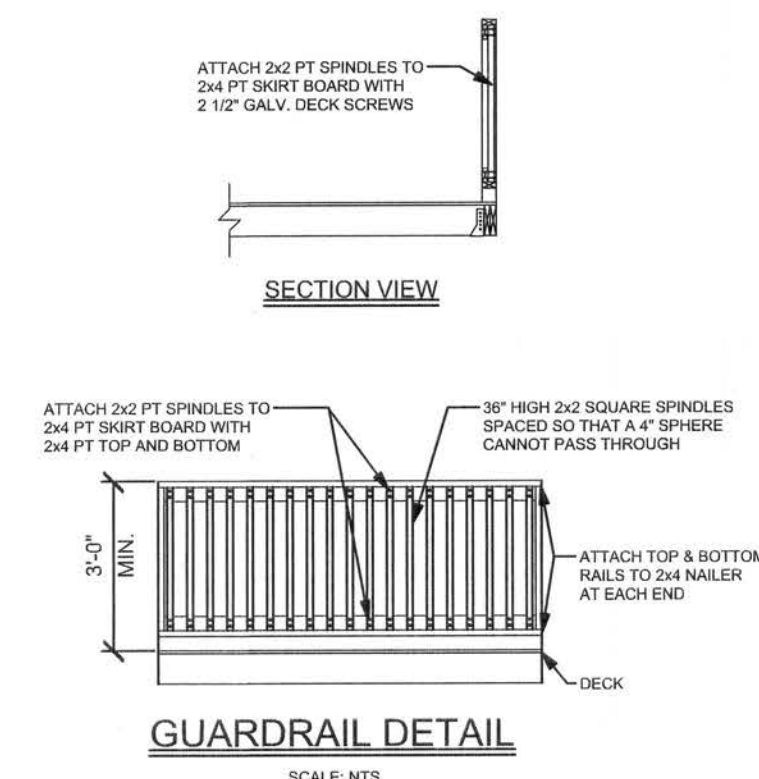


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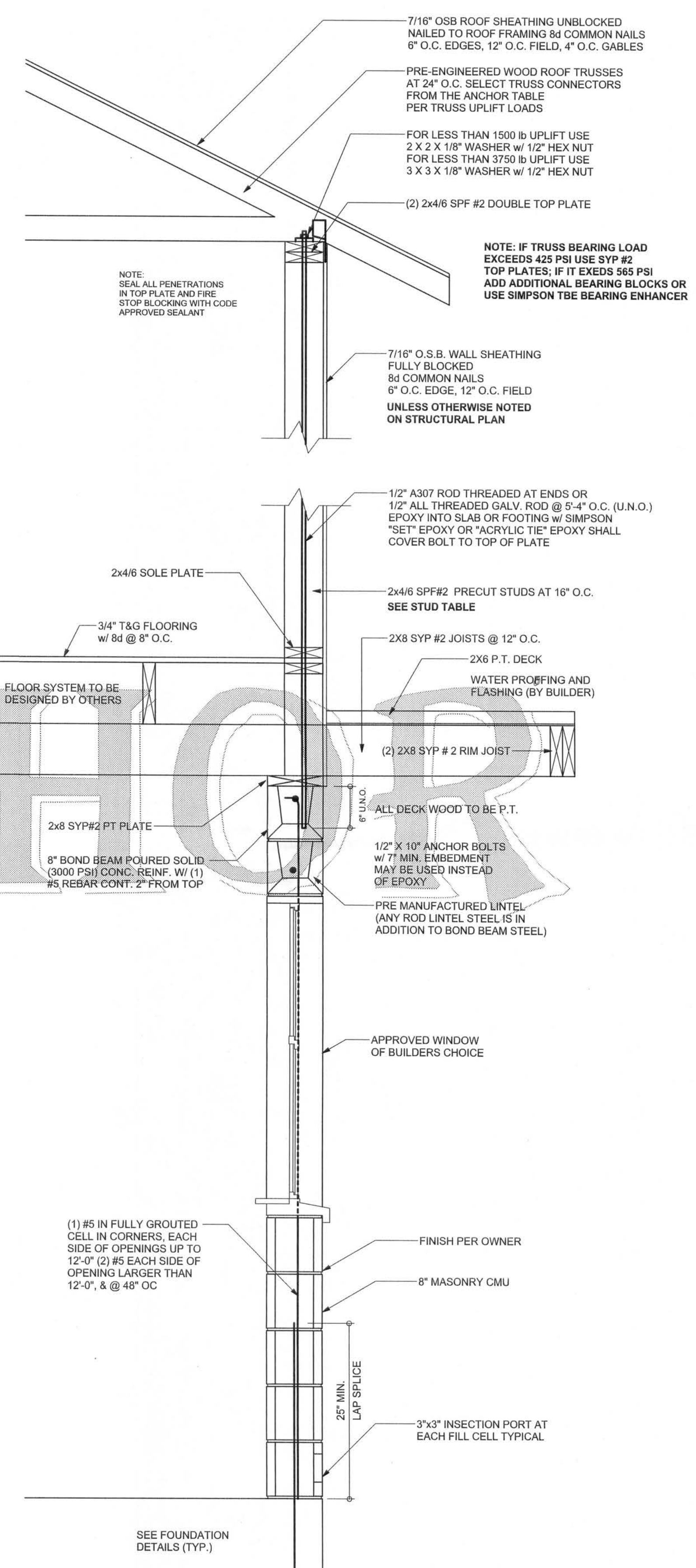
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**TYPICAL 2 STORY BLOCK / FRAME WALL SECTION**  
SCALE: 1" = 1'-0"



**SECTION @ BALCONY**  
SCALE: N.T.S.



**TYPICAL 2 STORY BLOCK / FRAME WALL SECTION @ CANTILEVERED BALCONIES**  
SCALE: 1" = 1'-0"

**WINDLOAD ENGINEER:** Mark Disoway, P.E. No. 53915, P.O. Box 868, Lake City, FL 32056, 386-754-5419

**DIMENSIONS:** Stated dimensions supersede scaled dimensions. Refer all questions to Mark Disoway, P.E. for resolution. Do not proceed without clarification.

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**CERTIFICATION:** I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, Florida building code residential 2004, to the best of my knowledge.

**LIMITATION:** This design is valid for one building, at specified location.

**MARK DISOWAY**  
P.E. 53915  
04-JUN-07  
SEAL

**Isaac Construction**

**Sunil & Pravina Patel Residence**

**ADDRESS:**  
Columbia County, Florida

**Mark Disoway P.E.**  
P.O. Box 868  
Lake City, Florida 32056  
Phone: (386) 754 - 5419  
Fax: (386) 269 - 4871

**PRINTED DATE:**  
June 04, 2007

**DRAWN BY:** David Disoway  
**CHECKED BY:**

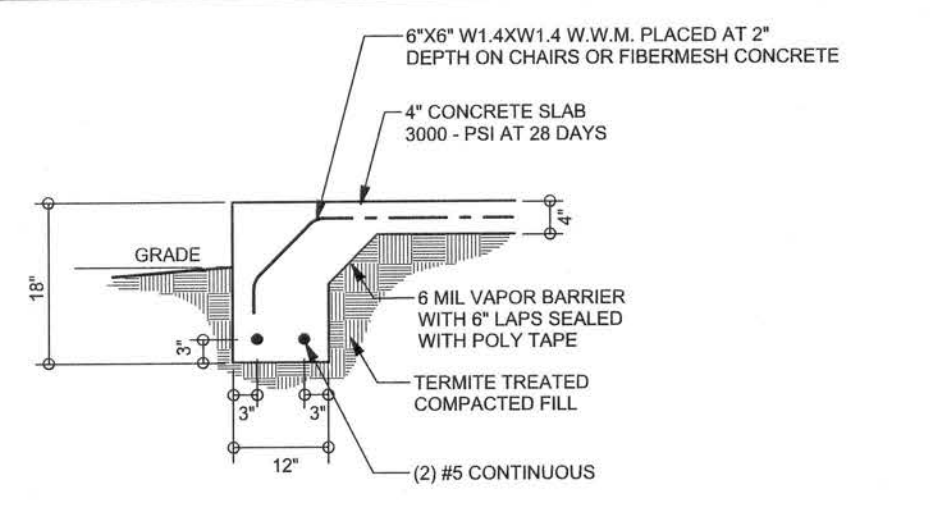
**FINALS DATE:**  
28 / May / 07

**JOB NUMBER:**  
705155

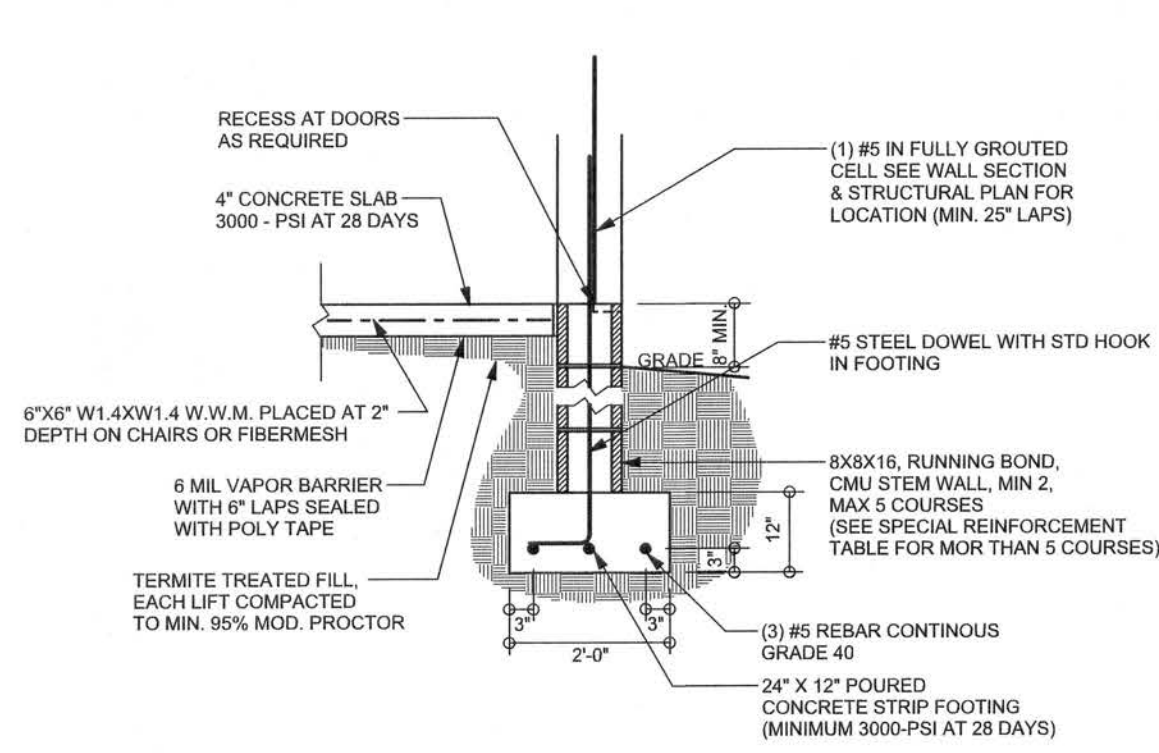
**DRAWING NUMBER**  
**S-1.1**  
OF 5 SHEETS

| REVISIONS |  |  |
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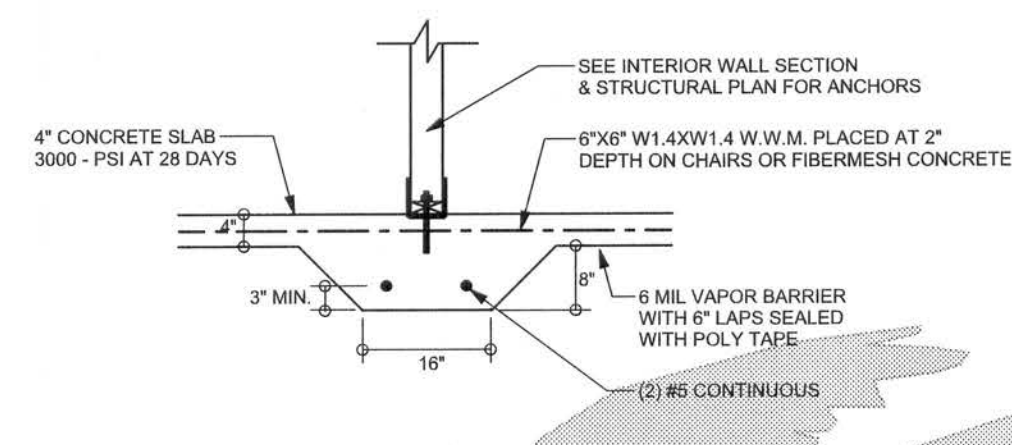
SOFTPLAN  
ARCHITECTURAL DESIGN SOFTWARE



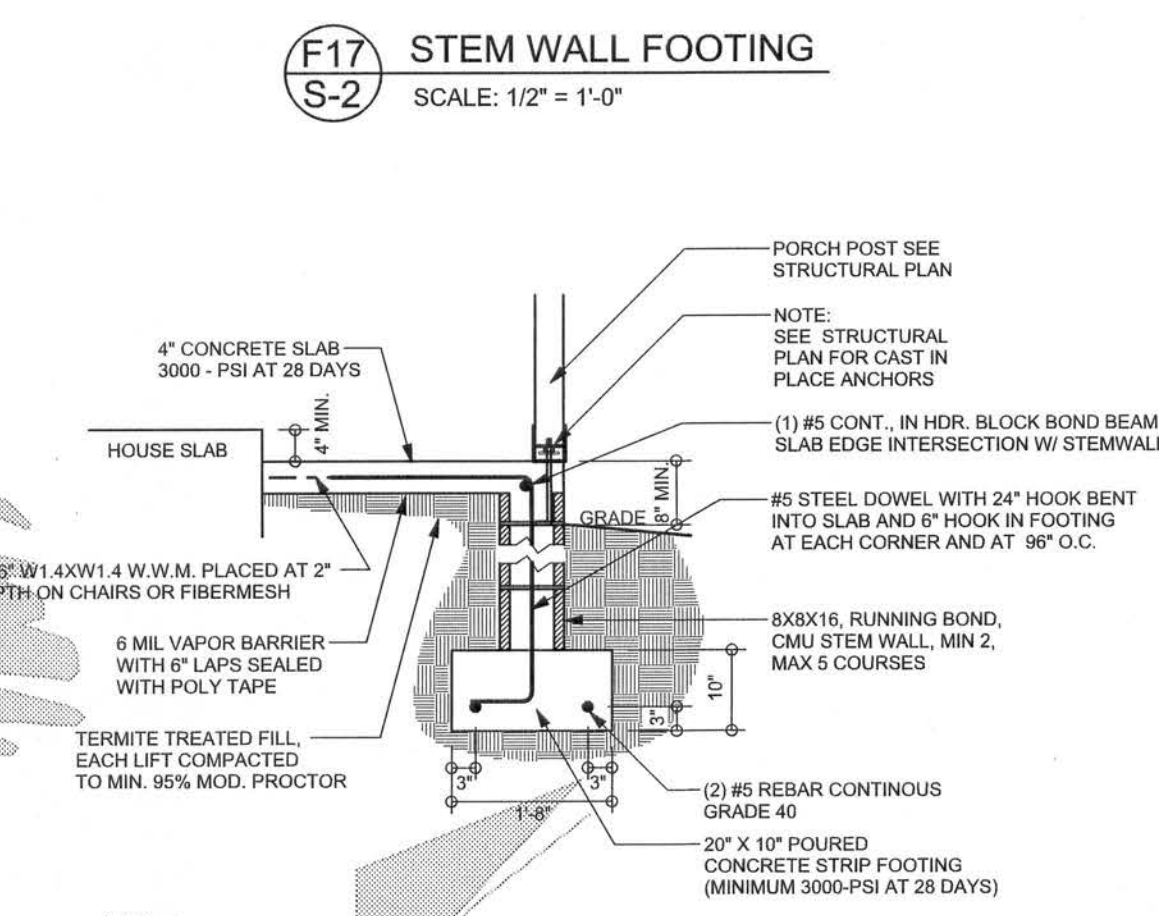
**F1 MONOLITHIC FOOTING**  
SCALE: 1/2" = 1'-0"



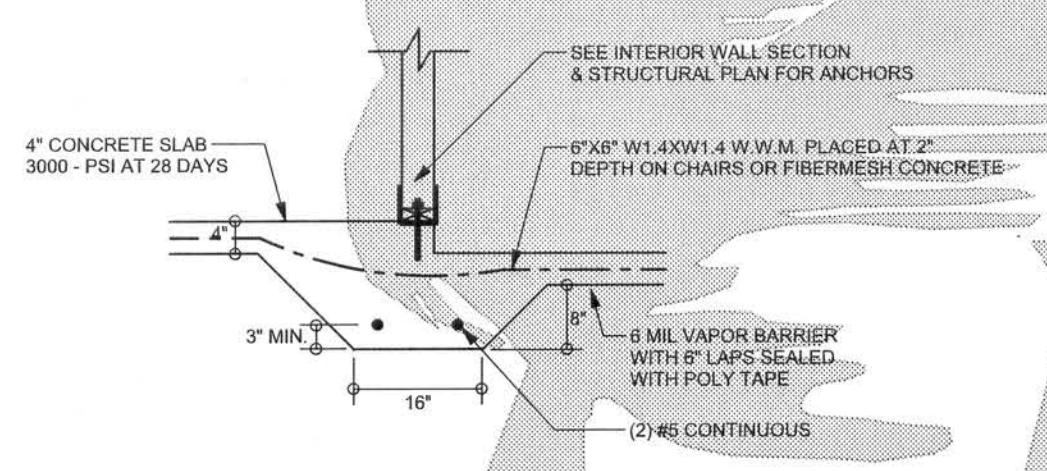
**F17 STEM WALL FOOTING**  
SCALE: 1/2" = 1'-0"



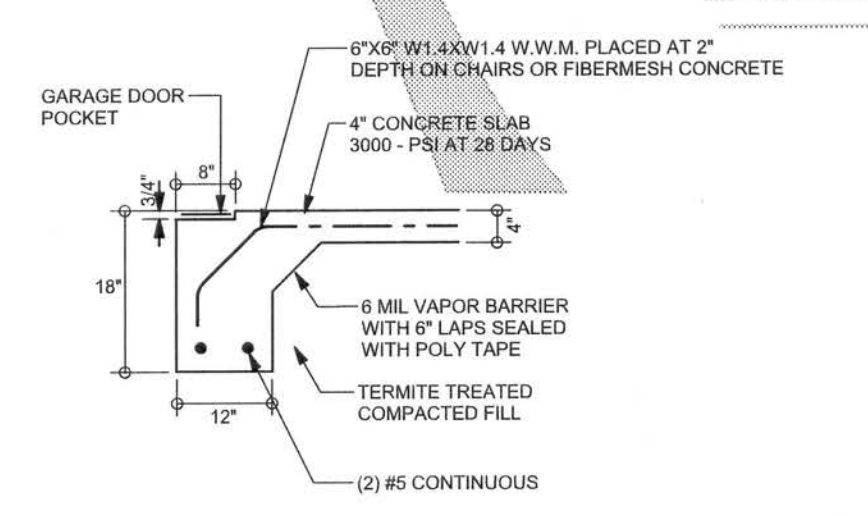
**F2 INTERIOR BEARING FOOTING**  
SCALE: 1/2" = 1'-0"



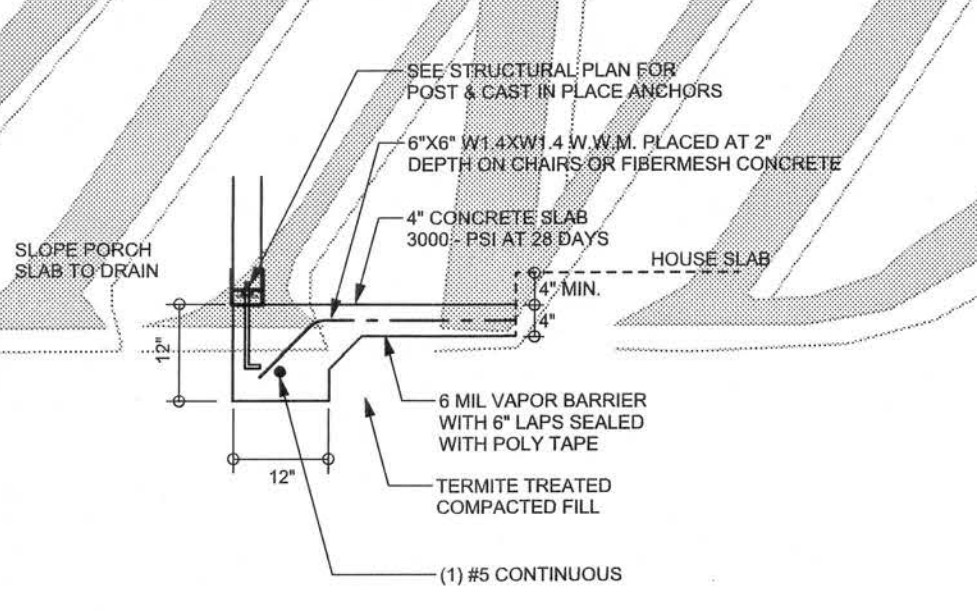
**F12 ALT. STEM WALL PORCH FOOTING**  
SCALE: 1/2" = 1'-0"



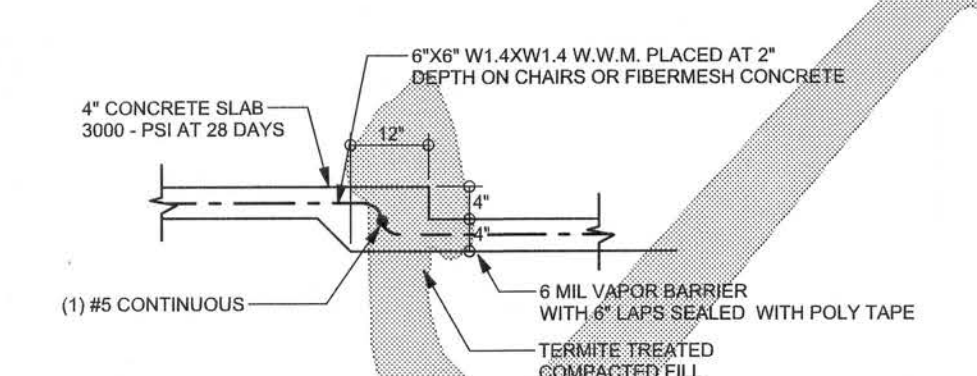
**F3 INTERIOR BEARING STEP FOOTING**  
SCALE: 1/2" = 1'-0"



**F4 GARAGE DOOR FOOTING**  
SCALE: 1/2" = 1'-0"



**F5 PORCH FOOTING**  
SCALE: 1/2" = 1'-0"

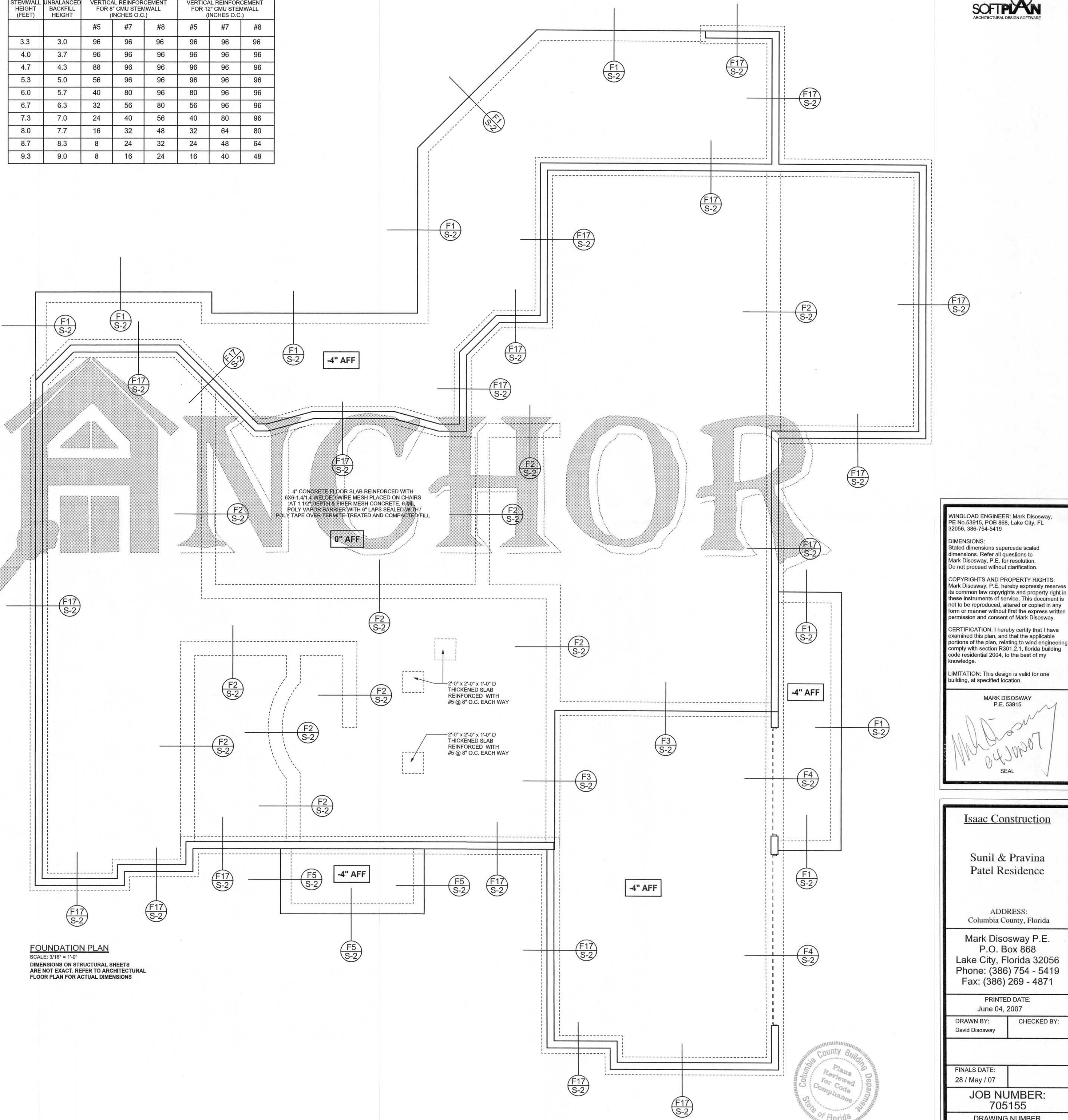


**F6 TYPICAL NON-BEARING STEP FOOTING**  
SCALE: 1/2" = 1'-0"

### TALL STEM WALL TABLE

The table assumes 60 ksi reinforcing bars with 6" hook in the footing and bent 24" into the reinforced slab at the top. The vertical steel is to be placed toward the tension side of the CMU wall (away from the soil pressure, within 2" of the exterior side of the wall). If the wall is over 8' high, add Duowall ladder reinforcement at 16" O.C. vertically or a horizontal bond beam with 165 continuous at mid height. For higher parts of the wall 12" CMU may be used with reinforcement as shown in the table below.

| STEM WALL HEIGHT (FEET) | UNBALANCED BACKFILL HEIGHT | VERTICAL REINFORCEMENT FOR 8" CMU STEM WALL (INCHES O.C.) |    |    | VERTICAL REINFORCEMENT FOR 12" CMU STEM WALL (INCHES O.C.) |    |    |
|-------------------------|----------------------------|-----------------------------------------------------------|----|----|------------------------------------------------------------|----|----|
|                         |                            | #5                                                        | #7 | #8 | #5                                                         | #7 | #8 |
| 3.3                     | 3.0                        | 96                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 4.0                     | 3.7                        | 96                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 4.7                     | 4.3                        | 88                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 5.3                     | 5.0                        | 56                                                        | 96 | 96 | 96                                                         | 96 | 96 |
| 6.0                     | 5.7                        | 40                                                        | 80 | 96 | 80                                                         | 96 | 96 |
| 6.7                     | 6.3                        | 32                                                        | 56 | 80 | 56                                                         | 96 | 96 |
| 7.3                     | 7.0                        | 24                                                        | 40 | 56 | 40                                                         | 80 | 96 |
| 8.0                     | 7.7                        | 16                                                        | 32 | 48 | 32                                                         | 64 | 80 |
| 8.7                     | 8.3                        | 8                                                         | 24 | 32 | 24                                                         | 48 | 64 |
| 9.3                     | 9.0                        | 8                                                         | 16 | 24 | 16                                                         | 40 | 48 |



**FOUNDATION PLAN**  
SCALE: 3/16" = 1'-0"  
DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

**MASONRY NOTES:**  
MASONRY CONSTRUCTION AND MATERIALS FOR THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATION FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TMS 602). THE CONTRACTOR AND MASON MUST IMMEDIATELY, BEFORE PROCEEDING, NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN ACI 530.1-02 AND THESE DESIGN DRAWINGS. ANY EXCEPTIONS TO ACI 530.1-02 MUST BE APPROVED BY THE ENGINEER IN WRITING.

| ACI 530.1-02 Section                     | Specific Requirements                                                                                                                                                         |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.4A Compressive strength                | 8" block bearing walls F'm = 1500 psi                                                                                                                                         |
| 2.1 Mortar                               | ASTM C 270, Type N, UNO                                                                                                                                                       |
| 2.2 Grout                                | ASTM C 476, admixtures require approval                                                                                                                                       |
| 2.3 CMU standard                         | ASTM C 90-02, Normal weight, Hollow, medium surface finish, 8"x8"x16" running bond and 12"x12" or 16"x16" column block                                                        |
| 2.3 Clay brick standard                  | ASTM C 216-02, Grade SW, Type FBS, 5.5"x2.75"x11.5"                                                                                                                           |
| 2.4 Reinforcing bars, #3 - #11           | ASTM 615, Grade 60, Fy = 60 ksi, Lap splices min 48 bar dia. (30" for #5)                                                                                                     |
| 2.4F Coating for corrosion protection    | Anchors, sheet metal ties completely embedded in mortar or grout, ASTM A525, Class G60, 0.60 oz/lb or 304SS                                                                   |
| 2.4F Coating for corrosion protection    | Joint reinforcement in walls exposed to moisture or wire ties, anchors, sheet metal ties not completely embedded in mortar or grout, ASTM A153, Class B2, 1.50 oz/lb or 304SS |
| 3.3.E.2 Pipes, conduits, and accessories | Any not shown on the project drawings require engineering approval.                                                                                                           |
| 3.3.E.7 Movement joints                  | Contractor assumes responsibility for type and location of movement joints if not detailed on project drawings.                                                               |

**WINDLOAD ENGINEER:** Mark Disoway, P.E. No. 53915, P.O. Box 868, Lake City, FL 32056, 386-754-5419

**DIMENSIONS:** Stated dimensions supersede scaled dimensions. Refer all questions to Mark Disoway, P.E. for resolution. Do not proceed without clarification.

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**CERTIFICATION:** I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section 903.1.2.1, Florida building code residential 2004, to the best of my knowledge.

**LIMITATION:** This design is valid for one building, at specified location.

MARK DISOWAY  
P.E. 53915  
04/30/07  
SEAL

**Isaac Construction**

Sunil & Pravina Patel Residence

ADDRESS:  
Columbia County, Florida

Mark Disoway P.E.  
P.O. Box 868  
Lake City, Florida 32056  
Phone: (386) 754-5419  
Fax: (386) 269-4871

PRINTED DATE:  
June 04, 2007

DRAWN BY:  
David Disoway

CHECKED BY:

FINALS DATE:  
28 / May / 07

**JOB NUMBER:**  
705155

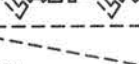
**DRAWING NUMBER**  
**S-2**  
OF 5 SHEETS



1.  $f_c$  8" precast lintel = 3500 psi
2.  $f_c$  precast lintel = 6000 psi
3. Grout per ASTM C476  $f_c$  = 3000 psi w/ maximum 3/8 inch aggregate & 8 to 11 inch slump
4. Concrete Masonry Units (CMU) per ASTM C90 w/minimum net area compressive strength = 1900 psi
5. Rebar per ASTM A615 grade 60
6. Prestressing strand per ASTM A416 grade 270 low relaxation
7. Mortar per ASTM C270 type M or S

1. Provide full mortar bed and head joints.
2. Shore filled lintels as required.
3. Installation of lintel must comply with the architectural and/or structural documents.
4. U-Lintels are manufactured with 5 1/2" long notches at the ends to accommodate vertical clip reinforcing and grouting.
5. All lintels meet or exceed L/360 deflection, except lintels 17'-4" longer with a nominal height of 8" meet or exceed L/180 deflection.
6. Bottom field added rebar to be located at the bottom of the lintel cavity.
7. 7/32" diameter wire stirrups are welded to the bottom steel for mechanical anchorage.
8. Cast-in-place concrete may be provided in composite lintel in lieu of concrete masonry units.

9. Safe load rating based on rational design analysis per ACI 318 and ACI 530
10. Product Approvals: Miami-Dade County, Florida No. 03-0606.05
11. The exterior surface of lintels installed in exterior concrete masonry walls shall have a coating of stucco applied in accordance with ASTM C-926 or other approved coating.
12. Lintels loaded simultaneously with vertical (gravity or uplift) and horizontal (lateral) loads should be checked for the combined loading with the following equation:
- |                              |   |                                |  |              |
|------------------------------|---|--------------------------------|--|--------------|
| <u>Applied vertical load</u> | + | <u>Applied horizontal load</u> |  | <u>\$1.0</u> |
| Safe vertical load           |   | Safe horizontal load           |  |              |
13. Additional lateral load capacity can be obtained by the designer by providing additional reinforced concrete masonry above the lintel. See detail at right:

| SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LIMITS                          |        |                                    |       |        |         |        |         |        |
|-----------------------------------------------------------------------------------|--------|------------------------------------|-------|--------|---------|--------|---------|--------|
|  |        | SAFE LOAD - POUNDS PER LINEAR FOOT |       |        |         |        |         |        |
| LENGTH                                                                            | TYPE   | RUR                                | SLOPE |        |         |        |         |        |
|                                                                                   |        |                                    | 8°-0' | 16°-0' | 16°-10' | 8°-20' | 16°-20' | 8°-20' |
| 2'-10"                                                                            | (34°)  | 2231                               | 3089  | 3089   | 3089    | 3089   | 3089    | 3089   |
| 3'-6"                                                                             | (42°)  | PRECAST                            | 2231  | 3089   | 3089    | 3089   | 3089    | 3089   |
| 4'-0"                                                                             | (48°)  | PRECAST                            | 1966  | 2961   | 3089    | 3089   | 3089    | 3089   |
| 4'-6"                                                                             | (54°)  | PRECAST                            | 1966  | 2961   | 3089    | 3089   | 3089    | 3089   |
| 5'-6"                                                                             | (64°)  | PRECAST                            | 1217  | 1348   | 3089    | 3089   | 3089    | 3089   |
| 7'-0"                                                                             | (70°)  | PRECAST                            | 1062  | 1451   | 3089    | 3089   | 3089    | 3089   |
| 8'-6"                                                                             | (78°)  | PRECAST                            | 908   | 1238   | 3089    | 3089   | 3089    | 3089   |
| 9'-6"                                                                             | (84°)  | PRECAST                            | 743   | 1011   | 3089    | 3089   | 3089    | 3089   |
| 10'-6"                                                                            | (112°) | PRECAST                            | 654   | 532    | 3089    | 3089   | 3089    | 3089   |
| 10'-6"                                                                            | (126°) | PRECAST                            | 475   | 735    | 3089    | 3089   | 3089    | 3089   |
| 11'-4"                                                                            | (138°) | PRECAST                            | 362   | 552    | 3089    | 3089   | 3089    | 3089   |
| 12'-0"                                                                            | (144°) | PRECAST                            | 337   | 540    | 3089    | 3089   | 3089    | 3089   |
| 13'-4"                                                                            | (160°) | PRECAST                            | 296   | 421    | 3089    | 3089   | 3089    | 3089   |
| 14'-0"                                                                            | (168°) | PRECAST                            | 270   | 442    | 3089    | 3089   | 3089    | 3089   |
| 14'-6"                                                                            | (176°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |
| 15'-4"                                                                            | (184°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |
| 17'-4"                                                                            | (208°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |
| 19'-4"                                                                            | (232°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |
| 21'-4"                                                                            | (256°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |
| 22'-0"                                                                            | (264°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |
| 24'-0"                                                                            | (288°) | PRESTRESSED                        | NR    | NR     | NR      | NR     | NR      | NR     |

| SAFE UPLIFT LOADS FOR 8" PRECAST |                    | SAFE UPLIFT LOADS PER LINEAR FOOT  |        |       |        |       |        |       |        |       |        |
|----------------------------------|--------------------|------------------------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| TYPE                             |                    | SAFE LOAD - DUNDS PER PRECAST FOOT |        |       |        |       |        |       |        |       |        |
|                                  |                    | 8R-11                              | 8R-11T | 8R-11 | 8R-11T | 8R-21 | 8R-21T | 8R-21 | 8R-21T | 8R-31 | 8R-31T |
|                                  |                    | 6R-21                              | 6R-12T | 6R-21 | 6R-12T | 6R-21 | 6R-21T | 6R-21 | 6R-21T | 6R-31 | 6R-31T |
| 2-10"                            | (34") PRECAST      | 197                                | 3173   | 67    | 5747   | 7024  | 9321   | 8068  | 8068   |       |        |
| 3-6"                             | (42") PRECAST      | 1560                               | 2524   | 37    | 4569   | 5531  | 6813   | 7636  |        |       |        |
| 4-10"                            | (48") PRECAST      | 1363                               | 2192   | 79    | 3986   | 4853  | 5740   | 6227  |        |       |        |
| 4-6"                             | (54") PRECAST      | 1307                               | 1940   | 73    | 3986   | 4853  | 5740   | 6227  |        |       |        |
| 5-4"                             | (64") PRECAST      | 1207                               | 1940   | 28    | 3566   | 4295  | 5277   | 861   |        |       |        |
| 5-4"                             | (64") PRECAST      | 1016                               | 1632   | 30    | 2940   | 3607  | 4265   | 4264  |        |       |        |
| 5-10"                            | (70") PRECAST      | 908                                | 1452   | 35    | 2294   | 3252  | 3567   | 4928  |        |       |        |
| 6-6"                             | (78") PRECAST      | 885                                | 1340   | 30    | 2410   | 2959  | 3488   | 4038  |        |       |        |
| 7-6"                             | (90") PRECAST      | 830                                | 1340   | 30    | 2410   | 2958  | 3488   | 4038  |        |       |        |
| 7-6"                             | (90") PRECAST      | 727                                | 1021   | 34    | 2102   | 2711  | 3039   | 3508  |        |       |        |
| 8-4"                             | (112") PRECAST     | 591                                | 859    | 33    | 1471   | 1815  | 2152   | 2484  |        |       |        |
| 10-6"                            | (126") PRECAST     | 591                                | 851    | 4     | 1185   | 1107  | 1458   | 2071  |        |       |        |
| 11-4"                            | (136") PRECAST     | 530                                | 666    | 93    | 1528   | 1868  | 2204   | 2544  |        |       |        |
| 11-4"                            | (136") PRECAST     | 470                                | 545    | 93    | 1234   | 1575  | 1910   | 2245  |        |       |        |
| 12-0"                            | (144") PRECAST     | 470                                | 541    | 3     | 1348   | 1151  | 1386   | 1584  |        |       |        |
| 13-4"                            | (160") PRECAST     | 418                                | 473    | 8     | 1348   | 1649  | 1948   | 2247  |        |       |        |
| 14-0"                            | (168") PRECAST     | 406                                | 470    | 8     | 1243   | 1952  | 1948   | 2247  |        |       |        |
| 14-0"                            | (168") PRECAST     | 384                                | 346    | 6     | 723    | 887   | 1052   | 1212  |        |       |        |
| 14-0"                            | (168") PRECAST     | 410                                | 420    | 8     | 1050   | 1344  | 1684   | 1954  |        |       |        |
| 14-8"                            | (176") PRESTRESSED | 239                                | 323    | 8     | 617    | 823   | 976    | 1129  |        |       |        |
| 15-4"                            | (184") PRESTRESSED | 246                                | 300    | 15    | 888    | 1324  | 1623   | 1874  |        |       |        |
| 15-4"                            | (184") PRESTRESSED | 224                                | 286    | 15    | 667    | 963   | 1051   | 1228  |        |       |        |
| 17-4"                            | (208") PRESTRESSED | 220                                | 306    | 15    | 987    | 1224  | 1562   | 1801  |        |       |        |
| 19-4"                            | (232") PRESTRESSED | 187                                | 255    | 4     | 620    | 637   | 754    | 872   |        |       |        |
| 21-4"                            | (256") PRESTRESSED | 192                                | 303    | 0     | 732    | 993   | 1288   | 1470  |        |       |        |
| 21-4"                            | (256") PRESTRESSED | 162                                | 222    | 0     | 448    | 546   | 640    | 746   |        |       |        |
| 21-4"                            | (256") PRESTRESSED | 124                                | 124    | 0     | 315    | 416   | 517    | 591   |        |       |        |
| 22-0"                            | (264") PRESTRESSED | 142                                | 198    | 6     | 343    | 440   | 567    | 654   |        |       |        |
| 22-0"                            | (264") PRESTRESSED | 142                                | 230    | 9     | 531    | 713   | 903    | 1046  |        |       |        |
| 22-0"                            | (264") PRESTRESSED | 132                                | 192    | 6     | 378    | 411   | 545    | 629   |        |       |        |
| 24-0"                            | (288") PRESTRESSED | 137                                | 221    | 4     | 508    | 544   | 617    | 675   |        |       |        |
| 24-0"                            | (288") PRESTRESSED | 124                                | 204    | 6     | 438    | 476   | 591    | 566   |        |       |        |
| 24-0"                            | (288") PRESTRESSED | 124                                | 200    | 6     | 450    | 600   | 756    | 875   |        |       |        |

| SAFE GRAVITY LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LEVELS                        |      |                                   |            |             |            |            |            |            |            |
|-------------------------------------------------------------------------------------|------|-----------------------------------|------------|-------------|------------|------------|------------|------------|------------|
|  |      | SAFE LAD - POUNDS PER LINEAR FOOT |            |             |            |            |            |            |            |
| LENGTH                                                                              | TYPE | 8RUF                              | 8RUF-0B    | 8RUF-0B-10R | 8RUF-18-0B | 8RUF-22-0B | 8RUF-26-0B | 8RUF-30-0B | 8RUF-36-0B |
|                                                                                     |      | 8RUF-0B                           | 8RUF-18-0B | 8RUF-22-0B  | 8RUF-26-0B | 8RUF-30-0B | 8RUF-36-0B | 8RUF-42-0B | 8RUF-48-0B |
| 4'-4" (52") PRECAST                                                                 | 1635 | 1748                              | 95         | 3290        | 639        | 5421       | 6495       | 7567       | 8639       |
| 4'-6" (54") PRECAST                                                                 | 1494 | 1596                              | 93         | 2992        | 396        | 4984       | 5924       | 6904       | 7884       |
| 5'-8" (68") PRECAST                                                                 | 866  | 920                               | 71         | 1718        | 2277       | 2839       | 3401       | 3963       | 4525       |
| 5'-10" (70") PRECAST                                                                | 813  | 867                               | 53         | 1342        | 1933       | 2509       | 3085       | 3661       | 4237       |
| 6'-8" (80") PRECAST                                                                 | 797  | 801                               | 25         | 3120        | 5048       | 7915       | 10784      | 13653      | 16522      |
| 7'-8" (90") PRECAST                                                                 | 669  | 755                               | 50         | 2459        | 3776       | 5743       | 7299       | 8855       | 10411      |
| 8'-8" (100") PRECAST                                                                | 511  | 525                               | 9          | 1569        | 2776       | 4743       | 6699       | 8655       | 10611      |
| 9'-8" (116") PRECAST                                                                | 446  | 468                               | 90         | 2458        | 3129       | 4949       | 6165       | 7381       | 8597       |

| SAFE UPLIFT LOADS FOR 8" PRECAST 12" RECESS DOOR U-LINTELS                          |  |                                         |        |        |        |        |        |           |           |
|-------------------------------------------------------------------------------------|--|-----------------------------------------|--------|--------|--------|--------|--------|-----------|-----------|
|  |  | SAFE LOAD UPLIFT ROUNDS PER LINEAR FOOT |        |        |        |        |        |           |           |
| TYPE                                                                                |  | 18RF11                                  | 18RF10 | 18RF11 | 18RF21 | 18RF22 | 18RF26 | 18RF30-FT | 18RF30-FT |
| LENGTH                                                                              |  | 18RF5                                   | 18RF2  | 18RF21 | 18RF22 | 18RF26 | 18RF27 | 18RF28    | 18RF30-FT |
| 4'-4" (52") PRECAST                                                                 |  | 905                                     | 1748   | 25     | 3322   | 4409   | 5296   | 6183      | 7070      |
|                                                                                     |  | 920                                     | 815    | 30     | 3374   | 4424   | 5311   | 6198      | 7085      |
| 4'-6" (54") PRECAST                                                                 |  | 887                                     | 1675   | 25     | 3374   | 4424   | 5307   | 6194      | 7081      |
|                                                                                     |  | 887                                     | 1675   | 25     | 3374   | 4424   | 5307   | 6194      | 7081      |
| 5'-8" (68") PRECAST                                                                 |  | 675                                     | 1301   | 30     | 2618   | 3277   | 3935   | 4594      | 5253      |
|                                                                                     |  | 675                                     | 1301   | 30     | 2618   | 3277   | 3935   | 4594      | 5253      |
| 5'-10" (70") PRECAST                                                                |  | 695                                     | 1292   | 30     | 2534   | 3178   | 3836   | 4495      | 5154      |
|                                                                                     |  | 695                                     | 1292   | 30     | 2534   | 3178   | 3836   | 4495      | 5154      |
| 6'-8" (80") PRECAST                                                                 |  | 570                                     | 1012   | 51     | 2204   | 2759   | 3312   | 3865      | 4418      |
|                                                                                     |  | 570                                     | 1097   | 51     | 2204   | 2759   | 3312   | 3865      | 4418      |
| 7'-4" (90") PRECAST                                                                 |  | 506                                     | 787    | 52     | 1952   | 2442   | 2931   | 3421      | 3911      |
|                                                                                     |  | 506                                     | 867    | 52     | 1952   | 2442   | 2931   | 3421      | 3911      |
| 9'-8" (116") PRECAST                                                                |  | 385                                     | 588    | 52     | 1534   | 1881   | 2272   | 2652      | 3032      |
|                                                                                     |  | 385                                     | 588    | 52     | 1534   | 1881   | 2272   | 2652      | 3032      |

**STRUCTURAL FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

**1ST FLOOR TOTAL SHEAR WALL SEGMENTS**

SWS = 0.0' INDICATES SHEAR WALL SEGMENTS

|              | REQUIRED | ACTUAL |
|--------------|----------|--------|
| TRANSVERSE   | 45.0'    | 120.5' |
| LONGITUDINAL | 42.8'    | 84.5'  |

|      |                                                                                                                                                                                                                                                                     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SN-1 | ALL LOAD BEARING FRAME WALL & PORCH HEADERS SHALL HAVE A MINIMUM OF (2) 2X12 SYP#2 (U.N.O.)                                                                                                                                                                         |
| SN-2 | ALL LOAD BEARING FRAME WALL HEADERS SHALL HAVE (1) JACK STUD & (1) KING STUD EACH SIDE (U.N.O.)                                                                                                                                                                     |
| SN-3 | DIMENSIONS ON STRUCTURAL SHEETS<br>DO NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS                                                                                                                                                            |
| SN-4 | PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWING. LATERAL BRACING IS TO BE RESTRAINED PER BCS#1-BCS#1, BCS#2-B4, & BCS#3-B4. BCS#1-B4, BCS#2-B4, & BCS#3-B4 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE TRUSS PACKAGE |

TAPCON IN FACE OF CMU  
 9" 1/2" MIN. EDGE DISTANCE  
 1 1/4" MIN. EMBEDMENT  
 3" MIN. SPACING

WINDOWS & DOORS UP TO 6'X8'

3/16" TAPCONS @ 2' O.C.  
 1/4" TAPCONS @ 3' O.C.

WINDOWS & DOORS UP TO 8'X12'

3/16" TAPCONS @ 16" O.C.  
 1/4" TAPCONS @ 24" O.C.

SLIDERS UP TO 8'X12'W

3/16" TAPCONS @ 12" O.C.  
 1/4" TAPCONS @ 18" O.C.

GARAGE DOOR UP TO 10'W

(2) 3/16" TAPCONS @ 16" O.C.  
 (2) 1/4" TAPCONS @ 24" O.C.

GARAGE DOOR UP TO 18'W

(2) 3/16" TAPCONS & 8" O.C.  
 (2) 1/4" TAPCONS & 12" O.C.

The diagram shows a rectangular box representing a beam call-out. The text inside the box is "(2) 2X12X0', 1J 1K". Arrows point from labels to the components of the call-out:

- HEADER/BEAM CALL-OUT (U.N.O.) points to the entire box.
- NUMBER OF KING STUDS (FULL LENGTH) points to the "2" at the beginning.
- NUMBER OF JACK STUDS (UNDER HEAD) points to the "1J".
- SPAN OF HEADER points to the "0'" part.
- SIZE OF HEADER MATERIAL points to the "2X12".
- NUMBER OF PLIES IN HEADER points to the "1K" at the end.

|                   |                                      |
|-------------------|--------------------------------------|
| <p>SWS = 0.0'</p> | 1ST FLOOR EXTERIOR                   |
| <p>SWS = 0.0'</p> | 2ND FLOOR EXTERIOR                   |
| <p>IBW = 0.0'</p> | 1ST FLOOR INTERIOR<br>SEE DETAILS ON |
| <p>IBW = 0.0'</p> | 2ND FLOOR INTERIOR<br>SEE DETAILS ON |

INDICATES LOCATION OF #5 VERTICAL DOWEL IN CMU CELL, FILLED SOLID W/ 3000 P.S.I. CONC.

INDICATES LOCATION OF (2) #5 VERTICAL DOWEL IN CMU CELL, FILLED SOLID W/ 3000 P.S.I. CONC.

● INDICATES LOCATION OF:  
1ST FLOOR 1/2" A307 ALL THREADED ROD

⊗ INDICATES LOCATION OF:  
2ND FLOOR 1/2" A307 ALL THREADED ROD

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |

**SOFTPLAN**  
ARCHITECTURAL DESIGN SOFTWARE

**WINDLOAD ENGINEER:** Mark Disoway,  
PE No.53915, POB 868, Lake City, FL  
32056, 386-754-5419

**DIMENSIONS:**  
Stated dimensions supercede scaled  
dimensions. Refer all questions to  
Mark Disoway, P.E. for resolution.  
Do not proceed without clarification.

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**CERTIFICATION:** I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering, comply with section R301.2.1, Florida building code residential 2004, to the best of my knowledge.

**LIMITATION:** This design is valid for one building, at specified location.

MARK DISOSWAY  
P.E. 53915

Isaac Construction

Sunil & Pravina  
Patel Residence

ADDRESS:  
Columbia County, Florida

Mark Disosway P.E.

Mark Disosway P.E.  
P.O. Box 868

Lake City, Florida 3205  
Phone: (386) 754-5411

Phone: (386) 754 - 5411

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PRINTED DATE:

|           |             |
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| DRAWN BY: | CHECKED BY: |
|-----------|-------------|

DRAWN BY: David Disosway

FINALS DATE:  
28 / May / 07

|               |  |
|---------------|--|
| 28 / May / 07 |  |
|---------------|--|

JOB NUMBER:  
705155

705155

**S-3**

**S-3**

OF 5 SHEETS

---

[illegible]

# REVISIONS

SOFTPLAN  
ARCHITECTURAL DESIGN SOFTWARE

## STRUCTURAL PLAN NOTES

- SN-1 ALL LOAD BEARING FRAME WALL & PORCH HEADERS SHALL BE A MINIMUM OF (2) 2X12 SYP#2 (L.N.O.)
- SN-2 ALL LOAD BEARING FRAME WALL HEADERS SHALL HAVE (1) JACK STUD & (1) KING STUD EACH SIDE (L.N.O.)
- SN-3 DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS
- SN-4 PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWINGS. LATERAL BRACING IS TO BE RESTRAINED PER BCSI-03. BCSI-01, BCSI-02, & BCSI-03. BCSI-01, BCSI-02, & BCSI-03 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE

## DOOR & WINDOW BUCK ATTACHMENT

- TAPCON IN FACE OF CMU  
2 1/2" MIN. EDGE DISTANCE  
1 1/4" MIN. EMBEDMENT  
3" MIN. SPACING
- WINDOWS & DOORS UP TO 6'x8'
- 3/16" TAPCONS @ 2' O.C.  
1/4" TAPCONS @ 3' O.C.
- WINDOWS & DOORS UP TO 8'x12'
- 3/16" TAPCONS @ 18" O.C.  
1/4" TAPCONS @ 24" O.C.
- SLIDERS UP TO 8'x20'W
- 3/16" TAPCONS @ 12" O.C.  
1/4" TAPCONS @ 18" O.C.
- GARAGE DOOR UP TO 10'W
- (2) 3/16" TAPCONS @ 18" O.C.  
(2) 1/4" TAPCONS @ 24" O.C.
- GARAGE DOOR UP TO 18'W
- (2) 3/16" TAPCONS @ 8" O.C.  
(2) 1/4" TAPCONS @ 12" O.C.

## HEADER LEGEND

- (2) 2X12X7.1J 1K → HEADER/BEAM CALL-OUT (L.N.O.)
- NUMBER OF KING STUDS (FULL LENGTH)
- NUMBER OF JACK STUDS (UNDER HEADER)
- SPAN OF HEADER
- SIZE OF HEADER MATERIAL
- NUMBER OF PILES IN HEADER

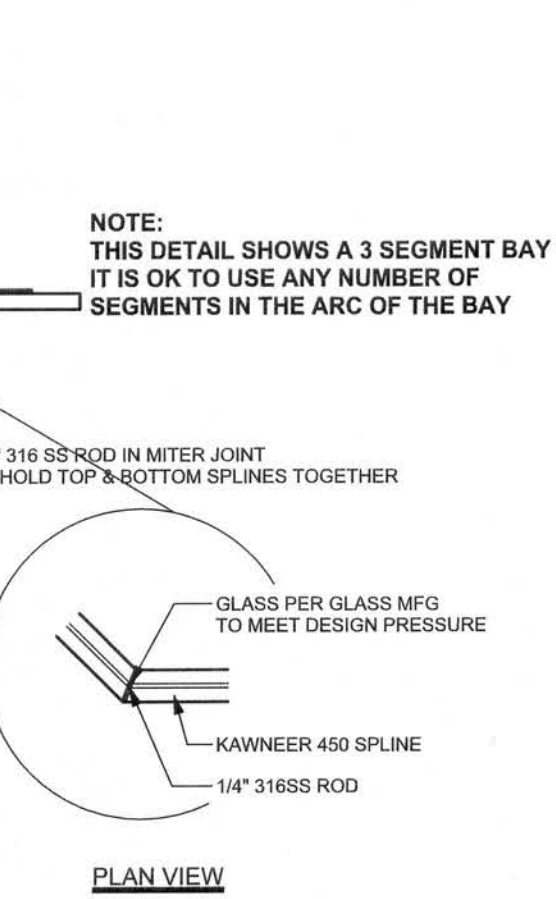
## WALL LEGEND

|            |                                                              |
|------------|--------------------------------------------------------------|
| SWS = 0.0" | 1ST FLOOR EXTERIOR WALL                                      |
| SWS = 0.0" | 2ND FLOOR EXTERIOR                                           |
| IBW        | 1ST FLOOR INTERIOR BEARING WALLS<br>SEE DETAILS ON SHEET S-1 |
| IBW        | 2ND FLOOR INTERIOR BEARING WALLS<br>SEE DETAILS ON SHEET S-1 |

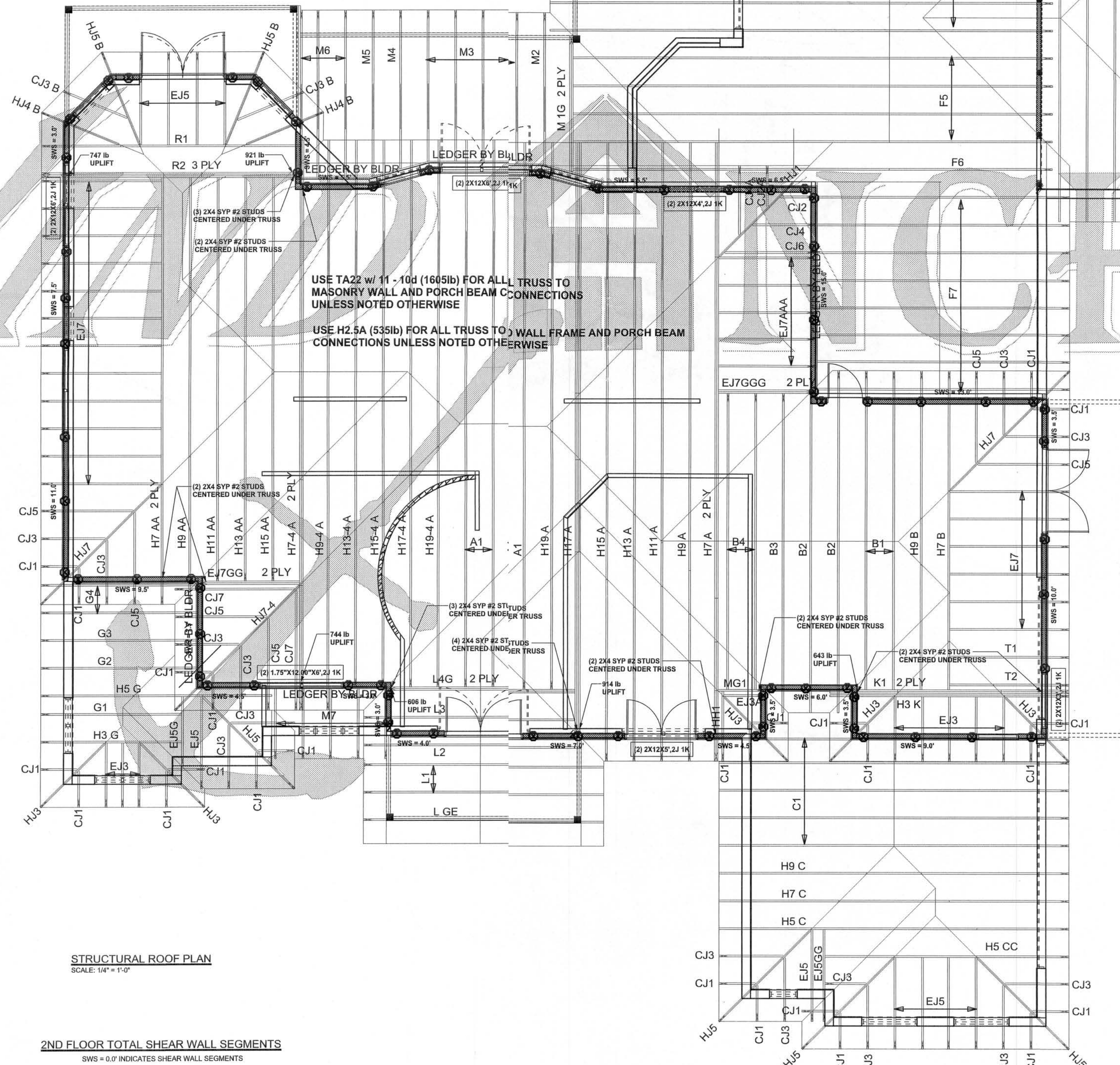
- INDICATES LOCATION OF #5 VERTICAL DOWEL IN CMU CELL, FILLED SOLID W/ 3000 P.S.I. CONC.
- INDICATES LOCATION OF (2) #5 VERTICAL DOWEL IN CMU CELL, FILLED SOLID W/ 3000 P.S.I. CONC.

## THREADED ROD LEGEND

- INDICATES LOCATION OF 1ST FLOOR 1/2" A307 ALL THREADED ROD
- INDICATES LOCATION OF 2ND FLOOR 1/2" A307 ALL THREADED ROD



- 1/4" TAPCON @ 12" O.C. w/ 1 1/4" EMBEDMENT IN CMU w/ 3/4" MIN. EDGE DISTANCE
- #10 TEKS @ 1' O.C. INTO 18ga MIN. STEEL STUD w/ 3 THREADS EXPOSED
- #12 WOOD SCREW @ 12" O.C. INTO SPF #2 OR BETTER w/ 1 1/2" PENETRATION
- 1/4" LAG SCRW @ 18" O.C. INTO SPF #2 OR BETTER w/ 1 1/2" PENETRATION



STRUCTURAL ROOF PLAN  
SCALE: 1/4" = 1'-0"

## 2ND FLOOR TOTAL SHEAR WALL SEGMENTS

|                                          |        |
|------------------------------------------|--------|
| SWS = 0.0" INDICATES SHEAR WALL SEGMENTS |        |
| REQUIRED                                 | ACTUAL |
| TRANSVERSE 42.8'                         | 72.9'  |
| LONGITUDINAL 38.4'                       | 78.9'  |

WINDLOAD ENGINEER: Mark Disosway,  
PE No.3915, POB 868, Lake City, FL  
32056-386-754-5419

DIMENSIONS:  
State dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

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CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portion of the plan, relating to wind engineering, complies with section R301.2.1, Florida building code residential 2004, to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

MARK DISOSWAY  
P.E. 53915

*Mark Disosway*  
05/04/07  
SEAL

## saac Construction

Sunil & Pravina  
Patel Residence

ADDRESS:  
Columbia County, Florida

Mark Disosway P.E.  
P.O. Box 868  
Lake City, Florida 32056  
Phone: (386) 754 - 5419  
Fax: (386) 269 - 4871

PRINTED DATE:  
June 04, 2007

DRAWN BY: David Disosway

CHECKED BY:

FINALS DATE:  
28 May / 07

JOB NUMBER:  
705155

DRAWING NUMBER

S-4

OF 5 SHEETS



CONNECTIONS, WALL, & HEADER DESIGN IS BASED ON REACTIONS & UPLIFTS FROM TRUSS ENGINEERING FURNISHED BY BUILDER, ANDERSON TRUSS CO. (JOB #7-101)