3450 Duck Avenue

1 market-rate & 1 affordable-rate

OROPEZA STONES CARDENAS
ATTORNEYS AT LAW

GREGORY S. OROPEZA | ADELE VIRGINIA STONES | SUSAN M. CARDENAS

VIA HAND DELIVERY

December 4, 2020

Katie Halloran, Director of Planning
City of Key West Planning Department
1300 White Street
Key West, FL 33040

RE: Request for Market Rate and Accessory Unit Building Permit Allocation System Allocation for 3450 Duck Avenue, Key West, Florida 33040:

Dear Ms. Halloran:

Please allow this correspondence to serve as an application for one (1) market rate and one (1) accessory unit residential Building Permit Allocation System ("BPAS") unit (the "BPAS Unit") on behalf of JKMH Partners LLC ("Applicant"). As counsel for JKMH Partners LLC, my firm submits the following Application and supporting documents for your consideration:

Title Block:

a.	Name of Owner:	JKMH Partners LLC
b.	Scale:	1" = 40'
c.	North Arrow:	As identified on the site plan
d.	Preparation/Revision Date:	October 26, 2020

Identification of Key Persons:

a.	Owner:	JKMH Partners LLC
b.	Owner's Authorized Agent:	Oropeza, Stones & Cardenas, PLLC
c.	Engineer:	Campbell Engineering Consultants LLC
d.	Surveyor:	O'Flynn Surveying

e. The undersigned certifies that all individuals/entities with a legal and equitable interest in the Property are as follows: JKMH Partners LLC and Jay Fairbanks.

Project Description: The proposed project is to construct a single-family home and accompanying accessory unit on the SF zoned subject lot.

Other Project Information:

a. Proposed Phases of Development and Target Dates: Single Phase.

b. Expected Date of Completion – On or before one year from issuance of BPAS Unit.

Intergovernmental Coordination:

All intergovernmental coordination shall be completed in accordance with the Development Agreement.

Description of Proposed Development and Use:

The proposed development shall consist of one (1) market rate and one (1) accessory unit structure which shall comply with the requirements of the Land Development Code. Currently, the property is a vacant lot as a result of the demolition of a non-conforming commercial structure.

Solution Statement:

The proposed single-family structure will be raised above the required 1.5' above Base Flood Elevation. The construction will comply with the baseline Florida Green Building Code.

Thank you for your consideration of this Application and attendant documents. We look forward to working with you and Planning staff on this project.

Very truly yours,

Gregory S. Oropeza, Esq.

GSO:gg
Enclosures

Building Permit Allocation System (BPAS) Application

(Year 8: July 1, 2020-June 30, 2021)

City of Key West, Florida • Planning Department

1300 White Street • Key West, Florida 33040-4602 • 305-809-3764 • www.cityofkeywest-fl.gov

RECEIVED
DEC 04 2020
BY: Dmp

Application Fee: $1,155.00 (Market-Rate)
$525.00 (Affordable-Rate)

A. APPLICANT / AGENT (if applicable): Property owner must submit a **notarized** authorization form authorizing the applicant / agent to act on their behalf (Exhibit A).

Name: Gregory S. Oropeza, Esq./Oropeza, Stones & Cardenas, PLLC

Mailing Address: 221 Simonton Street

City: Key West State: FL Zip: 33040

Home/Mobile Phone: Office: 305-294-0252

Email: greg@oropezastonescardenas.com

PROPERTY OWNER:

Name: JKMH Partners LLC

Mailing Address: 221 Simonton Street

City: Key West State: FL Zip: 33040

Home/Mobile Phone: Office: 305-294-0252

Email: greg@oropezastonescardenas.com

PROPERTY DESCRIPTION AND ZONING INFORMATION:

Site Address: 3450 Duck Avenye

Parcel ID RE#: 00053150-000000 Alternate Key: 1053783

Zoning District: SF Size of Site: 12,000 sq. ft.

Density Allowed: One (1) Unit Commercial Floor Area: N/A

B. EXISTING DEVELOPMENT:

Please provide a brief description of how the property is currently used:

Vacant land, formerly a non-conforming commercial building.

EXISTING AND PROPOSED DWELLING UNIT INFORMATION			
DWELLING UNIT DESCRIPTION	NUMBER OF DWELLING UNITS:		
	EXISTING	LICENSED RECOGNIZED	PROPOSED
Market-Rate Residential Dwelling Unit(s)	0	0	1
Affordable ResidentialDwelling Unit(s)2	0	0	0
Transient Unit(s)	0	0	-------- N/A --------
Accessory Dwelling Unit(s)3	0	0	1
Single Room Occupancy Unit(s)	0	0	0
Nursing Home Unit(s)	0	0	0
Total Number of Units Requested			2

1 Please provide City Licensing Records from the Building Department.

2 Standalone Affordable Housing projects are subject to Section 122-1467(c), (d), (e), and (f) of the Workforce Housing Ordinance. Applicant Eligibility Requirements are subject to Section 122-1469 (1) through (15) of the Workforce Housing Ordinance. Affordable housing projects enabled by federal tax credit housing are not subject to 122-1467(c).

3 Accessory dwelling units in the SF zoning district are subject to Section 122-231 through 122-238 of the Land development Regulations.

C. PROPOSED DEVELOPMENT:

Please indicate the scope of the proposed development as it relates to the BPAS (Section 108-997 (B)).

[X] **Major construction / renovation** – meaning new development, additions to existing structures, or redevelopment constituting more than 50% of the value of the existing building.

[ ] **Minor renovation-** meaning redevelopment constituting less than 50% of the value of the existing building.

Is this property located within a Historic Zoning District?	**Yes** [ ]	**No** [X]
Are buildings on the property listed as contributing historic structures?	**Yes** [ ]	**No** [X]
Is the proposal for mixed residential and commercial use?	**Yes** [ ]	**No** [X]
Are density bonuses proposed?	**Yes** [ ]	**No** [X]
Advanced affordable allocation request?	**Yes** [ ]	**No** [X]

Will the allocation require development review? Yes [ ] No [XX]

If yes, please specific what type of development review will be required: _____

[ ] Major Development Plan	[ ] Minor Development Plan	[ ] Conditional Use
[ ] Variance(s)	[ ] Beneficial Use	[ ] HARC
[ ] Lawful Unit Determination	[ ] Transient Transfer	[ ] Tree Commission
[ ] Other		

D. APPLICANTS MUST ATTACH ALL DOCUMENTATION REQUESTED BELOW:

[X] **1.** **Description of Proposed Development and Use.** Please be specific, describe and list existing, and proposed buildings and uses, accessory structures and uses, type and number of dwelling units, parking, etc. If there is more than one use, describe in detail the nature of each use (Please reference Sections 108-226 through 108-232). For properties proposing to utilize density bonuses for compact infill development projects, please include a description of how the project meets the criteria established in Code Section 108-998 and an analysis of how many density bonus units are requested.

[X] **2.** **Solution Statement.**

a. Describe aspects of the design that address community issues including but not limited to water pollution from stormwater runoff, potable water conservation, waste disposal, recycling, energy conservation, historic and archeological resource protection, affordable housing, and impacts on neighbors such as lighting, noise, traffic, and parking.

b. Describe how you intend to meet the Prerequisites (A or B described below) for a Major or Minor construction/renovation project (City Code Section 108-997 (B)):
(A)Major Construction/Renovation Prerequisites. The minimum standards for new development, including additions to existing structures, or redevelopment constituting more than 50% of the value of the building, required in order to be eligible to receive an allocation award from the BPAS system are as follows:

a. All new units shall be constructed in compliance with and obtain a **Baseline Green Building Certification.**

b. All new buildings shall be constructed to have the **first habitable floor 1.5 feet above the required base flood elevation,** except for properties located within the historic zoning districts, where the applicant must first demonstrate that such elevation does not interfere with the essential form and integrity of properties in the neighborhood by obtaining a certificate of appropriateness.

c. All new buildings shall be constructed with a **rainwater catchment system** that will hold a minimum of 300 gallons of water or an amount equivalent to 100% of the new roof area in gallons whichever is greater.
* (See page 4 of application.)

(B)Minor Renovation Prerequisites. For development constituting less than 50% of the value of the existing building, the applicant must demonstrate water and energy use 15% below the Florida Building Code using recognized energy and water rating standards by providing a copy of the Required Energy and Water Baseline Report consisting of 12 months of energy and water use. For Commercial buildings (including multifamily), building data must be input into EPE Portfolio Manager (https://www.energystar.gov/istar/pmpam/), and access to building data given to the City of Key West. For residential, either Energy Gauge or RESNET may be used to establish a baseline.
Please provide a description of 15% of both water and energy use will be reduced on the property.

[X] **3.** Copy of current, recorded warranty deed. Quit claim deeds will not be accepted.

[ ] **4.** Up-to-date signed and sealed survey (Section 108-240).

[ ] **5.** Flood Elevation Certificates (New Construction) (Section 34-127).

- [x] **6.** Copy of City licensing records for existing units.
- [x] **7.** Signed and Notarized Verification and Authorization Forms ***(Exhibit A)***.
- [x] **8.** Existing and Proposed Site Plan and Floor Plan (Section 108-237) that shall include a completed Site Data Table ***(Exhibit B)***.
- [x] **9.** Completed BPAS Estimated Score Sheet and Estimated total Points to be achieved ***(Exhibit C)***.
- [x] **10.** Signed and Notarized BPAS Certification Form ***(Exhibit D)***.
- [x] **11.** Copy of LEED or FGBC Score Sheet ***(Exhibit E)*** **or** a copy of the required energy and water baseline report as described in Attachment 2. Solution Statement (b.) B above.

*An applicant may request to be exempted from the rainwater catchment requirement, if:

(i) The applicant is voluntarily providing affordable housing at median or low-income classification which exceeds the requirements of section 122-1467 by at least twenty percent.

(ii) The applicant seeks to create an accessory unit(s) but the impervious surface and/ or building coverage ratio maximums for parcel have been met or exceeded, and the applicant contributes a fee of $2 per required gallon in mitigation to the City's storm water fund.

Authorization
&
Verification

City of Key West
Planning Department

Authorization Form
(Where Owner is a Business Entity)

Please complete this form if someone other than the owner is representing the property owner in this matter.

I, Jonathan J. Fairbank as
Please Print Name of person with authority to execute documents on behalf of entity

AMBR of JKMH Partners LLC
Name of office (President, Managing Member) *Name of owner from deed*

authorize Gregory S. Oropeza, Esq./Oropeza, Stones & Cardenas, PLLC
Please Print Name of Representative

to be the representative for this application and act on my/our behalf before the City of Key West.

Signature of person with authority to execute documents on behalf of entity owner

Subscribed and sworn to (or affirmed) before me on this 12-4-2020
Date

by Jonathan J. Fairbank.
Name of person with authority to execute documents on behalf of entity owner

He/She is personally known to me or has presented _____ as identification.

Notary's Signature and Seal

Notary Public State of Florida
Gregory Oropeza
My Commission GG 221725
Expires 07/01/2022

Name of Acknowledger typed, printed or stamped

Commission Number, if any

City of Key West
Planning Department
Verification Form
(Where Applicant is an entity)

I, Gregory S. Oropeza, in my capacity as Manager
(print name) *(print position; president, managing member)*

of Oropeza, Stones & Cardenas, PLLC
(print name of entity)

being duly sworn, depose and say that I am the Authorized Representative of the Owner (as appears on the deed), for the following property identified as the subject matter of this application:

3450 Duck Avenue
Street address of subject property

I, the undersigned, declare under penalty of perjury under the laws of the State of Florida that I am the Authorized Representative of the property involved in this application; that the information on all plans, drawings and sketches attached hereto and all the statements and answers contained herein are in all respects true and correct.

In the event the City or the Planning Department relies on any representation herein which proves to be untrue or incorrect, any action or approval based on said representation shall be subject to revocation.

Signature of Applicant

Subscribed and sworn to (or affirmed) before me on this Dec. 4, 2020 by
date

Gregory S. Oropeza.
Name of Applicant

He/She is personally known to me or has presented _____ as identification.

Patricia Gae Ganister
Notary's Signature and Seal

Notary Public State of Florida
Patricia Gae Ganister
My Commission GG 241871
Expires 09/20/2022

Name of Acknowledger typed, printed or stamped

Commission Number, if any

Warranty Deed

Doc# 1986509 06/17/2014 3:33PM
Filed & Recorded in Official Records of
MONROE COUNTY AMY HEAVILIN

06/17/2014 3:33PM
DEED DOC STAMP CL: Krys $4,760.00

Prepared by and return to:
Monica Hornyak
Real Estate Closer
Spottswood, Spottswood & Spottswood
500 Fleming Street
Key West, FL 33040
305-294-9556
File Number: **14-209-EM**
Will Call No.:

Doc# 1986509
Bk# 2690 Pg# 20

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **13th** day of **June, 2014** between **DUCK BAKERY, LLC, A Florida limited liability company** whose post office address is **201 Front Street, Suite 107, Key West, FL 33040**, grantor, and **JKMH PARTNERS, LLC, a Florida limited liability company** whose post office address is **3440 Duck Avenue, Key West, FL 33040**, grantee:

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

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Monroe County, Florida** to-wit:

Lots 22, 23 and 24, Block 10, KEY WEST FOUNDATION COMPANY'S PLAT NO. 2, according to the Plat thereof, recorded in Plat Book 1, Page 189 of the Public Records of Monroe County, Florida.

Parcel Identification Number: 00053150-000000

SUBJECT TO: Taxes for the current and subsequent years.
SUBJECT TO: Conditions, limitations, easements and restrictions of record, if any.

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

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

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2013**.

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

Signed, sealed and delivered in our presence:

Doc# 1986509
Bk# 2690 Pg# 21

Witness Name: Benjamin McPherson

Witness Name: Freddy Varela

DUCK BAKERY, LLC, A Florida limited liability company

By: _____
Edwin O. Swift, III, Managing Member

By: Nancy Swift
Nancy Swift, Managing Member

By: Chris Belland by Ed Swift
Christopher C. Belland, Managing Member
by Edwin O. Swift, III, Managing Member

(Seal)

State of Florida
County of Monroe

The foregoing instrument was acknowledged before me this 13th day of June, 2014 by Edwin O. Swift, III, Managing Member, Nancy Swift, Managing Member and Christopher C. Belland, Managing Member by Edwin O. Swift, III, his attroney-in-fact of DUCK BAKERY, LLC, A Florida limited liability company, on behalf of the corporation. They [✓] are personally known to me or [X] have produced a driver's license as identification.

[Notary Seal]

MARION HOPE CASAS
Commission # EE 181270
Expires July 21, 2016
Bonded Thru Troy Fain Insurance 800-385-7019

Marion Hope Casas
Notary Public

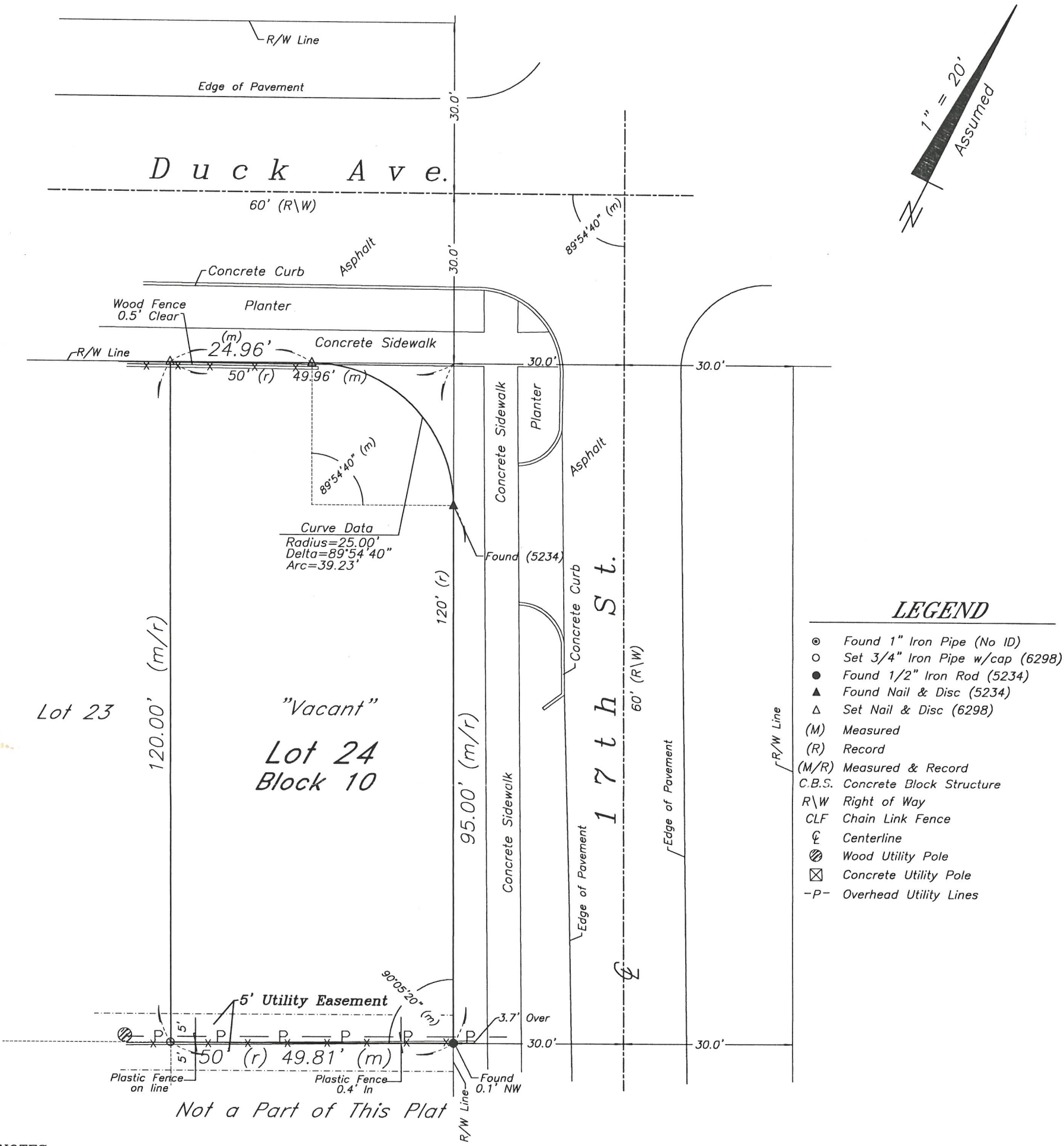
Printed Name: Marion Hope CASAS

My Commission Expires: _____

MONROE COUNTY
OFFICIAL RECORDS

Survey

Boundary Survey Map of Lot 24, Block 10, KEY WEST FOUNDATION CO'S PLAT NO. 2, Key West, FL



LEGEND

- ⊙ Found 1" Iron Pipe (No ID)
- ○ Set 3/4" Iron Pipe w/cap (6298)
- ● Found 1/2" Iron Rod (5234)
- ▲ Found Nail & Disc (5234)
- △ Set Nail & Disc (6298)
- (M) Measured
- (R) Record
- (M/R) Measured & Record
- C.B.S. Concrete Block Structure
- R\W Right of Way
- CLF Chain Link Fence
- ℄ Centerline
- Wood Utility Pole
- Concrete Utility Pole
- -P- Overhead Utility Lines

NOTES:

1. *The legal description shown hereon was furnished by the client or their agent. This survey does not determine or imply ownership.*
2. *Underground foundations and utilities were not located.*
3. *All angles are 90° (Measured & Record) unless otherwise noted.*
4. *Street address: 3450 Duck Ave, Key West, FL.*
5. *This survey is not valid without the signature and the original raised seal of a Florida licensed surveyor and mapper.*
6. *Lands shown hereon were not abstracted for rights-of-way, easements, ownership, or other instruments of record.*
7. *North Arrow is assumed and based on the legal description.*
8. *Date of field work: July 20, 2020*
9. *Ownership of fences is undeterminable, unless otherwise noted.*

BOUNDARY SURVEY OF: Lot 24, Block 10, of KEY WEST FOUNDATION COMPANY'S PLAT NO. 2, according to the plat thereof as recorded in Plat Book 1, Page 189, of the Public Records of Monroe County, Florida.

BOUNDARY SURVEY FOR: Jonathan Fairbank;

I HEREBY CERTIFY that this survey was made under my responsible charge and meets the Standard of Practice as set forth by the Florida Board of Professional Surveyors & Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

J. LYNN O'FLYNN, INC.

J. Lynn O'Flynn, PSM
Florida Reg. #6298

July 21, 2020

THIS SURVEY IS NOT ASSIGNABLE

J. LYNN O'FLYNN, Inc.
Professional Surveyor & Mapper
PSM #6298
3430 Duck Ave., Key West, FL 33040
(305) 296-7422 FAX (305) 296-2244

Site Plans

3450 DUCK AVENUE, KEY WEST, FL

SITE DATA

SITE ADDRESS:	3450 DUCK AVE, KEY WEST, FLORIDA 33043
LEGAL DESC.:	KW FWDN SUB PLAT 2 PB1-189 LTS 23 AND 24 SQR 10 G48-97/103
FLOOD ZONE:	AE (EL 7') MAP & PANEL 12087C 1509K; EFFECTIVE 02-18-2005
LOT AREA:	5,853.6 SF
ZONING:	SINGLE FAMILY RESIDENTIAL
F.L.U.M.:	LOW DENSITY RESIDENTIAL
SETBACKS:	FRONT - 20 FT
	STREET SIDE - 10 FT; SIDE - 5 FT
	REAR - 25 FT
MAX. BUILDING HEIGHT:	30 FT
MAX. BUILDING COVERAGE:	35% (MAX. IMPERVIOUS - 50%)

DESIGN DATA

DESIGN LOADS (MINIMUM):

A.	ROOF DEAD LOAD	17 PSF (METAL)
B.	ROOF LIVE LOAD	20 PSF
C.	DEAD LOAD FOR UPLIFT CALCULATION	7PSF
D.	FLOOR DEAD LOAD (WOOD FRAMING)	20 PSF
E.	FLOOR DEAD LOAD (12" CONCRETE)	150 PSF
F.	FLOOR LIVE LOAD (LIVING AREAS)	40 PSF
G.	FLOOR LIVE LOAD (BALCONY AREAS)	60 PSF
H.	STAIRS LIVE LOAD	60 PSF AND 300 LBS NON-CONCURRENT
I.	GUARD RAILS/HANDRAILS	200 LBS

WIND DESIGN SPECIFICATIONS:

A.	BUILDING OCCUPANCY CATEGORY	II
B.	CONSTRUCTION TYPE	VB
C.	WIND SPEED	
a.	ULTIMATE (LRFD) =	180 MPH
b.	ALLOWABLE (ASD)=	140 MPH
E.	WIND EXPOSURE CATEGORY	D
F.	ENCLOSURE CLASSIFICATION	ENCLOSED
G.	INTERNAL PRESSURE COEFFICIENT	+/- 0.18
H.	WIND-BORNE DEBRIS AREA	YES
I.	REFER TO DRAWINGS FOR STRUCTURE HEIGHT AND AREA	
J.	STRUCTURAL LOADS AND DESIGN PRESSURES LISTED IN THESE PLANS ARE ALLOWABLE (ASD) UNLESS NOTED OTHERWISE	

LOCATION MAP
NOT TO SCALE

NORTH

DRAWING INDEX

SCOPE OF WORK

- NEW RESIDENTIAL CONSTRUCTION
- NEW ACCESSORY UNIT CONSTRUCTION

DESIGN CODE

- 2017 FLORIDA BUILDING CODE, 6th EDITION, BUILDING, FBC
- 2017 FLORIDA BUILDING CODE, 6th EDITION, RESIDENTIAL, FBC-R
- 2017 FLORIDA MECHANICAL CODE FBC-M
- 2014 NATIONAL ELECTRICAL CODE, NEC 2014
- 2017 FLORIDA PLUMBING CODE, FBC-P
- 2017 FLORIDA FUEL GAS CODE, 6th EDITION, FFPC
- FLORIDA FIRE PREVENTION CODE, FBC-FG
- NATIONAL FIRE PROTECTION ASSOCIATION, NEBA

COVER SHEET

ABBREVIATIONS

A.B.	Anchor Bolt	F.G.	Fixed Glass	Plt Ht.	Plate Height
Abv.	Above	Flr.	Floor	Plt Sh.	Plant Shelf
A/C	Air-Conditioner	Fnd.	Foundation	PSF	Pounds per square foot
Adj.	Adjustable	Flr. Sys.	Floor System	P.T.	Pressure Treated
A.F.F.	Above Finished Floor	F/P	Fireplace	Pwd.	Powder Room
A.H.U.	Air Handler Unit	Ft.	Foot / Feet	Rad.	Radius
ALT.	Alternate	Ftg.	Footing	Ref.	Refrigerator
B.C.	Base Cabinet	F.V.	Field Verify	Req'd.	Required
B.F.	Bifold Door	FX.	Fixed	Rm.	Room
B.F.F.	Below Finished Floor	Galv.	Galvanized	Rnd.	Round
Bk Sh	Book Shelf	G.C.	General Contractor	R & SH	Rod and Shelf
Bm.	Beam	G.F.I.	Ground Fault Interrupter	SD.	Smoke Detector
BOT.	Bottom	G.T.	Girder Truss	S.F.	Square Ft.
B.P.	Bypass door	Hdr.	Header	Sh.	Shelves
Brg.	Bearing	Hgt.	Height	SHT	Sheet
Cir.	Circle	HB	Hose Bibb	S.L.	Side Lights
Clg.	Ceiling	Int.	Interior	S.P.F.	Spruce Pine Fir
Col.	Column	K/Wall	Kneewall	Sq.	Square
Comp.	A/C Compressor	K.S.	Knee Space	S.Y.P.	Southern Yellow Pine
C.T.	Ceramic Tile	Laun.	Laundry	Temp.	Tempered
D.	Dryer	Lav.	Lavatory	Thik'n.	Thicken
Dec.	Decorative	L.F.	Linear Ft.	T.O.B.	Top of Block
Ded.	Dedicated Outlet	L.T.	Laundry Tub	T.O.M.	Top of Masonry
Dbl.	Double	Mas.	Masonry	T.O.P.	Top of Plate
Dia.	Diameter	Max.	Maximum	Trans.	Transom Window
Disp.	Disposal	M.C.	Medicine Cabinet	Typ.	Typical
Dist.	Distance	Mfgr.	Manufacturer	UCL	Under Cabinet Lighting
D.S.	Drawer Stack	Micro.	Microwave	U.N.O.	Unless Noted Otherwise
D.V.	Dryer Vent	Min.	Minimum	VB	Vanity Base
D.W.	Dishwasher	M.L.	Microlam	Vert.	Vertical
Ea.	Each	Mir.	Mirror	V.I.	Versalam
E.W.	Each Way	Mono	Monolithic	VP	Vapor Protected
Elec.	Electrical	N.T.S.	Not to Scale	VTR	Vent through Roof
Elev.	Elevation	Opn'g.	Opening	W	Washer
Ext.	Exterior	Opt.	Optional	w/	With
Exp.	Expansion	Pc.	Piece	W.C.	Water Closet
F.B.C.	Florida Bldg. Code	Ped.	Pedestal	W.A.	Wedge Anchor
F.B.C.R.	Florida Bldg. Code Resid.	P.L.	Parallam	Wd.	Wood
F.F.	Finished Floor	PLF	Pounds per linear foot	WP	Water Proof

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License #: 79269
Email: will@ceceflk.com CA/Registry #: 31437
Phone #: 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

PROJECT #:
1838
Date:
OCTOBER 26, 2020

SHEET 1 of 14

SHEET #
CS

GENERAL NOTES

STRUCTURAL LUMBER

1. All wood members shall meet or exceed requirements stated in "ANSI/AF&PA National Design Specification for Wood Construction" and all referenced standards.
2. All wood members shall be Southern Pine #2, MC 19%, NO. 2 Dense or greater kiln dried as referenced in the Standards.
3. All wood members exposed to the exterior or directly contacting concrete or steel shall be Pressure Treated (PT) UC3B grade per AWPA Standards and treated with chemicals to protect from insects and decay. Allow wood to dry after treatement.
4. All field cuts in Pressure Treated lumber shall be treated on site.
5. Nailing shall be in accordance with FBC 2017. Nails and other fasteners for Pressure Treated wood shall be Stainless Steel or ACQ Approved treated.
6. Sheathing shall be $\frac{19}{32}$" CDX Plywood Sheathing Grade, unless otherwise stated specified in the plans.
7. Use 10d ring-shank nails with spacing of 4" o.c. on all edges and 6" o.c. in the field with all edges blocked.
8. Cutting and notching of wood members including but not limited to floor joist shall not exceed one-sixth of the depth of the member and cannot be located in the middle one-third of the span.
9. The depth of the notching at the ends of the wood members shall not exceed one-fourth of the depth of the member.
10. Beams, joist, and rafters with a thickness equal or greater than 4" shall only be notched at the ends of the members and shall not be notched on the tension side of the member.
11. Holes cut into wood members shall have a diameter less than one-third of the depth of the member and shall not be located closer than two inches to the top or bottom of the member. .
12. Blocking shall be placed between all joist at a spacing not to exceed 8' on center.
13. Install Simpson LUS Series Galvanized Joist Hangers at locations where structural wood members including but not limited to joist and beams connect into other members

HARDWARE

1. Hardware shall meet or exceed 304 Stainless Steel properties or be Zmax galvanized for non exposed Simpson products, unless otherwise specified.
2. All connectors shall have stainless steel screws and fasteners or ACQ Approved treated for non exposed areas.
3. All connectors and fasteners shall be applicable for use and compatible with pressure treated wood.
4. Apply a bond breaker between the wood surface an any connector or fastener that is not compatible with pressure treated wood.
5. All connectors and fasteners shall be manufactured by Simpson Strong Tie or an approved equal and installed as per the manufactures recommendations prior to loading the connected wood member.
6. All structural members shall have a connector or fastener securing and anchoring the member for hurricane protection.

CAST IN PLACE CONCRETE

1. The concrete shall have the following properties:
   1. Compressive strength at 28 days equal to or greater than 4000PSI
   2. Ready Mix as per ASTM C94
   3. Type 1 Portland Cement shall adhere to ASTM C 150
   4. Normal weight aggregates shall adhere to ASTM C33
   5. Light weight aggregates shall adhere to ASTM C330
   6. No calcium chloride
   7. Air entraining shall adhere to ASTM C260
   8. Water reducing shall adhere to ASTM C494
   9. Water used shall be fresh water which is clean and potable
   10. Concrete slump range shall be within the range of 3" to 5" unless otherwise stated.
   11. Applicable code is ACI 318 latest addition and ACI 301.

FOUNDATION AND CONCRETE

1. All footings including shall be placed on firm, undisturbed, natural rock unless otherwise noted.
2. All footings shall be centered under the walls, columns, or specified line unless otherwise noted
3. Auger piles shall be drilled no less than 3' into the cap rock and must be 16" in diameter unless otherwise noted.
4. All exposed concrete edges shall be constructed and finished with a $\frac{1}{2}$" chamfer edge.
5. All concrete works including but not limited to mixing, placing, and curing shall conform with ACI 305R Hot Weather Concrete.
6. Concrete shall be water cured with a continuous flow of water over the surface of the concrete for 7 days or until 75% concrete compressive strength has been achieved. At this time, a concrete curing compound shall be applied to the surface of the concrete while the concrete is still damp or moist from the prior water curing event.
7. All soil below the concrete slab on grade shall be treated and covered with a 10MIL vapor barrier.

REINFORCING STEEL

1. The reinforcing steel shall be ASTM A615 Grade 60.
2. The splicing length shall be 45 times the bar diameter unless otherwise noted.
3. The rebar shall have a minimum clear cover of 3" for concrete placed at the existing grade elevation and a 2" minimum clear cover for concrete placed above the referenced elevation unless otherwise noted.
4. The welded wire fabric shall be in conformance with ASTM A-185.
5. The splice length of the welded wire fabric shall be one full mesh section with the ends and sides connected by tie wire.
6. All rebar accessories including but not limited to rebar chairs shall be installed in accordance with ACI 318.

GENERAL REQUIREMENTS

1. Prior to starting any work the Contractor shall review these plans and site conditions and notify the Engineer if any discrepancies are discovered or conflicts with these plans, specifications, or dimensions which affect the execution of construction or safety .
2. This set of plans is solely intended to be utilized for construction at the specified location.
3. The Contractor shall not scale the drawings and shall request additional information required for construction from the Engineer of Record.
4. The Contractor shall be responsible for calling Sunshine Utility Locate Service prior to performing any construction activities in any areas which underground utilities may be present. The Engineer of Record shall not be responsible for providing the location of utilities.
5. The Engineer of Record is not responsible for the supervision of the Contractor nor their employees during the construction.
6. The Contractor is responsible for providing and implementing the means and methods for the construction process and perform all works in conformance with the standards and requirements of the 2017 Florida Building Code, manufacturer's recommendations, local county and city codes and ordinances, and specifications referenced within these plans.
7. The Contractor must complete the construction in accordance with the Building Envelope Energy Requirements of the Florida Model Energy Code.
8. Quality of the work must meet or exceed the industry standard practices.
9. Any deviations from these plans shall be reviewed and approved by the Engineer of Record.
10. Install shoring as required for all structural members of the existing structure.
11. Contractor is responsible for all means and methods as required to improve or maintain the existing condition, structural integrity, and safety of the structure including but not limited to the design and installation of structural shoring or tie-downs and diligently performing works. The contractor is responsible for the safety of all personnel entering the designated working area.
12. The Contractor shall coordinate their work with all other trades in order to avoid scheduling conflicts.
13. The Engineer of Record certifying this document shall not be held liable for any financial or time related damages including but not limited to damages to the structure, personnel, time related delays, and structural issues that result from the construction in accordance with the applicable specifications of this certified document. The Contractor shall notify the Engineer of Record if any conditions or issues arise that do not adhere to the details specified.

PORTLAND CEMENT PLASTERING STUCCO NOTES

1. The Contractor shall perform all work in conformance with the 2017 Florida Building Code.
2. Comply with ASTM C 926 in regards to project conditions while performing plastering/stucco works.
3. PVC Lath shall be fabricated from PVC, paper backed, and self furring. The product shall be Plastic Components, Inc. Ultra Plastic Lath or approved equal.
4. All accessories shall comply with ASTM C 1063
5. Plastic accessories shall be high impact PVC.
6. Corner beads shall be small nose corner beads with perforated flanges.
7. Casing beads shall be bull nose style.
8. Control joints shall be one piece, M-shaped configuration, with perforated flanges and removable protective tape on plaster face of control joint.

PORTLAND CEMENT PLASTERING STUCCO NOTES (cont'd)

9. Expansion joints shall be two piece, formed with a slip joint and square edge 1 -1/2" wide reveal with perforated concealed flanges.
10. Water for mixing shall be potable and free of any contaminants.
11. Fiber for base coat shall be alkaline resistant glass or polypropylene fibers 1 /2 inch long, free of contaminants, manufactured for use in portland cement plaster.
12. The bonding compound shall conform with ASTM C 932
13. Steel drill screws shall comply with ASTM C 1002 or ASTM C 954
14. Fasteners used for attaching the PVC lath to the substrates shall comply with the lath manufacturers requirements.
15. Fasteners used for attaching metal lath to substrates shall comply with ASTM C 1063
16. The Contractor shall perform all work in conformance with the 2017 Florida Building Code.
17. Masonry cement shall conform with ASTM C 91 Type N
18. Lime shall comply with ASTM C 206 Type S or ASTM C 207
19. Sand aggregate shall comply with ASTM C 897
20. Perlite aggregate shall comply with ASTM C 35
21. Plaster mixes shall comply with ASTM C 926
22. Comply with fiber manufacturers recommendations for quantity of fiber and mixing procedure.
23. Control joints shall be delineated into areas with the maximum sizes for vertical surfaces at 144 SQ. FT. and non vertical surfaces at 100 SQ. FT. with length to width ratios of $2\frac{1}{2}$:1.
24. Distances between control joints shall not exceed 18 FT.
25. Install control joints at locations where control joints occur in the main wall behind the plaster.
26. The plaster application shall conform with ASTM C 926.
27. The plaster application shall not deviate more than $\frac{1}{4}$" in 10 FT.
28. Three coat plaster work shall contain base coat mixes for over PVC lath with scratch and brown coats.

FRAMING NOTES

1. Unless stated otherwise, all framing lumber shall be Southern Pine #2, MC 19%, NO. 2 Dense
2. All timber construction shall conform to the latest edition of AFTC, T.P.I, and National Design Specifications for Wood Construction.
3. All wood shall be PT(Pressure Treated) to prevent decay and protect from insects and must be dry prior to use.
4. All wood fasteners and connectors shall be compatible with PT wood.
5. For all non-compatible members with PT wood, building paper or an approved equal material must be used as a barrier between the referenced members.
6. All PT wood framing connections must utilize a products manufactured by Simpson Strong Tie or an approved equal and must be installed as per the manufacturers recommendations.
7. Blocking must be placed between all joist with a spacing not to exceed 8' O.C.
8. Simpson LUS Type Joist Hangars must be used at intersection points of all structural wood members including but not limited to joist and beams.
9. All structural wood members shall have a fiber stress of at least 1200PSI
10. Wood Studs shall be stress graded standard American Lumber (Fb=625 PSI, Fv=400PSI Minimum, E=1,000,000 PSI) #2 Southern Yellow Pine
11. General Sheathing Notes: 10d Ring Shank Nails, 4" O.C. for Short Side, 6" O.C. Long Side, 6" O.C. Field
12. General Bucking Notes: Exterior Windows: 1"x6" PT Buck on Jambs and Head, Exterior Doors: 2"x6" PT Buck on Jambs and Head, Install sufficient fasteners of specified type in order to meet or exceed stated loads.
13. Fasteners shall be spaced in equal distance across the length of the buck and shall be no closer than 2" or further than 4" from the end of the buck
14. The minimum fasteners for a top buck is 2 and the minimum fasteners for a side buck is 3.
15. The approved fasteners are as follows: $\frac{3}{16}$ Tapcon with $1\frac{3}{4}$" Penetration and 230LBS of Connection Strength Capacity; $\frac{1}{4}$" Tapcon with 2" Penetration and 380LBS of Connection Strength Capacity.
16. Refer to manufacturers installation recommendations and specifications for the fasteners required for entry doors and windows

STRUCTURAL NOTES

1. The design and applicable scope of work is intended to comply with the 2017 Florida Building Code and ASCE 7-10.
2. The structure referenced in these documents is designed to withstand the applicable forces from 180MPH wind load and a floor live load of 40PSF in accordance with ASCE 7-10.
3. The soil bearing capacity must meet or exceed 2,000LBS per SQ. FT. Compaction required (Modified Proctor) typical under slabs, pile caps, grade beams, and foundation or where concrete is in contact with the soils at 98%.
4. The engineer must be notified and submit a written approval for all modifications or deviations from the specified design.
5. The contractor shall provide all temporary shoring as required to resist all loads generated from wind or the construction sequence until all structural members, connectors, and fasteners are installed including shear walls and decking.
6. The contractor must submit material certifications/specifications, shop drawings and erection plans/drawings for all components and construction methods required for the structure to be constructed.
7. All major structural shop drawings must be submitted with calculations and the seal of a Florida Professional Engineer.

METAL AND STEEL BUILDING NOTES

1. GENERAL

A. Metal building erector shall be responsible for erection of the steel and associated work in compliance with the metal building manufacturers association.

B. The builder is responsible for designing, supplying, locating and installing temporary supports and bracing during erection of the building. Metal building bracing is designed for code required loads after building completion and shall not be considered as adequate erection bracing. Tension brace rods work in pairs to balance forces caused by initial tensioning. care must be taken while tightening brace rods so as not to cause accidental or misalignment of components. all rods must be installed loose and then tightened. Rods shall not exhibit excessive sag. for long or heavy rods or angles, it may be necessary to support the rod at mid-bay by suspending it from a secondary member.

C. Equipment bracing and suspension connections must not impose torsion or minor axis loads, or cause local distortion in any structural components.

D. All field welding must be done at the direction of a design professional, and done in accordance with aws (americian welding society) by welders qualified to perform the work as directed by the applicable welding procedure specification (wps). a wps shall be prepared by the contractor for each welding variation specified. the contractor is responsible for any special welding inspections as required by local jurisdiction.

2. MATERIALS

All structural plates, channels and miscellaneous metals shall be in accordance with astm specification below.

Material	ASTM Description	Yield strength (min)
Structural steel plate	a529/ a572 / a1011	50 ksi
Hollow structural	a500	42 ksi
Hot rolled str. shapes	a500 / a572 / a592 / a992	50 ksi
Hot rolled angles	a36	36 ksi
Cold formed shapes	a653 / a1011	
Roof and wall sheeting	a653 / a792	
Bolts	a307 / a325	
Rods	a572 / a108	
Anchor rods	f1554	36 ksi

E. All steel exposed to weather shall be galvanized or coated with primer and marine grade epoxy.

F. Weld filler material shall be 70 ksi tensile strength.

3. EXECUTION

A. Install metals as detailed on metal building drawings and permit drawings.

B. Steel work shall conform to the latest edition of the design, fabrication and erection of structural steel for building as adopted by the aisc and metal building manufacturers assocation.

C. All steel shall be painted with one coat of primer and shall be touched up after installation, unless the material is stainless steel.

D. Steel exposed to the elements shall also be coated with a marine grade epoxy unless the material is stainless steel.

E. Coat all steel members with marine grade epoxy for corrosion resistance.

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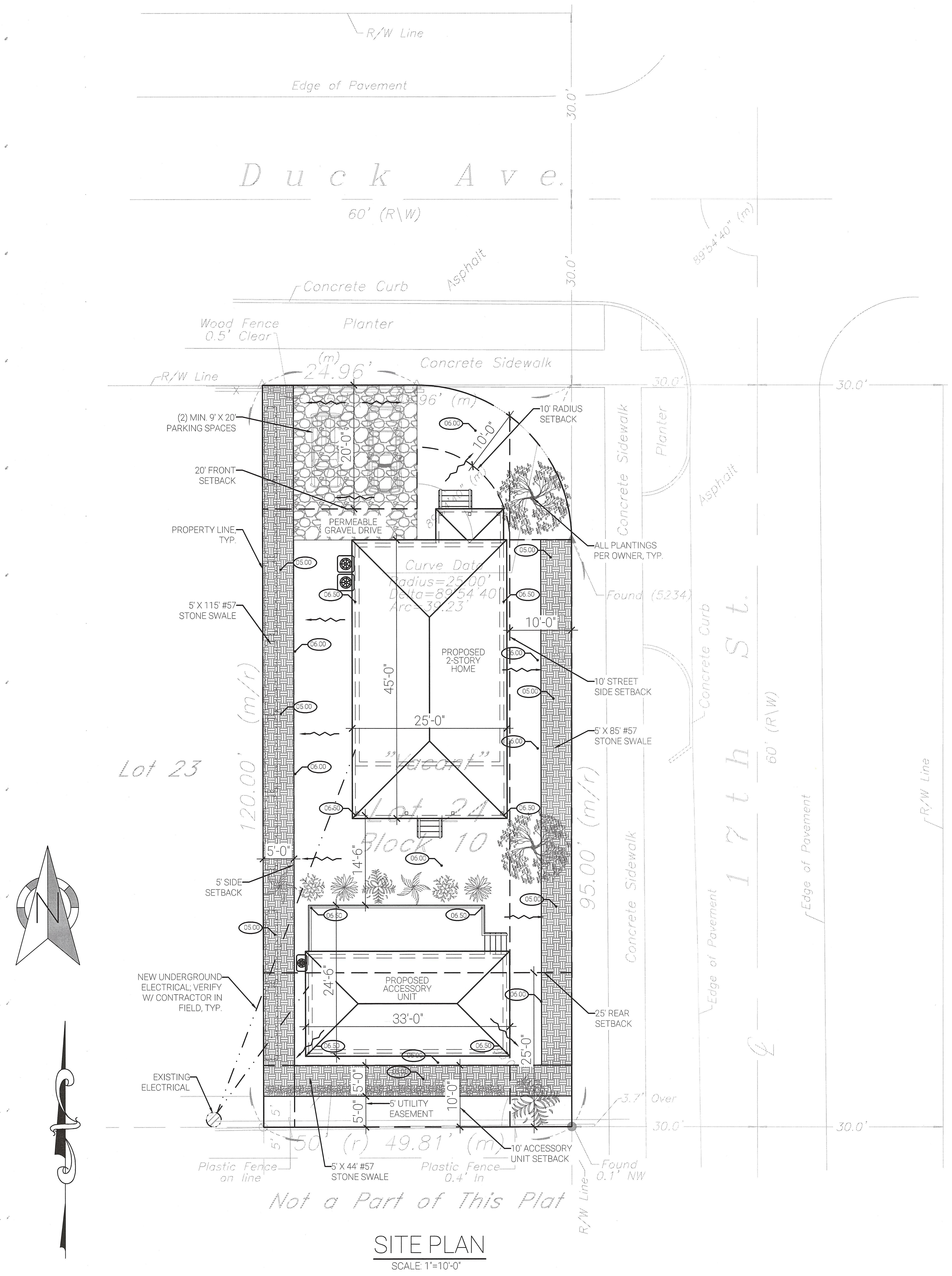
Phone #: 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

PROJECT #: 1838

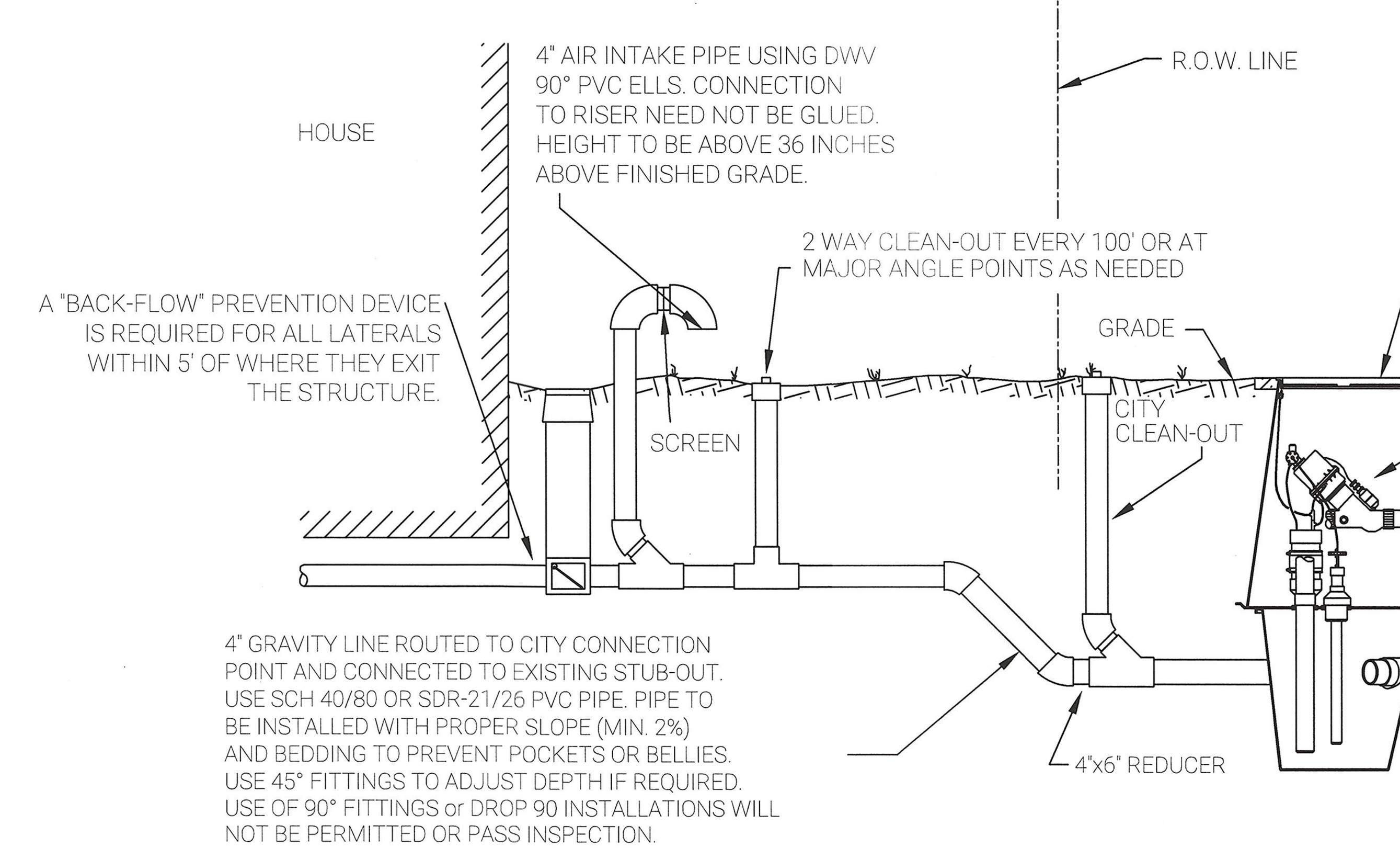
Date: OCTOBER 26, 2020

SHEET # GN



SITE PLAN

SCALE: 1"=10'-0"



NOTES:
1. MIN 2% SLOPE TO CITY CLEANOUT
2. ALL GLUE JOINTS TO BE PURPLE PRIMER / HEAVY DUTY GRAY PVC CEMENT
3. PIPING TO BE FREE OF EARTH & DEBRIS & INSPECTED BY CITY UTILITY W/ FOAM TEST BALL PRIOR TO CONNECTION & BACKFILL.
4. FINAL SEWER CONNECTION SHALL NOT BE COMPLETED UNTIL TCO/OR CO IS IMMINENT & INSPECTED & BY THE CITY UTILITY DEPT.

TYPICAL SEWER CONNECTION

NOT TO SCALE

SITE PLAN ELEVATION & DRAINAGE LEGEND

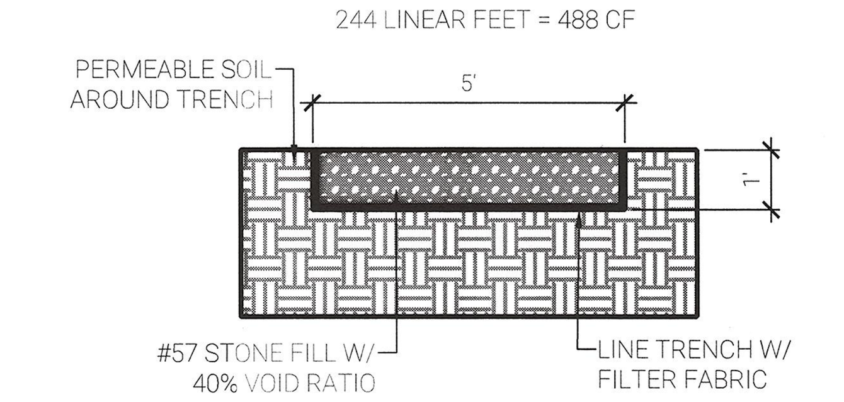
Symbol	Description
(arrow)	DRAINAGE FLOW
+ X.XX	EXISTING SPOT GRADE
(XX.XX)	PROPOSED SPOT GRADE
(hatch)	PROPOSED SWALE CONTOUR

SITE DRAINAGE CALCULATIONS

TOTAL LOT SIZE	5,853.6 SQ. FT.
IMPERVIOUS COVERAGE: BUILDING AREA, STAIRS, PORCHES (TOTAL BUILDING COVERAGE & TOTAL IMPERVIOUS)	1,993 SF = 34.1%
TOTAL DISTURBED AREA:	5,853.6 SF
5,853.6 SF X 0.083 = CUBIC FT. REQ'D	485.8 CF REQ'D
CUBIC FT. PROVIDED	488 CF

*CONTRACTOR TO VERIFY SWALE LENGTH

5.0' X 1' X .40 = 2.0 CU. FT/FT.
244 LINEAR FEET = 488 CF



#57 STONE SWALE SECTION

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SHEET # SP

EXTERIOR DOOR SCHEDULE

MARK	NOMINAL SIZE (W X H)	TYPE	WINDLOAD REQUIREMENT (ASCE 7-10)	MANUFACTURER & MODEL NUMBER	WINDLOAD RATING & APPROVAL NUMBER
01	3'-0" x 6'-8" ZONE 4	IMPACT DOOR	+57.3 / -62.1	BY CONTRACTOR	PROVIDED BY CONTRACTOR
02	(2)3'-0" x 6'-8" ZONE 4	IMPACT FRENCH DOORS	+54.0 / -62.9	BY CONTRACTOR	PROVIDED BY CONTRACTOR
03	(2)3'-0" x 6'-8" ZONE 5	IMPACT FRENCH DOORS	+54.0 / -67.4	BY CONTRACTOR	PROVIDED BY CONTRACTOR

- CONTRACTOR TO PROVIDE THE NOA'S.
- CONTRACTOR TO FIELD VERIFY ALL DOOR DIMENSIONS.
- CONTRACTOR TO FOLLOW ALL MANUF. INSTRUCTIONS FOR INSTALLATION.

WINDOW SCHEDULE

MARK	NOMINAL SIZE (W X H)	TYPE	WINDLOAD REQUIREMENT (ASCE 7-10)	MANUFACTURER & MODEL NUMBER	WINDLOAD RATING & APPROVAL NUMBER
01	(2)2'-3" x 4'-0" ZONE 4	SINGLE HUNG	+54.5 / -64.7	BY CONTRACTOR	PROVIDED BY CONTRACTOR
02	2'-3" x 5'-0" ZONE 4	SINGLE HUNG	+57.4 / -62.2	BY CONTRACTOR	PROVIDED BY CONTRACTOR
03	3'-0" x 5'-0" ZONE 5	SINGLE HUNG	+56.5 / -74.7	BY CONTRACTOR	PROVIDED BY CONTRACTOR
04	2'-0" x 6'-0" ZONE 4	SINGLE HUNG	+57.3 / -62.1	BY CONTRACTOR	PROVIDED BY CONTRACTOR
05	(2)3'-0" x 5'-0" ZONE 4 *EGRESS	SINGLE HUNG	+54.0 / -62.4	BY CONTRACTOR	PROVIDED BY CONTRACTOR
06	3'-0" x 5'-0" ZONE 4 *EGRESS	SINGLE HUNG	+56.5 / -61.3	BY CONTRACTOR	PROVIDED BY CONTRACTOR
07	5'-0" x 1'-6" ZONE 4	CLERESTORY AWNING	+57.8 / -69.6	BY CONTRACTOR	PROVIDED BY CONTRACTOR
08	3'-0" x 1'-6" ZONE 4	CLERESTORY FIXED	+57.8 / -62.5	BY CONTRACTOR	PROVIDED BY CONTRACTOR
09	2'-0" x 4'-0" ZONE 4	SINGLE HUNG	+57.8 / -62.5	BY CONTRACTOR	PROVIDED BY CONTRACTOR

NOTE: ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW TO MEET FL. BLDG. CODE 2017 FOR EGRESS. A MIN. 5.7 SQ. FT. NET CLEAR OPENING IS REQUIRED WITH A MIN. NET CLEAR HEIGHT OF 24" & MIN. NET CLEAR WIDTH OF 20" & A MAX. SILL HEIGHT OF 44" ABV. FINISHED FLOOR.

ADDITIONAL NOTES:

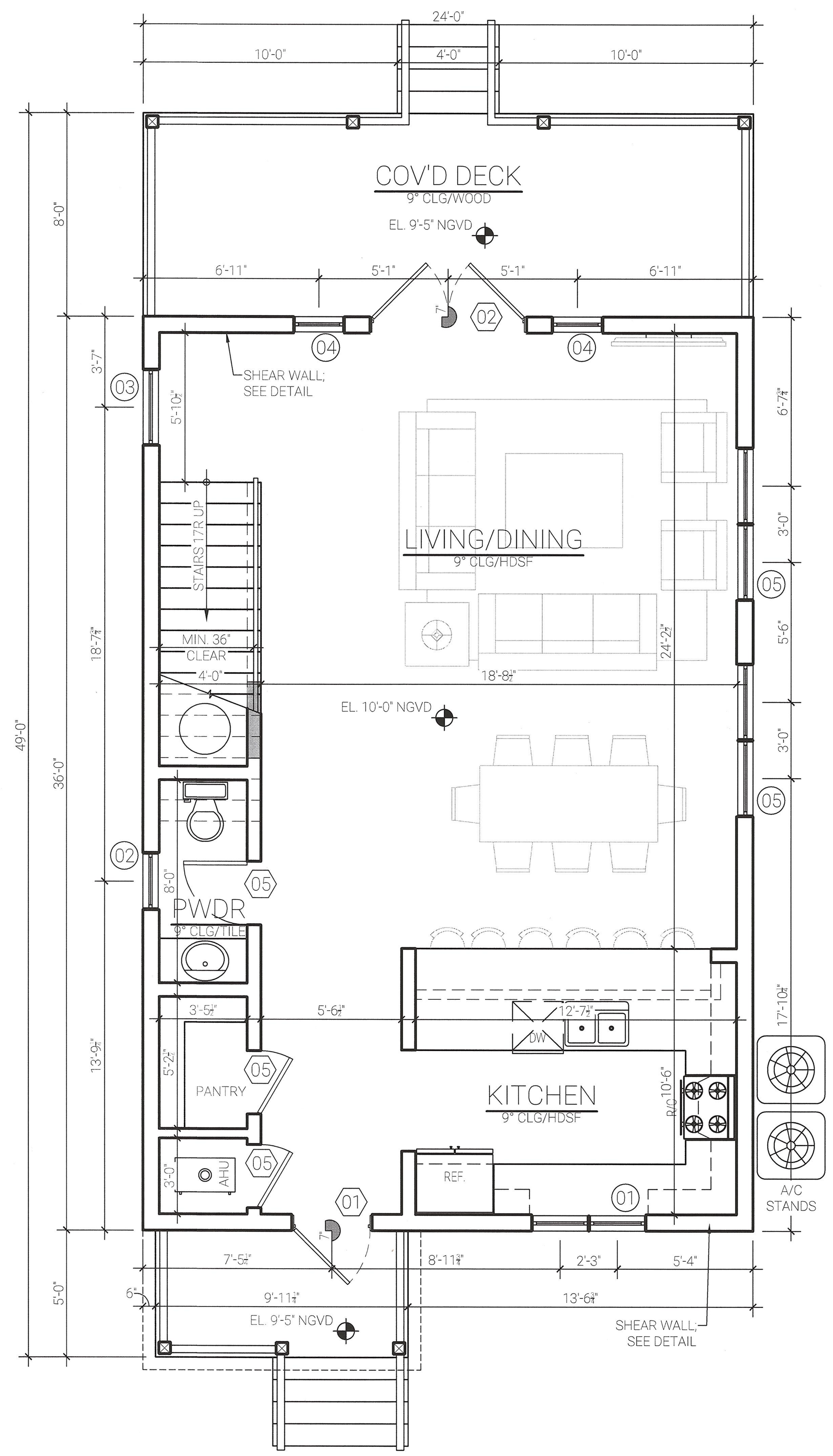
1. CONTRACTOR TO PROVIDE THE NOA'S.
2. CONTRACTOR TO FIELD VERIFY ALL WINDOW DIMENSIONS.
3. CONTRACTOR TO FOLLOW ALL MANUF. INSTRUCTIONS FOR INSTALLATION.

INTERIOR DOOR SCHEDULE

MARK	NOMINAL SIZE (W X H)	DESCRIPTION	ROUGH OPENING	MANUFACTURER / MODEL	FINISH	HARD-WARE
04	2'-0" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
05	2'-6" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
06	2'-8" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
07	3'-0" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
08	(2)2'-0" x 6'-8"	2 PANEL/SOLID WOOD FRENCH DOORS	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
09	6'-0" x 6'-8"	2 PANEL/SOLID WOOD BI-PASS DOORS	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD

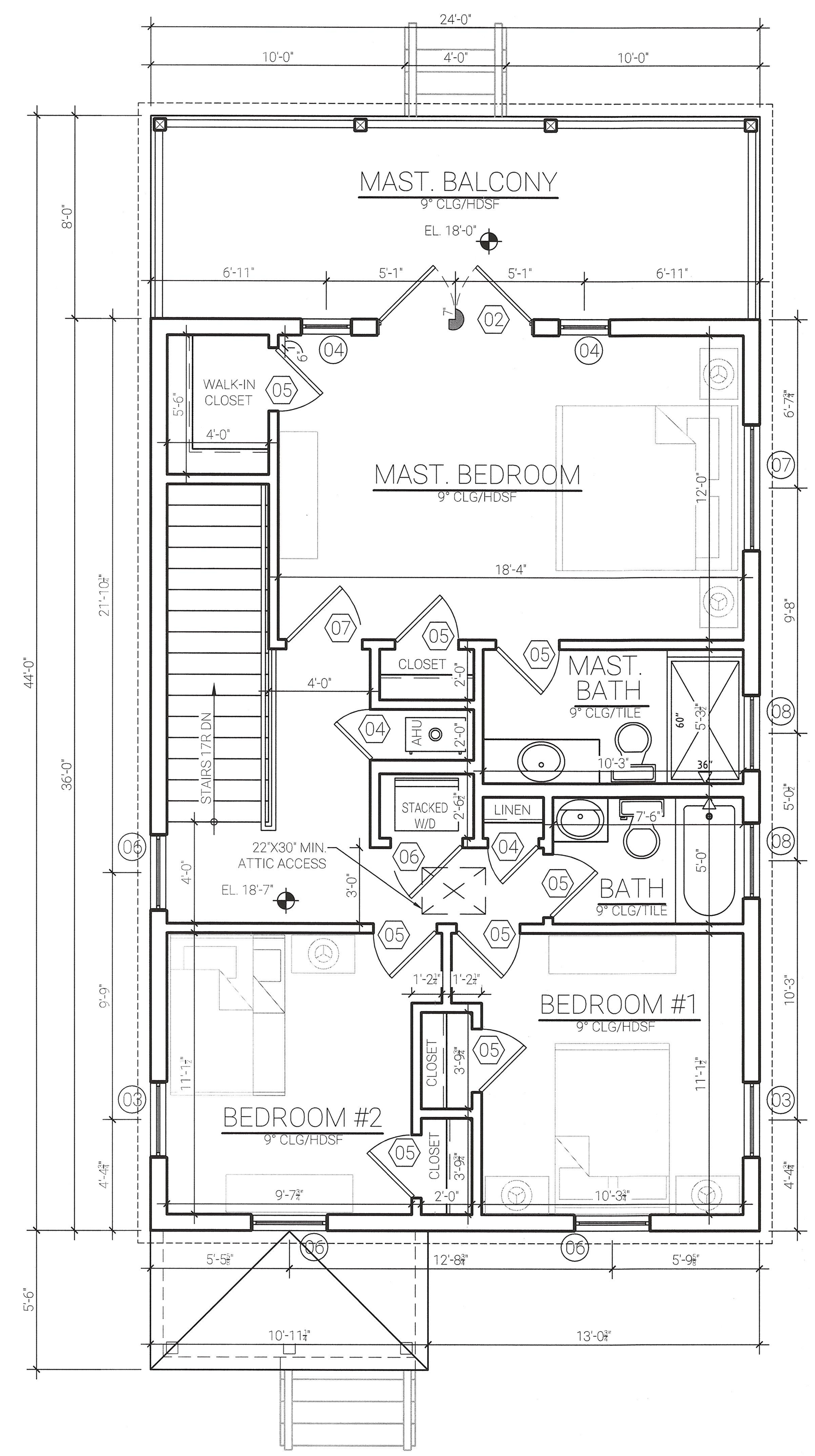
BUILDING AREA

1st FLOOR LIVING A/C	864 SQ. FT.	
2nd FLOOR LIVING A/C	864 SQ. FT.	
TOTAL LIVING A/C		1728 SQ. FT.
1st FLOOR ENTRY	68 SQ. FT.	
1st FLOOR REAR DECK	192 SQ. FT.	
2nd FLOOR REAR DECK	192 SQ. FT.	
TOTAL EXTERIOR LIVING		452 SQ. FT.
TOTAL MAIN HOME FOOTPRINT		1208 SQ. FT.
ACCESSORY UNIT A/C	512 SQ. FT.	
ACCESSORY UNIT DECK	240 SQ. FT.	
ACCESSORY UNIT TOTAL FOOTPRINT		785 SQ. FT.
TOTAL SITE FOOTPRINT		1993 SQ. FT.



PROPOSED FIRST FLOOR PLAN

SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR PLAN

SCALE: 1/4"=1'-0"

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ELECTRICAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT AND SUPERVISION NECESSARY TO PROVIDE THE WORK COMPLETE AND READY TO USE.
2. ALL DEVICES, EQUIPMENT, MATERIAL AND LABOR SHALL LBE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
3. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE MOUNTED AS PER EQUIPMENT AND DEVICE MANUFACTURER RECOMMENDATIONS
4. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE CODES AND STANDARDS.
5. NO PIPE, CONDUIT OR JUNCTION BOX SHALL BE INSTALLED IN STRUCTURAL SLABS, COLUMNS OR BEAMS UNLESS SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.
6. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING EXISTING CONDITIONS AT THE SITE AND WITHIN THE BUILDING PRIOR TO BID.
7. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY FOR NEW SERVICE AND ANY SPECIAL REQUIREMENTS. SECONDARY SERVICE OVERHEAD FEEDER BY KEYS. ELECTRICAL CONTRACTOR SHALL COORDINATE SPLICE LOCATION WITH KEYS SERVICE REQUIREMENTS.
8. ELECTRICAL DRAWINGS (PLANS, DIAGRAMS, ETC.) ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED. THE DRAWINGS DO NOT SHOW EVERY BEND, OFFSET, ELBOW AND OTHER FITTINGS WHICH MAY BE REQUIRED FOR PROPER INSTALLATION IN THE SPACE ALLOCATED OR AS REQUIRED TO COORDINATE WORK WITH THAT OF OTHER TRADES. ANY WORK NOT SHOWN BUT CONSIDERED NECESSARY FOR PROPER COMPLETION OF THE WORK SHALL BE PROVIDED WITHOUT ADDITIONAL CHARGES TO THE OWNER.
9. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER.
10. ALL MAERIALS AND EQUIPMENT TO BE INSTALLED SHALL BE NEW AND FREE OF DEFECTS. ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION (NEMA) STANDARDS AND SHALL BE UL LABELED.
11. THE CONTRACTOR SHALL SATISFACTORILY REPAIR AND/OR REPLACE EXISTING WORK, FEATURES AND EQUIPMENT DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHES SHALL BE RESTORED TO MATCH ADJACENT AREAS.
12. ALL CUTTING AND NOTCHING REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK SHALL BE ACCOMPLISHED IN AN APPROVED MANNER. APPROVAL SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CUTTING OR DRILLING STRUCTURAL MEMBERS UNLESS SPECIFICALLY ADDRESSED HEREIN.
13. EXISTING ELECTRICAL WORK, FEATURES AND EQUIPMENT INDICATED AND/OR REQUIRED TO BE REMOVED SHALL BE PROPERLY DISPOSED BY THE CONTRACTOR INCLUDING ABANDONED RACEWAYS, WIRING, BOXES, SWITCHES AND OTHER ELECTRICAL ITEMS NOT PLANNED TO REMAIN IN USE.
14. ALL DEVICE BOXES SHALL BE INSTALLED FLUSH AND CONDUITS RUN CONCEALED IN FINISHED AREAS EXCEPT AS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
15. ALL CONDUITS INSTALLED INTERIOR SHALL BE EMT. ALL CONDUITS INSTALLED EXTERIOR SHALL BE GALVANIZED RIGID METAL CONDUIT.
16. ALL WIRE SIZE SHALL BE #12 UNLESS OTHERWISE NOTED ON DRAWINGS. CONDUCTIORS #10 AND SMALLER SHALL BE SOLID COPPER. CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER. UNLESS NOTED OTHERWISE, CONDUCTOR INSULATION SHALL BE DUAL RATED AT THHN/THWN.
17. ALL MATERIAL SHALL BE UL APPROVED.
18. A TYPEWRITTEN PANEL TALLY SHALL BE AFFIXED TO THE PANEL DOOR AFTER COMPLETION OF WORK THAT REFLECTS ALL CHANGES AND ADDITIONS.
19. CONTRACTOR TO PROVIDE COMPUTER PRINTED ON WHITE WRAPAROUND PAPER WITH CLEAR PLASTIC PROTECION FOR TAIL FOR ALL WIRE MARKERS. MARKER SHALL STATE PANELBOARD NAME AND CIRCUIT NUMBER ON ALL WIRES IN JUNCTION AND PULL BOXES AND IN EQUIPMENT TERMINAL BOXES.
20. CONTRACTOR TO PROVIDE PUNCH TAPE LABELS ON ALL WIRING DEVICES FOR IDENTIFICATION. SHALL BE 1/2" BLACK TAPE WITH WHITE RAISED LETTERS. TAPE LABELS SHALL STATE PANELBOARD NAME AND CIRCUIT NUMBER.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE SET OF RECORD DRAWINGS TO THE OWNER AT THE END FOR THE CONSTRUCTION.
22. ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED WITHIN 10%.
23. ALL FLOOR PENETRATIONS SHALL BE SEALED WITH A FIRE SEAL SIMILAR TO 'OZ' FLAMESEAL.
24. ALL NON-POWER RELATED WIRING IN CEILING A/C PLENUM RUNNING WITHOUT CONDUIT SHALL BE TEFLON COATED CLASSIFIED FOR USE IN PLENUMS.
25. ALL OUTLETS, SWITCHES AND COVER PLATES SHALL HAVE WHITE FINISH OR OTHER COLOR SELECTED BY OWNER AND LEVITON 5350/5252 SERIES OR EQUAL.
26. ALL BRANCH CIRCUITS SHALL BE EQUIPPED WITH A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC 250.95.
27. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH NYLON PULL STRINGS.
28. FUSES SHALL BE DUAL ELEMENT, TIME DELAY UNLESS OTHERWISE NOTED.
29. ALL LUMINAIRES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH CEILING MANUFACTURER RECOMMENDATIONS IF APPLICABLE AND LOCAL REQUIREMENTS. MOUNTING DEVICES MUST BE CAPABLE OF SUPPORTING CEILING FAN FIXTURES.
30. ALL RECESS CANS SHALL BE IC RATED, AND CONTROLLED BY DIMMER SWITCHES.
31. ALL CABLES SHALL BE RUN WITHOUT SPLICES UNLESS OTHERWISE NOTED.
32. PROVIDE REQUIRED CONNECTION FOR GARAGE DOOR OPENER(S), KITCHEN APPLIANCES, AND MECHANICAL EQUIPMENT.
33. ALL BATHROOM, GARAGE AND EXTERIOR RECEPTACLE OUTLETS AND KITCHEN RECEPTACLE OUTLETS WITHIN 6' OF WATER SOURCE SHALL BE GFI PROTECTED. ALL KITCHEN AND LAUNDRY RECEPTACLES WILL ALSO BE ARC-INTERRUPT. ALL EXTERIOR RECEPTACLE OUTLETS SHALL BE WATER-PROOF PROTECTED. ALL BEDROOM RECEPTACLE OUTLETS SHALL BE ARC FAULT PROTECTED IN ACCORDANCE WITH NEC 210-12.
34. MECHANICAL VENTILATION, WHEN REQUIRED, SHALL OPERATE WHENEVER THE ROOM IS OCCUPIED.
35. CEILING BOXES USED FOR THE SOLE SUPPORT OF PADDLE FANS SHALL BE LISTED FOR THE PURPOSE.
36. NEW RECEPTICLES INSTALLED IN DWELLING UNITS SHALL BE LISTED TAMPER RESISTANT
37. A MINIMUM OF 75% OF PERMANENTLY INSTALLED LUMINRIES SHALL BE HIGH EFFICIENCY
38. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF DRAWINGS TO INDICATE ALL CHANGES MADE TO THE ELECTRICAL DESIGN. THE AS-BUILT DRAWINGS SHALL BE DELIVERED TO THE OWNER AFTER COMPLETION OF THE WORK.
39. ALL SMOKE DETECTORS SHALL BE WIRED IN TANDEM. SMOKE DETECTORS WITHIN 20' OF COOKING APPLIANCES SHALL BE SILENCEABLE.

ELECTRICAL LEGEND

$ — WALL SWITCH (60" FROM T.O.F.F. TO CENTER)	BAR LIGHT
$3 — 3-WAY WALL SWITCH	FLUORESCENT STRIP
$4 — 4-WAY WALL SWITCH	FLUORESCENT FIXTURE
$D — DIMMER WALL SWITCH	WALL MOUNT SCONCE LIGHT
DUPLEX OUTLET (STANDARD 18" FROM T.O.F.F. TO CENTER)	RECESSED CAN
DUPLEX OUTLET - HALF SWITCHED	DIRECTIONAL RECESSED CAN
SINGLE OUTLET - FLOOR MOUNT	RECESSED CAN/EXHAUST COMBO
220 — DUPLEX OUTLET - CEILING MOUNT	SPOT LIGHT/FLOOD LIGHT
220 VOLT OUTLET	CEILING FAN W/ LIGHT (U.N.O.)
+44 GFI — DUPLEX W/ MOUNTING HT ABV F.F.	
TV — TV OUTLET	EXHAUST FAN
PH — PHONE OUTLET	FOOD DISPOSAL
DATA — DATA OUTLET	SD — SMOKE DETECTOR
HOME OFFICE PORT (2 RG6-2 CAT5)	CM — CARBON MONOXIDE ALARM
MEDIA OUTLET (1 RG6-1 CAT5)	ELECTRICAL PANEL
U — USB PORT	THERMOSTAT
	GAS VALVE
PEND — PENDANT LIGHT	ELECTRIC PUSH BUTTON FOR CHIMES
WALL MOUNT FIXTURE	DOOR CHIMES
TRACK LIGHTING	DESIGNATES CIRCUIT #
CEILING FIXTURE	220 CIRCUIT
DECORATIVE CEILING FIXTURE	AHU DISCONNECT

AR = ARC-FAULT PROTECTED
GFI = GROUND FAULT INTERRUPT
WP = WATERPROOF / WEATHERPROOF
ALL EXTERIOR OUTLETS SHALL BE GFI, WEATHER PROOF, AND TAMPER PROOF

KITCHEN DUPLEX:
RANGE - OVEN IS 220 @ 8" A.F.F.
COOK TOP IS 220 @ 36" A.F.F.
DOUBLE OVEN IS 220 @ 70" A.F.F.

SMOKE DETECTOR NOTE:

- RE: Smoke Detectors - Provide smoke detection per 2018 IRC section R314.2. Smoke detection systems. All smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.
- Smoke alarms shall be installed in the following locations:

1. Inside each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms
3. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

- When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

MAIN HOUSE
UNIT ELECTRICAL LOAD CALCULATIONS
(BASED UPON N.E.C. ARTICLE 220)
UNIT SQUARE FOOTAGE HEAT STRIP GREATER THAN CONDENSING UNIT
ADDITION/REMODEL AREA SERVICE REQUIREMENTS

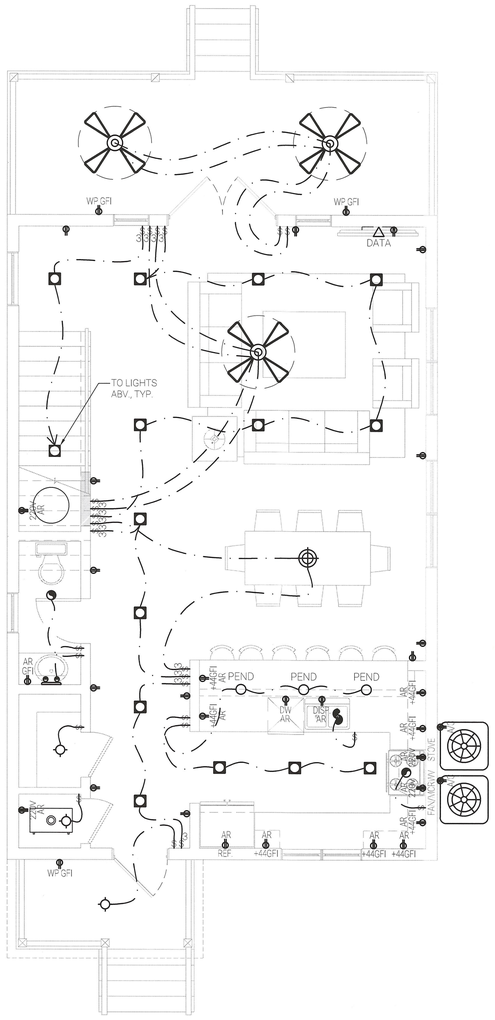
EQUIPMENT SERVED	BREAKER SIZE	CONDUCT OR SIZE	LOAD IN WATTS
REFRIGERATOR	20A/1P	#12	830
DUAL FUEL RANGE	40A/1P	#8	8,000
DISHWASHER 1	20A/1P	#12	1,200
WATER HEATER	40A/2P	#8	8,000
DRYER	30A/2P	#10	5,600
WASHER	20A/1P	#12	1,600
GARBAGE DISPOSAL	20A/1P	#12	900
EXHAUST HOOD	20A/1P	#12	1,000
MICROWAVE	20A/1P	#12	1,000
APPLIANCE CIRCUITS			
(3 @ 1500 WATTS EACH)	20A/1P	#8	4,500
GENERAL LIGHTING & RECEPTACLES			
(3 WATTS PER SQUARE FOOT)	15A/1P	#14	5,184
OUTDOOR LIGHTING & RECEPTACLES			
(1 WATT PER SQUARE FOOT)	15A/1P	#14	423
SUBTOTAL			38,237
AIR CONDITIONING REQUIREMENTS			
BLOWER MOTOR LOAD			600
HEATING LOAD (8,000 WATTS X .65)			5,200
AIR CONDITIONING SUBTOTAL			5,800
CALCULATION PER N.E.C. 220-30			
FIRST 10,000 WATTS @ 100%			10,000
REMAINDER OF WATTS @ 40%			11,295
AIR CONDITIONING LOAD SUBTOTAL			5,800
TOTAL UNIT LOAD			27,095

28,176 WATTS/240 VOLTS = 118 AMPS

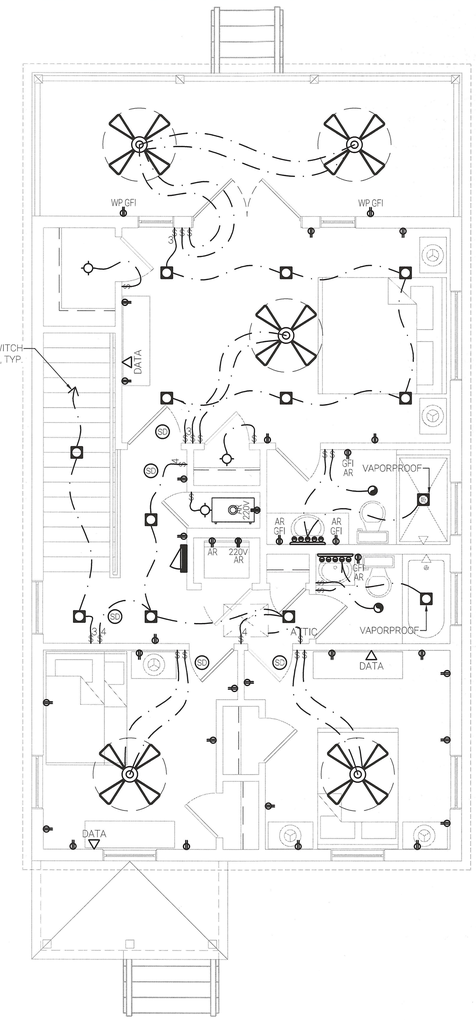
ACCESSORY UNIT
UNIT ELECTRICAL LOAD CALCULATIONS
(BASED UPON N.E.C. ARTICLE 220)
UNIT SQUARE FOOTAGE HEAT STRIP GREATER THAN CONDENSING UNIT
ADDITION/REMODEL AREA SERVICE REQUIREMENTS

EQUIPMENT SERVED	BREAKER SIZE	CONDUCT OR SIZE	LOAD IN WATTS
REFRIGERATOR	20A/1P	#12	830
DUAL FUEL RANGE	40A/1P	#8	8,000
DISHWASHER	20A/1P	#12	1,200
WATER HEATER (UNDER SINK ON-DEMAND)	50A/1P	#8	28,000
GARBAGE DISPOSAL	20A/1P	#12	900
EXHAUST HOOD	20A/1P	#12	1,000
MICROWAVE	20A/1P	#12	1,000
APPLIANCE CIRCUITS			
(2 @ 1500 WATTS EACH)	20A/1P	#8	3,000
GENERAL LIGHTING & RECEPTACLES			
(3 WATTS PER SQUARE FOOT)	15A/1P	#14	1,536
OUTDOOR LIGHTING & RECEPTACLES			
(1 WATT PER SQUARE FOOT)	15A/1P	#14	245
SUBTOTAL			45,711
AIR CONDITIONING REQUIREMENTS (MINI-SPLIT)			
BLOWER MOTOR LOAD			2,400
HEATING LOAD			2,300
AIR CONDITIONING SUBTOTAL			4,700
CALCULATION PER N.E.C. 220-30			
FIRST 10,000 WATTS @ 100%			10,000
REMAINDER OF WATTS @ 40%			14,284
AIR CONDITIONING LOAD SUBTOTAL			4,700
TOTAL UNIT LOAD			28,984

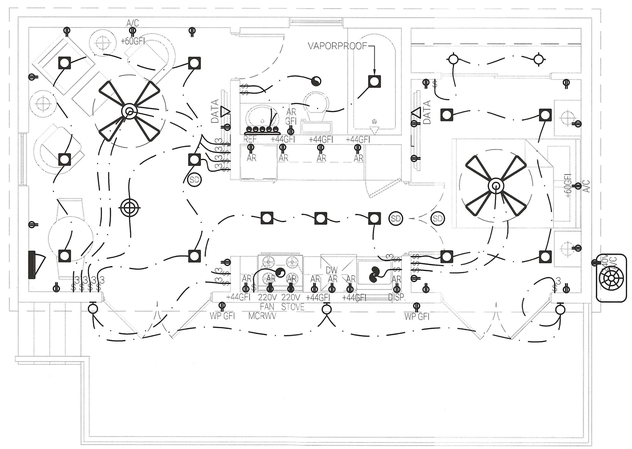
44,476 WATTS/240 VOLTS = 185 AMPS



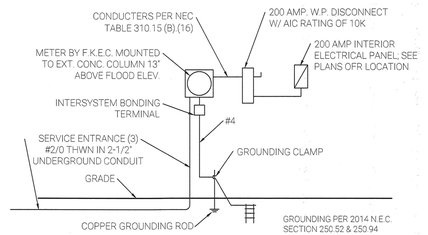
PROPOSED FIRST FLOOR ELECTRICAL PLAN
SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR ELECTRICAL PLAN
SCALE: 1/4"=1'-0"



ACCESSORY UNIT ELECTRICAL PLAN
SCALE: 1/4"=1'-0"



ELECTRICAL SERVICE RISER DIAGRAM
SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License # 79269
Email: will@cecflk.com CA/Registry # 31437
Phone #: 305-735-4626

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1838
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MECHANICAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2017 MECHANICAL CODE, FLORIDA ENERGY EFFICIENCY CODE AND ALL LOCAL ORDINANCES.
2. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, SUPERVISION, PERMITS, FEES AND INSPECTIONS NECESSARY TO PROVIDE THE WORK COMPLETE AND READY FOR USE.
3. CONTRACTOR SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AND SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO FABRICATING DUCTWORK OR INSTALLING EQUIPMENT OR PIPING.
4. PRIMARY DUCTWORK SHALL BE CONSTRUCTION OF ONE AND HALF-INCH THICK (R-6 MINIMUM) FIBERGLASS DUCTBOARD WITH REINFORCED ALUMINUM FOIL FACED COVERING FABRICATED AND INSTALLED PER SMACNA RECOMMENDATIONS.
5. ALL VENTILATION AND EXHAUST DUCTWORK SHALL BE OF GALVANIZED SHEET METAL CONSTRUCTION PER SMACNA RECOMMENDATIONS.
6. REFRIGERANT PIPING SHALL BE TYPE "L" COPPER TUBING SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSULATED SUCTION AND CONDENSATE PIPING WITH 1/4" THICK FOAM PLASTIC OF FIRE RETARDANT TYPE 25/30 MAXIMUM SMOKE DEVELOPED AND FLAME SPREAD RATING RESPECTIVELY PER TESTS IN MFPA-255. FINISH WHERE EXPOSED WITH TWO COATS OF ACRYLIC LACQUER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
7. ALL EQUIPMENT, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. COMPRESSORS SHALL CARRY A FIVE-YEAR FACTORY GUARANTEE.
8. AIR CONDITION SYSTEM SHALL BE BALANCED TO OBTAIN COMFORT CONDITIONS IN ALL AREAS WITHOUT DRAFTING.
9. THERMOSTATS SHALL BE HEAT/COOL TYPE WITH FAN AND SYSTEM SELECTOR SWITCH ON SUB BASE. MOUNT FIVE FEET ABOVE FINISHED FLOOR WHERE SHOWN.
10. ALL DUCT ELBOWS GREATER THAN FORTY FIVE (45) DEGREES SHALL BE FITTED WITH TURNING VANES.
11. PROVIDE READY ACCESSIBILITY TO DAMPERS AND OTHER PARTS OF THE SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.
12. VERIFY ALL VOLTAGES WITH ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT.
13. VIBRATION ISOLATION SHALL BE PROVIDED FOR ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.
14. ALL OUTSIDE EQUIPMENT SHALL BE SECURED TO WITHSTAND FORCES GENERATED BY 150 MPH WINDS.
15. FLEXIBLE DUCT SHALL BE FACTORY FABRICATED ROUND DUCTWORK COMPOSED OF CORROSION-RESISTANT REINFORCING WITH HELIX PERMANENTLY BONDED AND ENCLOSED IN POLYESTER FILM THEN COVERED WITH 1-1/2 INCH THICK 1/4 PCF (R-6 MINIMUM) DENSITY FIBERGLASS INSULATION BLANKET SHEATHED IN A VAPOR BARRIER OF ALUMINUM METALIZED POLYESTER FILM LAMINATED TO GLASS MESH, ELASTOMER BACK COATED. THE DUCT SHALL COMPLY WITH MFPA BULLETIN 90-A AND BE LISTED A CLASS 1 AIR DUCT. UL 181 DUCT SHALL BE "WIRE HOLD" TYPE WG OR EQUAL.

MECHANICAL NOTE:
CONTRACTOR TO VERIFY PLAN CONFIGURATIONS.. FOLLOW ALL APPLICABLE CODES, INCLUDING THE FLORIDA MECHANICAL CODES.

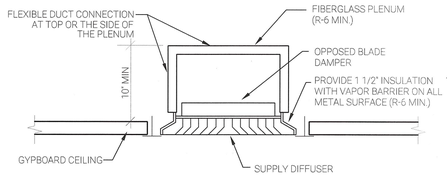
MECHANICAL LEGEND

- SUPPLY VENT
- RETURN VENT
- HVAC DUCTWORK (PRIMARY)
- HVAC DUCTWORK (SECONDARY)

NOTE:
MECHANICAL PLANS PROVIDED ARE CONCEPTUAL AND TO BE CERTIFIED BY A MECHANICAL ENGINEER AND MUST MEET ALL FBC 2017 REQUIREMENTS.

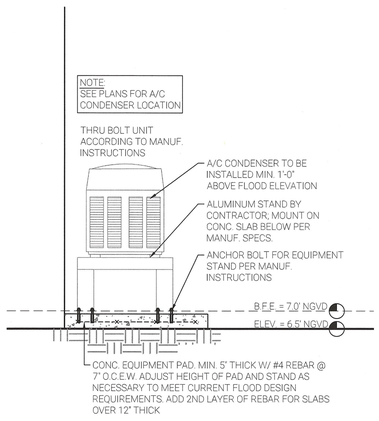
NOTE:
ALL AIR HANDLER UNITS TO BE EQUIPPED WITH RETURN AIR SUPPLY MEETING ALL FBC 2017 REQUIREMENTS.

NOTE:
HVAC TO HAVE AN ENERGY RATING OF 12 OR HIGHER



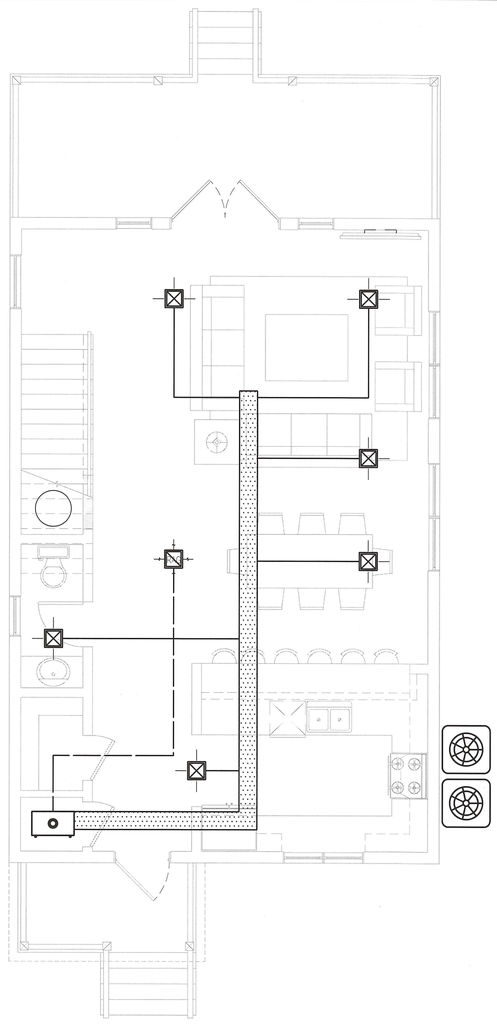
DIFFUSER DETAIL

NOT TO SCALE



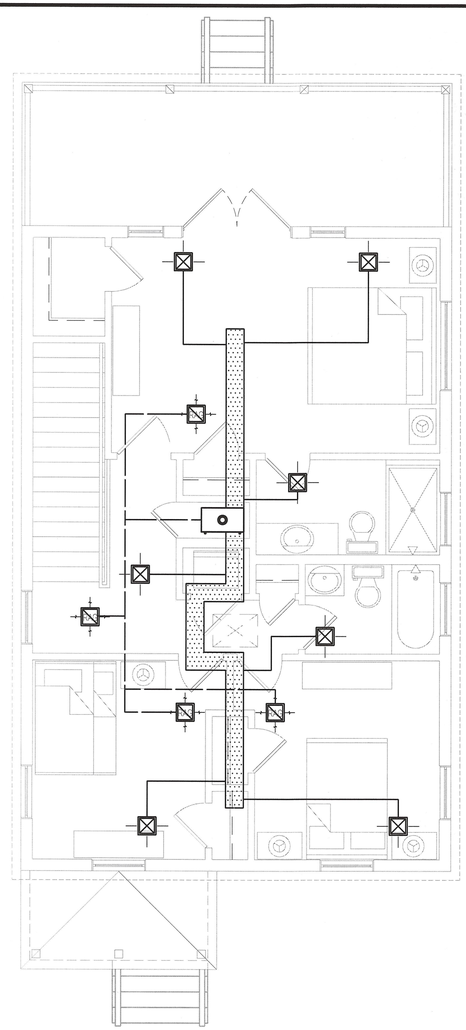
AC STAND DETAIL

SCALE: 1/2"=1'-0"



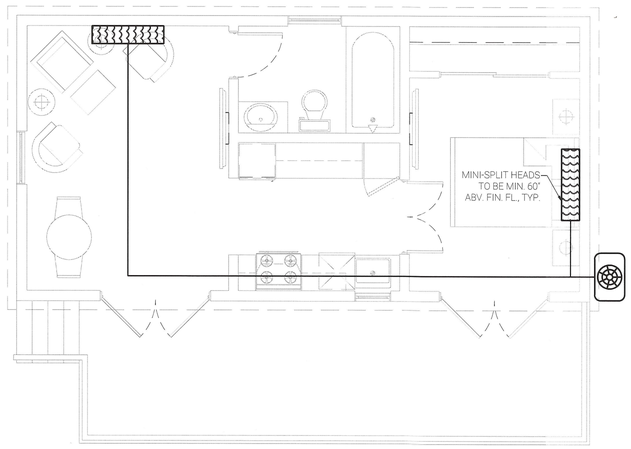
PROPOSED FIRST FLOOR MECHANICAL PLAN

SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR MECHANICAL PLAN

SCALE: 1/4"=1'-0"



ACCESSORY UNIT MECHANICAL PLAN

SCALE: 1/4"=1'-0"

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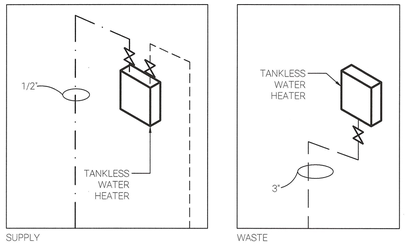
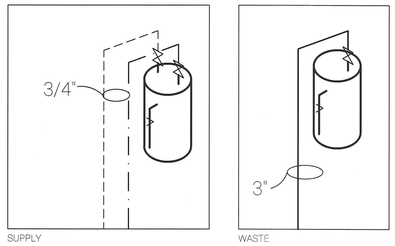
PLUMBING NOTES:

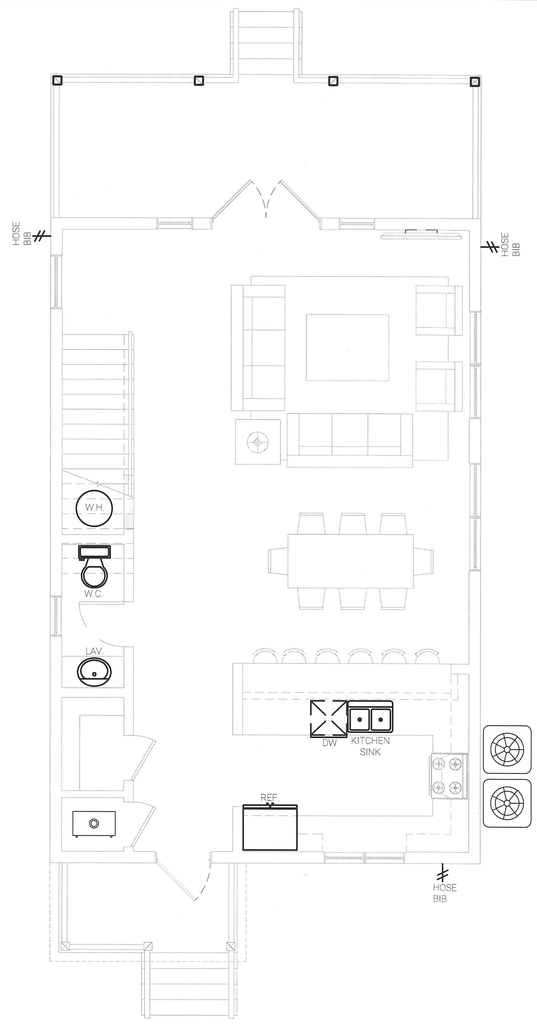
1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT AND SUPERVISION NECESSARY TO PROVIDE THE WORK COMPLETE AND READY FOR USE. THE NEW WORK SHALL INCLUDE COMPLETE HOT AND COLD WATER SYSTEMS AND VENT, WASTE AND DRAIN SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
2. ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2017 PLUMBING CODE, THE ENERGY CONSERVATION CODE AND ALL APPLICABLE LOCAL ORDINANCES.
3. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING.
4. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR.
5. PLUMBING DRAWINGS (PLANS, DIAGRAMS, ETC.) ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED. THE DRAWINGS DO NOT SHOW EVERY BEND, OFFSET, EXBOW AND OTHER FITTINGS WHICH MAY BE REQUIRED FOR PROPER INSTALLATION IN THE SPACE ALLOCATED NOR AS REQUIRED TO COORDINATE WORK WITH THAT OF OTHER TRADES. ANY WORK NOT SHOWN ON THE DRAWINGS BUT CONSIDERED NECESSARY FOR THE PROPER COMPLETION OF THE WORK SHALL BE PROVIDED WITHOUT ADDITIONAL CHARGE TO THE OWNER.
6. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER WORK UNDER THIS CONTRACT.
7. THE OWNER WILL NOT BE HELD LIABLE FOR ANY CHANGES THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER OR FIELD CHANGES THAT ARISE FROM CONTRACTOR ERROR OR OMISSION OF MATERIAL OR POOR WORKMANSHIP.
8. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING MAIN, WATER AND SEWER CONNECTIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOTIFY AND RECEIVE CLEARANCE FROM THE APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATING.
9. VERIFY ALL DIMENSIONS AND CLEARANCES AT THE SITE AND IN THE BUILDING PRIOR TO FABRICATION AND INSTALLATION.
10. THE CONTRACTOR SHALL SATISFACTORILY REPAIR AND/OR REPLACE EXISTING WORK, FEATURES AND EQUIPMENT DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHES SHALL BE RESTORED TO MATCH ADJACENT SURFACES AND FINISHES.
11. THE CONTRACTOR SHALL INSPECT EXISTING CONDITIONS PRIOR TO BID AND BECOME FAMILIAR WITH THE SCOPE OF WORK. NO EXTRAS WILL BE ALLOWED FOR THE CONTRACTORS FAILURE TO COMPLY WITH THIS REQUIREMENT.
12. PLUMBING FIXTURES SHALL BE SELECTED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. (PLUMBING FIXTURES INDICATED ON DRAWING ARE FOR REFERENCE ONLY, FIXTURES OR EQUAL QUALITY, AND CRAFTSMANSHIP MAY BE USED AS DIRECTED).
13. ALL FIXTURES SHALL BE PROTECTED FROM WATER HAMMER WITH AIR CHAMBER SIZED IN ACCORDANCE WITH P.D.I. STANDARDS. (JOSAN OR EQUAL)
14. PROVIDE CONTROL VALVES TO ALL RISERS, BRANCHES, GROUPS OF FIXTURES AND EACH PIECE OF EQUIPMENT. CONTROL VALVES SHALL BE CAST BRASS OR BRONZE GATE VALVES.
15. PROVIDE FULLY ACCESSIBLE CLEANOUTS ON SANITARY PIPING AT THE BASE OF EACH SOIL AND WASTE PIPE AND AT EVERY CHANGE OF DIRECTION.
16. PROVIDE MINIMUM PITCH OF ¼" PER FOOT FOR ALL HORIZONTAL BRANCHES AND SEWER TRADES.
17. ALL WATER PIPING SHALL BE TYPE M COPPER WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
18. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.
19. SANITARY DRAIN PIPING WITHIN THE BUILDING AND BELOW THE GROUND SHALL BE SCHEDULE 40 PVC.
20. WATER HEATER SHALL BEAR LABEL INDICATING COMPLIANCE WITH ASHRAE STD. 90. WATER HEATER SHALL BE EQUIPPED WITH A DRAIN PAN WITH 2" MIN. SIDES AND 2" CLEARANCE ON ALL SIDES. PROVIDE ¾" DRAIN OUTLET LOCATED ½" ABOVE BOTTOM OF PAN. P&T RELIEF VALVE AND DRAIN PAN PIPING SHALL BE TYPE M COPPER.
21. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS TO PROTECT TRAP SEAL.
22. ALL VENTS THROUGH ROOF SHALL MAINTAIN MINIMUM 10' HORIZONTAL CLEARANCE FROM ANY MECHANICAL AIR INTAKE.
23. ALL PIPING SHALL BE SUPPORTED RIGIDLY.
24. ALL CUTTING AND NOTCHING REQUIRED FOR THE INSTALLATION OF PLUMBING WORK SHALL BE ACCOMPLISHED IN AN APPROVED MANNER. APPROVAL SHALL BE OBTAINED FROM THE ENGINEER OF RECORD PRIOR TO CUTTING OR DRILLING STRUCTURAL MEMBERS UNLESS SPECIFICALLY ADDRESSED HEREIN.
25. WATER USAGE FOR PLUMBING FIXTURES SHALL NOT EXCEED THE FOLLOWING:
WATER CLOSETS: 1.6 GALLONS PER FLUSH
SHOWERS: 2.5 GALLONS PER MINUTE
FAUCETS: 2.0 GALLONS PER MINUTE
26. HOSE BIBS SHALL BE PROTECTED BY APPROVED BACK-SIPHONAGE BACKFLOW PREVENTERS.
27. TEST ALL WATER PIPING AT 100 PSI HYDROSTATIC PRESSURE A MINIMUM OF 2 HOURS.
28. TEST ALL SOIL, WASTE AND VENT PIPING WITH A 10' HEAD OF WATER. WATER LEVEL TO REMAIN UNCHANGED FOR 2 HOURS MINIMUM.
29. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF DRAWINGS TO INDICATE ALL CHANGES MADE TO THE PLUMBING DESIGN. THE AS-BUILT DRAWINGS SHALL BE DELIVERED TO THE OWNER AFTER COMPLETION OF WORK.
30. CONTRACTOR TO COORDINATE INSPECTION WITH MONROE COUNTY AND KEY WEST RESORT UTILITIES.



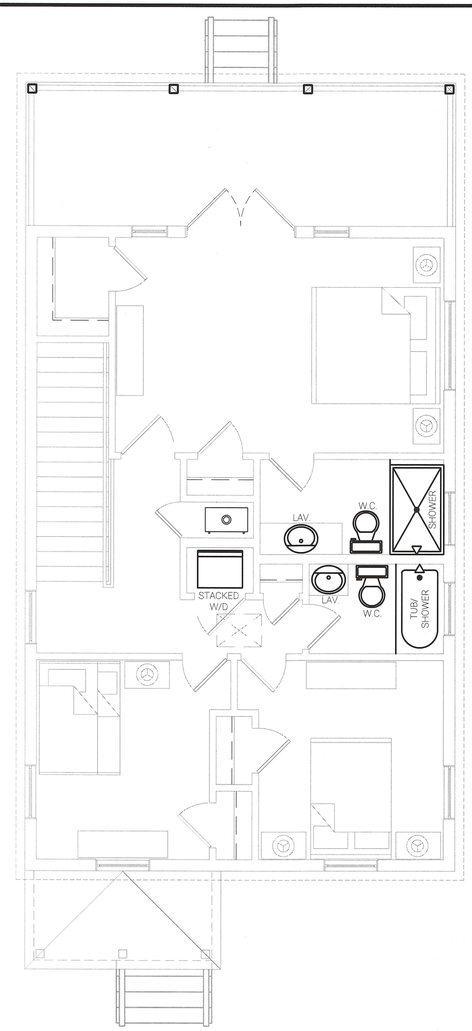
TYP. WATER HEATER RISER DIAGRAM
SCALE: 1/2"=1'-0"



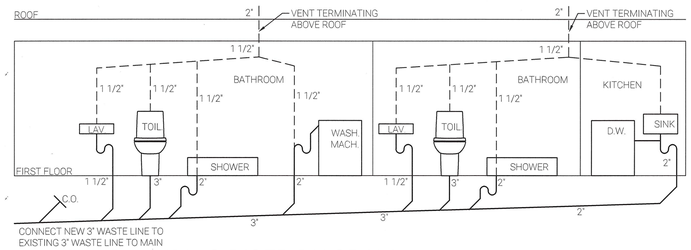
TYP. WATER HEATER RISER DIAGRAM
SCALE: 1/2"=1'-0"



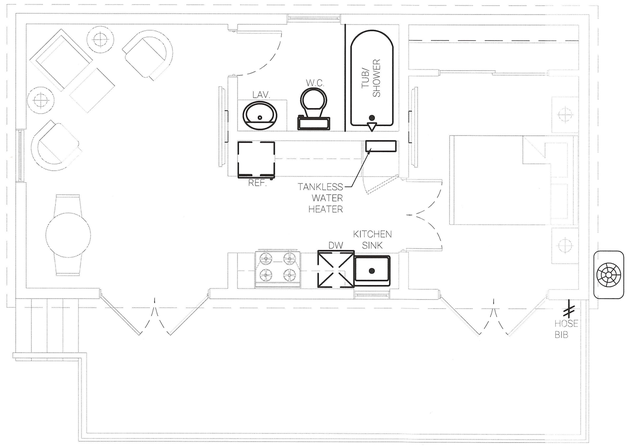
PROPOSED FIRST FLOOR PLUMBING LAYOUT
SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR PLUMBING LAYOUT
SCALE: 1/4"=1'-0"



TYPICAL PLUMBING RISER DIAGRAM
SCALE: 1/4"=1'-0" NOT REPRESENTATIVE OF ACTUAL FIXTIRE LOCATIONS



ACCESSORY UNIT PLUMBING LAYOUT
SCALE: 1/4"=1'-0"

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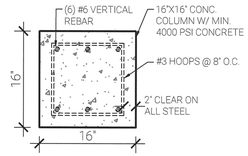
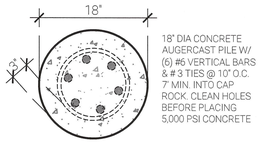


16"X16" CONC. COLUMN



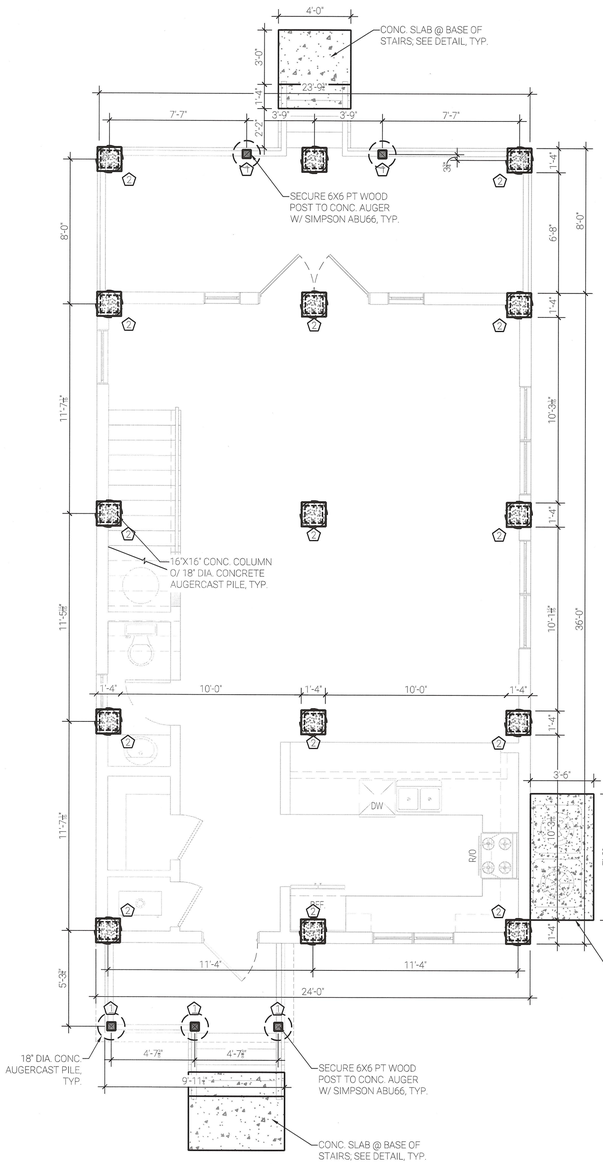
18" AUGERCAST PILE

BEAM, COLUMN & AUGER DETAILS

SCALE: 1"=1'-0"

COLUMN LEGEND:

- 6"X6" PT WOOD COLUMN
- 16"X16" CONC. COLUMN

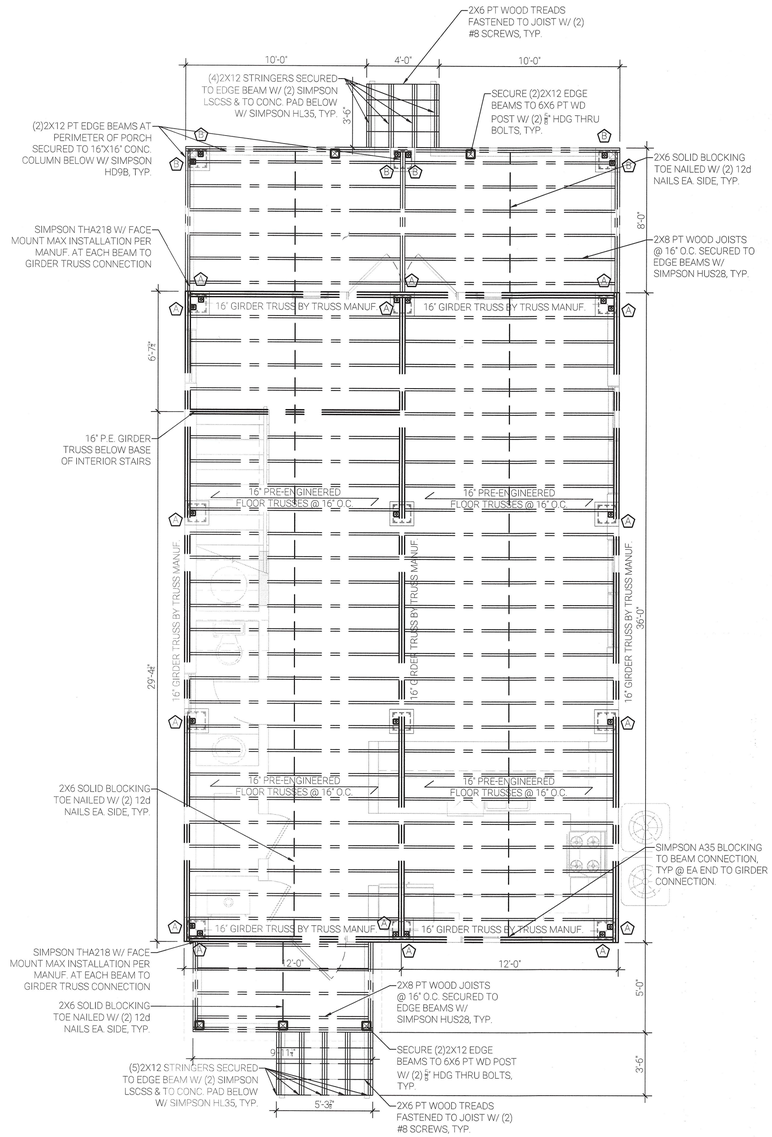


FOUNDATION PLAN

SCALE: 1/4"=1'-0"

CONNECTOR NOTES:

- SIMPSON HD9B TO EACH COL. BELOW W/ (2) AT EACH CORNER
- SIMPSON HD7B TO EACH COL. BELOW W/ (2) AT EACH CORNER



FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

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CONNECTOR NOTES:

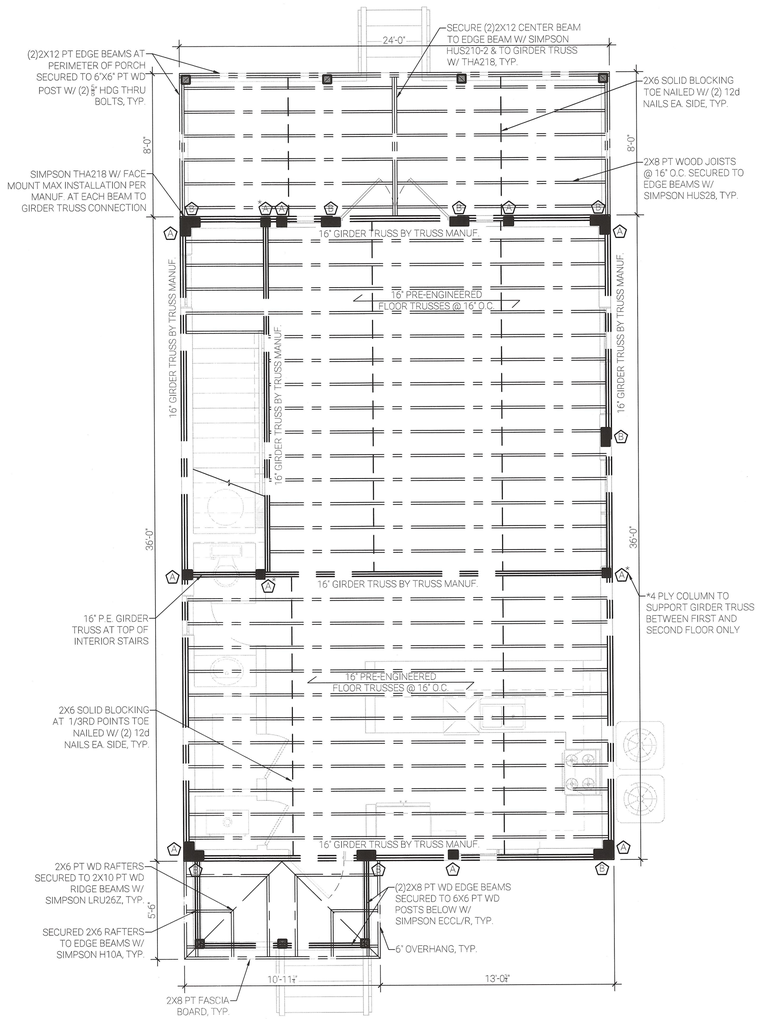
SIMPSON HD19 AT 4 PLY COL. BELOW

SIMPSON HD19 AT 8 PLY COL. BELOW

SHEAR WALL NOTES:

SEE SHEET A-1 FOR SHEAR WALL LOCATIONS.

SEE SHEET S-3 FOR SHEAR WALL DESIGN INFO.



SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

CONNECTOR NOTES:

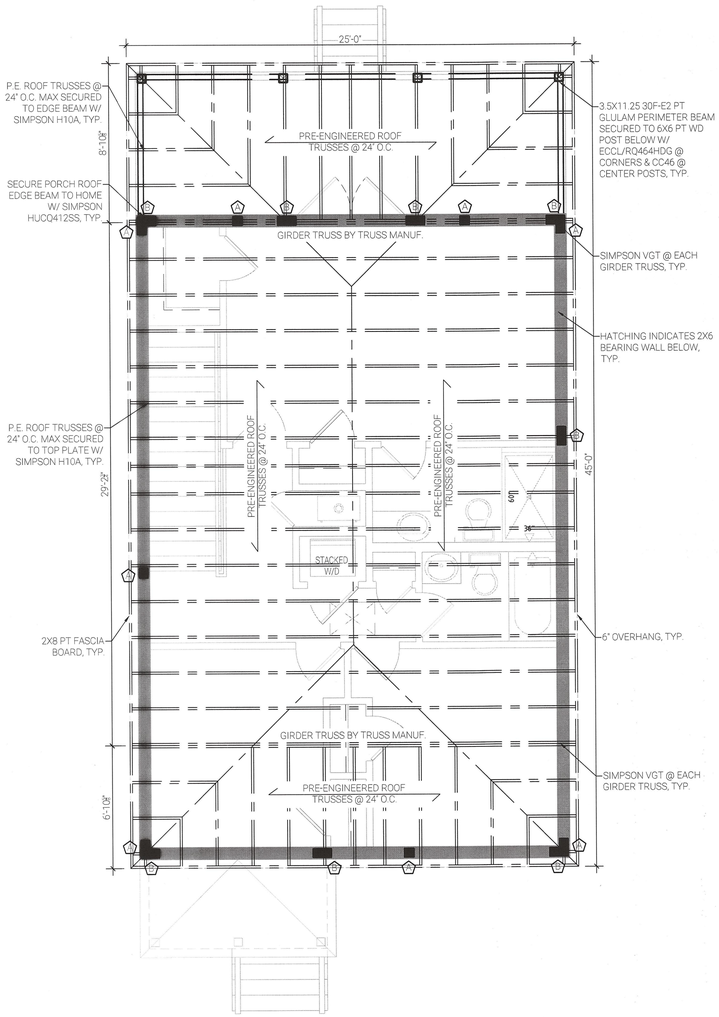
SIMPSON HD19 AT 4 PLY COL. BELOW

SIMPSON HD19 AT 8 PLY COL. BELOW

SHEAR WALL NOTES:

SEE SHEET A-1 FOR SHEAR WALL LOCATIONS.

SEE SHEET S-3 FOR SHEAR WALL DESIGN INFO.



ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC

William R. Campbell, P.E. License #: 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone # 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

PROJECT #:
1838
Date:
OCTOBER 26, 2020

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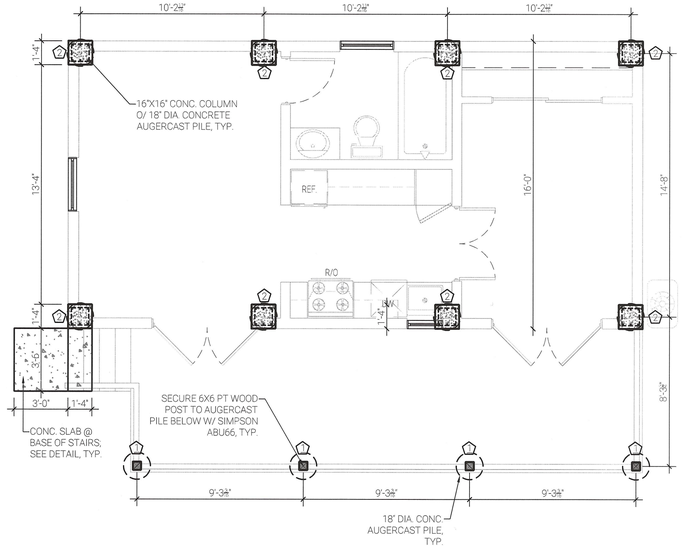
S-2

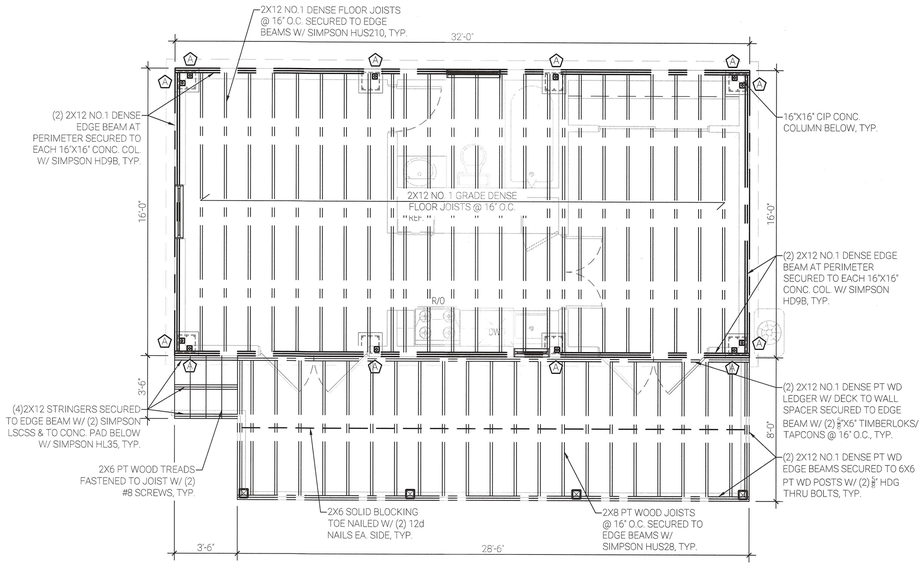


ACCESSORY UNIT FLOOR PLAN

SCALE: 1/4"=1'-0"

COLUMN LEGEND:

- 6"X6" PT WOOD COLUMN
- 16"X16" CONC. COLUMN

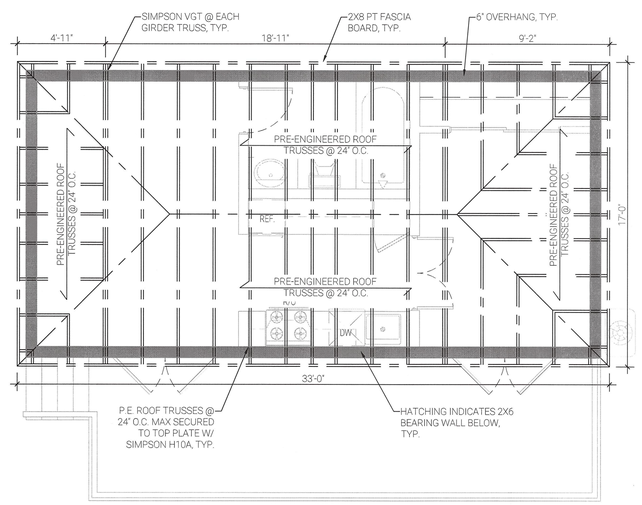


ACCESSORY UNIT FLOOR PLAN

SCALE: 1/4"=1'-0"

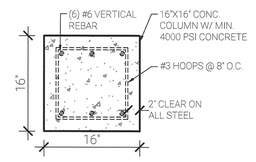
CONNECTOR NOTES:

- SIMPSON HD9B TO EACH COL. BELOW W/ (2) AT EACH CORNER

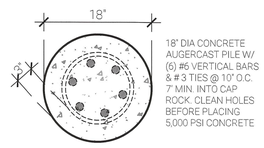


ACCESSORY UNIT FLOOR PLAN

SCALE: 1/4"=1'-0"



16"X16" CONC. COLUMN



18" AUGERCAST PILE

BEAM, COLUMN & AUGER DETAILS

SCALE: 1"=1'-0"

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William R. Campbell, P.E. License # 79269
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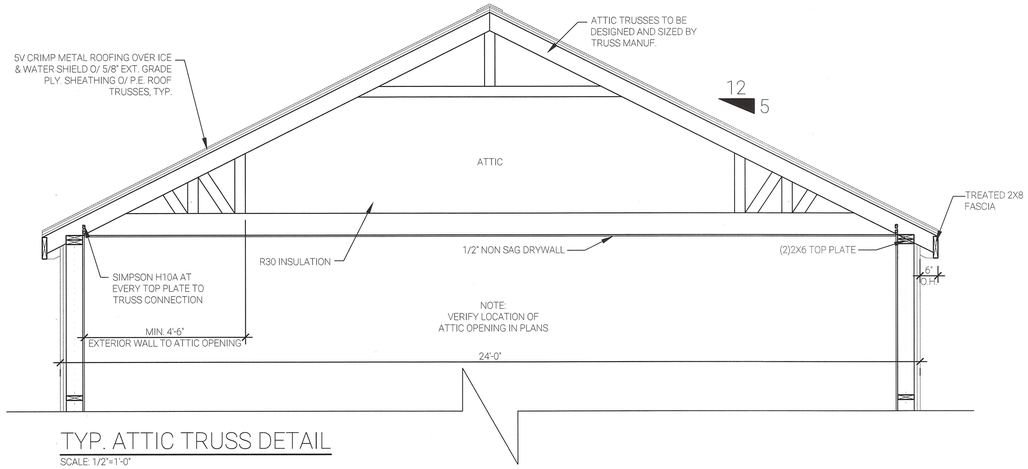
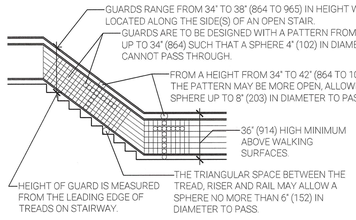


TYP. ATTIC TRUSS DETAIL

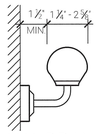
SCALE: 1/2"=1'-0"



STAIR AND RAILING REQUIREMENTS DIAGRAM

HANDRAIL AND GUARDS LOAD REQUIREMENTS

- HANDRAILS AND GUARDS ARE TO BE DESIGNED TO RESIST A LOAD OF 50 POUNDS PER LINEAL FOOT (0.73 kN/m) APPLIED IN ANY DIRECTION AT THE TOP AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE SUPPORTING THE RAIL OR GUARD.
- HANDRAIL ASSEMBLIES ARE ALSO TO BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 POUNDS (0.89 kN) APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP. THIS LOAD CAN BE CONSIDERED INDEPENDENTLY OF THE UNIFORM LOAD NOTED PREVIOUSLY.
- INTERMEDIATE RAILS, THAT IS, THOSE NOT THE HANDRAIL, ARE TO BE ABLE TO RESIST A LOAD OF 50 POUNDS (0.22 kN) ON AN AREA NOT TO EXCEED 1 S.F. (0.09 M) INCLUDING THE OPENINGS AND SPACES BETWEEN RAILS. THESE ARE NOT REQUIRED TO BE SUPERIMPOSED WITH OTHER RAILING LOADS NOTED ABOVE.

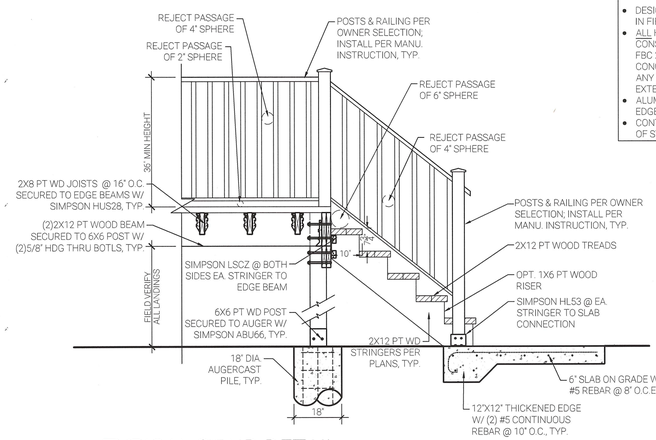


HANDRAIL DETAIL

NO SCALE

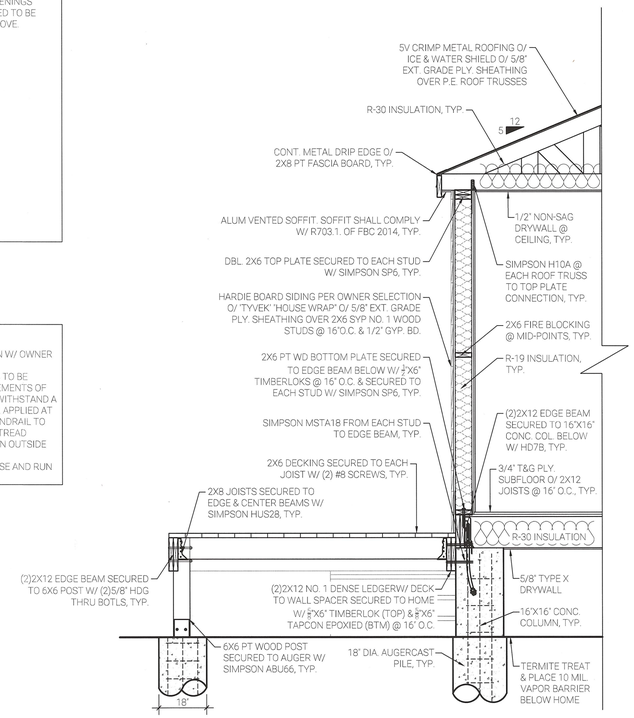
TYPICAL STAIR/RAILING NOTES:

- DESIGN MAY VARY; VERIFY DESIGN W/ OWNER IN FIELD.
- ALL HANDRAILS AND GUARDRAILS TO BE CONSTRUCTED TO MEET REQUIREMENTS OF FBC 2017 AND MUST BE ABLE TO WITHSTAND A CONCENTRATED LOAD OF 200LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HANDRAIL TO EXTEND TO BEGINNING OF FIRST TREAD
- ALUMINUM RAILING SHALL RUN ON OUTSIDE EDGE OF STAIRS AND DECK
- CONTRACTOR TO FIELD VERIFY RISE AND RUN OF STAIRS



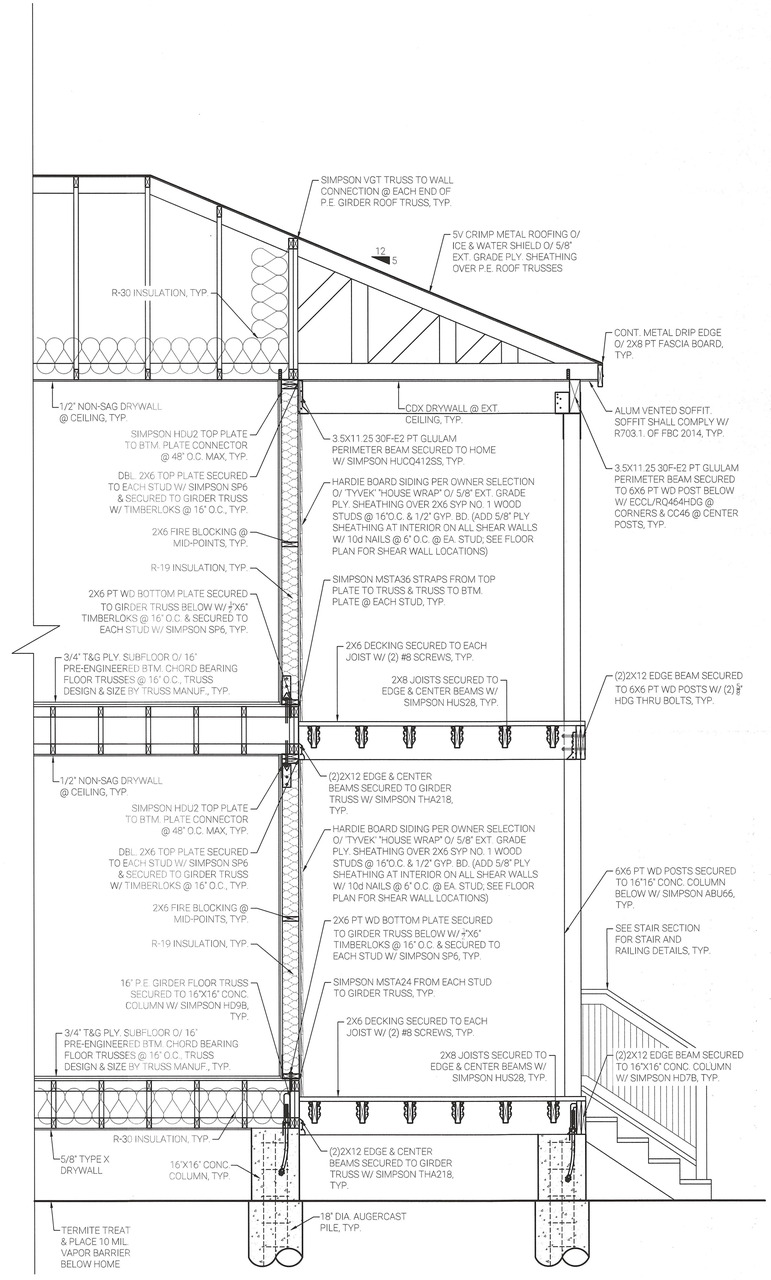
TYPICAL STAIR DETAIL

SCALE: 1/2"=1'-0"



ACCESSORY UNIT BUILDING SECTION

SCALE: 1/2"=1'-0"



MAIN HOME BUILDING SECTION

SCALE: 1/2"=1'-0"

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ASCE 7-10 WIND LOAD DATA
PER FBC 2017 - CH. 28, 30

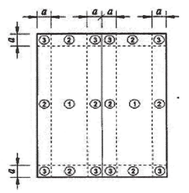
WIND SPEED 180 MPH
CATAGORY/EXPOSURE: II/D
MEAN ROOF HEIGHT: 26-1"
ROOF ANGLE 22.62 DEG.
WIND PRESSURES (PSF)
(PER FBC MULTIPLY BY 0.6 FOR APPLIED LOADS)

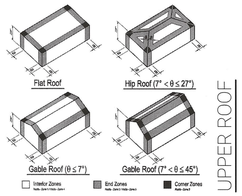
NOMINAL ROOF ZONES:	ULTIMATE ROOF ZONES:
ZONE 1: +33.2/-52.9	ZONE 1: +55.8/-88.5
ZONE 2: +33.2/-92.0	ZONE 2: +55.8/-154.2
ZONE 3: +33.2/-136.1	ZONE 3: +55.8/-227.9

Interior Zones
Roofs - Zone 1 / Walls - Zone 4

End Zones
Roofs - Zone 2 / Walls - Zone 5

Corner Zones
Roofs - Zone 3





UPPER ROOF

ASCE 7-10 WIND LOAD DATA
PER FBC 2017 - CH. 28, 30

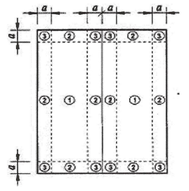
WIND SPEED 180 MPH
CATAGORY/EXPOSURE: II/D
MEAN ROOF HEIGHT: 12-10"
ROOF ANGLE 22.62 DEG.
WIND PRESSURES (PSF)
(PER FBC MULTIPLY BY 0.6 FOR APPLIED LOADS)

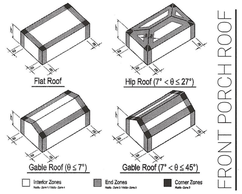
NOMINAL ROOF ZONES:	ULTIMATE ROOF ZONES:
ZONE 1: +41.2/-61.5	ZONE 1: +68.6/-102.6
ZONE 2: +41.2/-121.8	ZONE 2: +68.6/-203.0
ZONE 3: +41.2/-121.8	ZONE 3: +68.6/-203.0

Interior Zones
Roofs - Zone 1 / Walls - Zone 4

End Zones
Roofs - Zone 2 / Walls - Zone 5

Corner Zones
Roofs - Zone 3





FRONT PORCH ROOF

ASCE 7-10 WIND LOAD DATA
PER FBC 2017 - CH. 28, 30

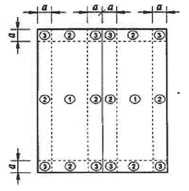
WIND SPEED 180 MPH
CATAGORY/EXPOSURE: II/D
MEAN ROOF HEIGHT: 13-9"
ROOF ANGLE 22.62 DEG.
WIND PRESSURES (PSF)
(PER FBC MULTIPLY BY 0.6 FOR APPLIED LOADS)

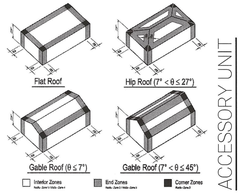
NOMINAL ROOF ZONES:	ULTIMATE ROOF ZONES:
ZONE 1: +29.4/-46.8	ZONE 1: +49.4/-78.4
ZONE 2: +29.4/-81.5	ZONE 2: +49.4/-136.6
ZONE 3: +29.4/-120.5	ZONE 3: +49.4/-201.8

Interior Zones
Roofs - Zone 1 / Walls - Zone 4

End Zones
Roofs - Zone 2 / Walls - Zone 5

Corner Zones
Roofs - Zone 3

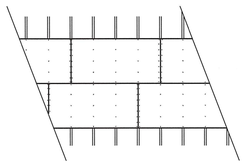




ACCESSORY UNIT

ROOF CONSTRUCTION NOTES:

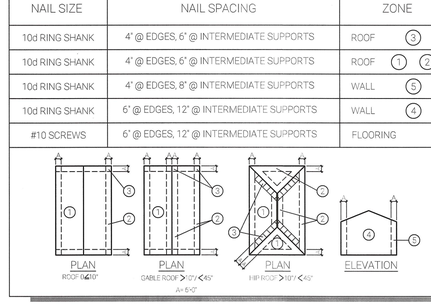
1. PROVIDE ATTIC VENTS AS SPECIFIED IN WALL SECTIONS.
2. TIE ROOF TRUSSES TO INTERIOR PARTITIONS WITH METAL CLIPS, TIES OR STRAPS AS SPECIFIED IN STRAPPING SCHEDULE.
3. PROVIDE ALL REQUIRED TRUSS BRACING AS SPECIFIED ON ENGINEERED TRUSS PLAN.
4. PRE-FAB, PRE-ENGINEERED ROOF TRUSSES ARE TO BE SPACED @ 2'-0", O.C.
5. SBCCI APPROVED ANCHORS CAPABLE OF MEETING UPLIFT REQUIREMENTS AS PROVIDED BY THE TRUSS MANUFACTURER AT EACH TRUSS TO PROVIDE A CONTINUOUS TRANSFER OF UPLIFT LOADS FROM TRUSS TO FOUNDATION.
6. TRUSS MANUFACTURER TO SUBMIT PROFILES & PLANS, PRIOR TO FABRICATION, TO THE CONTRACTOR FOR APPROVAL.
7. ROOF PLAN FOR DESIGN PURPOSES ONLY.
8. ALL CONNECTORS IN CONTACT WITH P.T. WOOD S-HALL BE Z-MAX COATED OR EQUAL.
9. ALL TRUSSES TO TIEBEAM CONNECTIONS: SIMPSON (HETA-20) UP TO 1810 # UNLESS OTHERWISE NOTED.
10. ALTERNATE FASTENERS MAY BE USED PROVIDED THEY MEET UPLIFT AND LOAD REQUIREMENTS AND ARE NO LESS THAN THE VALUES LISTED ABOVE FOR UPLIFTS.
11. ATTACH ALL STRAPS WITH GALVANIZED NAILS OF SIZE AND QUANTITY SPECIFIED BY STRAP MANUFACTURER.
12. ALL HURRICANE RESISTANT TIE DOWNS STRAPPING AND ANCHORS SHALL HAVE A CONTINUOUS PATH FROM THE ROOF TO FOUNDATIONS. ALL STRAPPING AND ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
13. ROOF TRUSSES SHALL BE HANDLED, STORED, ERECTED, TEMPORARILY BRACED & PERMANENTLY BRACED PER "BCSI1-03" GUIDE TO GOOD PRACTICES FOR HANDLING, INSTALLING & BRACING METAL PLATE CONNECTED WOOD TRUSSES.
14. ADD SEALANT AT SEAMS FOR 5V CRIMP ROOF UNDER 3:12 PITCH.
15. INSTALL SHEATHING WITH 1/8" GAP AT ALL EDGES.

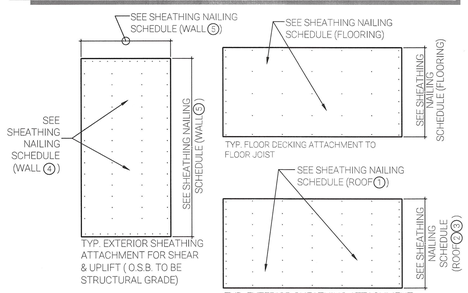


ROOF & WALL NAILING REQUIREMENTS
SCALE = N.T.S.

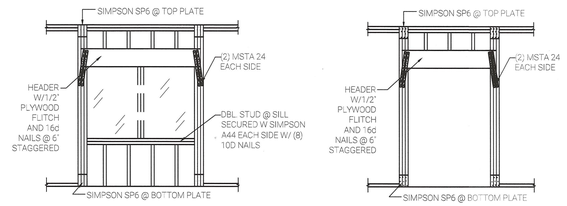
SHEATHING NAILING SCHEDULE
(WALLS AND ROOF)

NAIL SIZE	NAIL SPACING	ZONE
10d RING SHANK	4" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF (3)
10d RING SHANK	4" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF (1) (2)
10d RING SHANK	4" @ EDGES, 8" @ INTERMEDIATE SUPPORTS	WALL (5)
10d RING SHANK	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	WALL (4)
#10 SCREWS	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	FLOORING

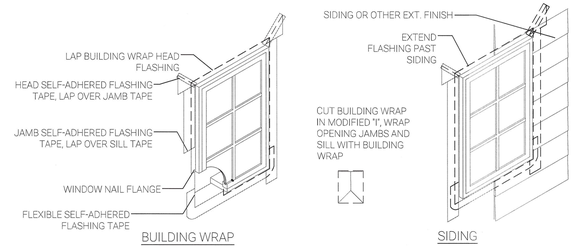




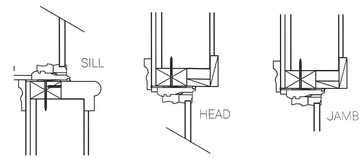
TYP. NAILING DETAIL
SCALE: N.T.S.



WINDOW/DOOR FRAMING DETAILS

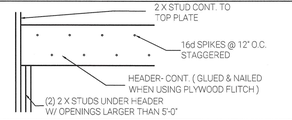


WINDOW BLDG. WRAP/FLASHING DETAILS



TYPICAL WINDOW DETAIL
SCALE: N.T.S.

HEADER SCHEDULE



OPENING WIDTH	BEARING WAL OR SHEAR WALL	NONBEARING WALLS
0'-0" TO 3'-0"	(2) - 2 X 6's	(2) - 2 X 4's
3'-1" TO 5'-0"	(2) - 2 X 10's	(2) - 2 X 6's
5'-1" TO 7'-0"	(2) - 2 X 12's	(2) - 2 X 8's
7'-1" TO 9'-0"	(2) - 2 X 12's W/ 1/2" PLYWOOD FLITCH	(2) - 2 X 12's

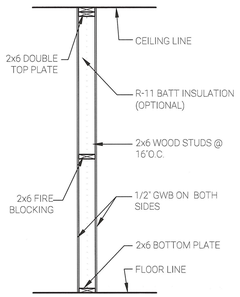
HEADER NOTES:
1. USE HEADER SIZES ABOVE UNLESS OTHERWISE NOTED ON FRAMING PLAN
2. PRIMARY FRAMING (BEAMS,GIRDERS, ETC.) WERE SIZED USING
   1800 "Fb" EXTREME FIBER IN BENDING (SINGLE)
   90 "Fv" HORIZONTAL SHEAR
   1.6E "E" MODULES OF ELASTICITY
3. JOISTS, RAFTERS, LINTELS, ETC. WHERE SIZED USING
   1200 "Fb" EXTREME FIBER IN BENDING (SINGLE)
   90 "Fv" HORIZONTAL SHEAR
   1.6E "E" MODULES OF ELASTICITY

(1) PREPARATION OF WINDOW OPENING
-LINE THE OPENING WITH VAPOR BARRIER
-INSTALL PRESSURE TREATED WOOD BUCK TO PERIMETER OF OPENING USING NEW 3/16" X 3-1/2" OR EQUAL PROVIDING 500LBS, SHEAR STRENGTH 16" ON CENTER (4' AT EDGES)
-APPLY A CONTINUOUS BEAD OF CAULKING TO SEAL WOOD BUCK TO FRAME OPENING-ENSURE THAT A CLEARANCE OF 1/4" PER SIDE IS LEFT FOR SHIMMING

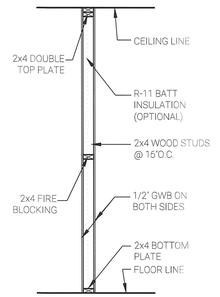
(2) INSTALLATION OF WINDOW
-REFER TO INSTALLATION INSTRUCTIONS FOR THE SPECIFIC PRODUCT BEING INSTALLED
-SET WINDOW IN OPENING, SHIMMING, LEVELING, AND SQUARING TO ENSURE PROPER OPERATION
-INSTALL #9 1-1/4" PAN HEAD WOOD SCREWS THRU ALL PREDRILLED HOLES IN THE INSTALLATION FIN TO SECURE UNIT (8" ON CENTER)
-ENSURE THAT THE INSTALLATION FIN IS SEALED TO THE WOOD BUCK WITH A CONTINUOUS BEAD OF CAULKING
-FILL VOID BETWEEN WINDOW AND WOOD BUCK WITH INSULATION BEING CAREFUL NOT TO BOW WINDOW FRAME

(3) APPLICATION OF CAULKING
-INSERT STYROFOAM BACKER ROD INTO THE OPENING BETWEEN WINDOW FRAME AND "J" MOULD
-APPLY A CONTINUOUS BEAD OF URATHAENE SEALANT, REFER TO SEALANT MANUFACTURERS RECOMMENDATIONS FOR SURFACE PREPARATION AND APPLICATION

(4) INSTALLATION LIMITATIONS
-WINDOW INSTALLATION TO MEET THE REQUIREMENTS OF THE WIND LOADS OF THE FLORIDA BUILDING CODE IN EFFECT AT THE TIME OF CONSTRUCTION



INTERIOR 2x6 PLUMBING WALL DETAIL
SCALE: 1/2"=1'-0"



INTERIOR 2x4 WALL DETAIL
SCALE: 1/2"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

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KEY WEST, FLORIDA

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CONSULTANTS LLC
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OCTOBER 26, 2020

SHEET 14 of 14

SHEET #
S-5

Certification Form

Exhibit D – BPAS Certification Form

Building Permit Allocation System Application

305-809-3720 • www.cityofkeywest-fl.gov

I certify that I am familiar with the information contained in this application, and that to the best of my knowledge such information is true, complete and accurate. I certify that all information required has been provided.

I certify that my total estimated points are 10. I certify that if I am awarded one or more Building Permit Allocations and am unable to achieve all prerequisites and/or achieve the total amount of points represented on the Score Sheet, a Certificate of Occupancy will not be issued for the project.

I certify that if I am awarded one or more Building Permit Allocations, the Score Sheet and Prerequisite Solution Statement prepared as part of this application will be provided to my contractor and that my contractor will be made aware that if the completed project does not achieve all prerequisites and achieve the total amount of points represented on the Score Sheet, a Certificate of Occupancy will not be issued for the project.

_____ 12-4-2020

Signature of applicant *Date*

Gregory S. Oropeza

Print name of Applicant

Subscribed and sworn to (or affirmed) before me on this 4th day of December, 20 20,

by Gregory S. Oropeza (name of person signing the application)

as Manager (type of authority…e.g. officer, manager/member, trustee, attorney)

for Oropeza, Stones & Cardenas, PLLC (name of entity or party on behalf of whom application was executed).

He/She is personally known to me or has presented _____ as identification.

Patricia Gae Ganister

Notary's Signature and Seal

SEAL

_____

Name of Acknowledger typed, printed or stamped

_____

Commission Number, if any

Notary Public State of Florida
Patricia Gae Ganister
My Commission GG 241871
Expires 09/20/2022

Estimated Score Sheet

Exhibit C – Applicant's Estimated Score Sheet
Building Permit Allocation System Application

305-809-3720 • www.cityofkeywest-fl.gov

The purpose of the Estimated Score Sheet is to provide the applicant with the understanding that if a BPAS Allocation(s) is awarded the total amount of points represented on the Estimated Score Sheet and finalized through the official staff ranking process is required to be permanently maintained throughout the lifecycle of the project. Because the total amount of points is not linked to one specific criterion, the applicant has flexibility in the construction phase in the event that certain point system criteria, for which the application is ranked, need to be substituted.

In the event that the Prerequisites and/or the total points are not achieved, a Certificate of Occupancy will not be issued for the project.

Oropeza, Stones & Cardenas, PLLC

Applicant: Gregory S. Oropeza **Site Address:** 3450 Duck Avenue

Number and type of Units Requested: Market Rate 1 Affordable 1

Prerequisite Development Type: Major Construction/ Renovation X
Minor Renovation _____

Please acknowledge that the Prerequisites required for the proposed project shall be met in accordance with the solution statement provided: _____
Initial here

The following criteria and point system shall be utilized in the ranking of applications for development of non-transient units as follows:

a.	Building more than 1.5' higher than the base flood elevation (+5)	Points 5
b.	Exceeding the minimum required percentage of affordable housing (+30)	Points _____
c.	Voluntarily providing affordable housing which exceeds the requirements of section 122-1467 at median income classification (+40)	Points 40
d.	Voluntarily providing affordable housing which exceeds the requirements of section 122-1467 at low income classification (+60)	Points _____
e.	Achieving Green Building Certification Upgrade 1 (+20)	Points _____
f.	Achieving Green Building Certification Upgrade 2 (+27)	Points _____
g.	Achieving Green Building Certification Upgrade 3 (+40)	Points _____
h.	Voluntary contribution to the arts in public places fund or tree fund in the amount of $2,500 or more (+5)	Points _____
i.	Providing electrical high-voltage sized conduit for future electric car charging station near parking area (+5)	Points 5
j.	Using light-colored, high-reflectivity materials for all non-roof areas with a Solar Reflectance Index (SRI) of at least 29 (+5)	Points _____
k.	Providing on-site recreational amenities or exceeding the open space requirements of section 108-346 (b) of article V of Chapter 108 (+10)	Points _____
l.	Using light-colored, high-reflectivity roofing materials with a Solar Reflectance Index (SRI) of at least 29 (+5)	Points _____

TOTAL ESTIMATED POINTS 50

FGBC Checklist

FGBC FLORIDA GREEN BUILDING COALITION

FGBC Green Home Standard

Version 10

Application

Effective October 1, 2013

Revised 8-25-16

Instructions for Submission:

Electronic Submissions (Required)

Complete the credit card authorization below or pay online

(Note: Payment by check is acceptable - see mailing instructions below)

Upload the application, checklist and supporting documents via the FGBC link below. All application packages must be submitted as one zipped file.

https://dropbox.hightail.com/certifications

Mailing Instructions

- Make check payable to "FGBC" based on fee schedule OR submit credit card payment information
- Mail fees, application, and electronic version of checklist with supporting documents on CD to:

FGBC
1415 E. Piedmont Dr. Suite 5
Tallahassee, FL 32308-7954

FEES

Single Family New and Existing Home Fees

Fee	Builder or Homeowner Must Be Member
$75	Member of FGBC **and** FHBA
$100	Member of FGBC **or** FHBA
$125	Non Member

Multi-Family Fees

Multi-family applications: Use TAB 18

Additional Options

$39	FGBC Certified Home Bronze Plaque
$40	Florida Water Star Certification
Free	FGBC Certified Home Yard Sign (Electronic Version)

Builder Information

Name:
Company:
Address:
City/ST/Zip:
Phone:
Buidler Email:
DBPR License #:
FGBC Member #:
FHBA Member #:
Signature

Certifying Agent Information

Name:
Company:
Address:
City / Zip:
Phone:
Fax:
E-mail:
CA Registration #:

PAYMENT

	Do You Want A Yard Sign? (Free)
	Home Fees
	Bronze Plaques
	Florida Water Star Certification
$0.00	Total Amount Authorized

Pay Online **or Authorize Credit Card Here: (Visa/MC/AX)**

CC#:
Expiration Date:
Name on Card:
Billing Zip Code:

Signature:

Home Information

Address:
City/ST/Zip:
County:
Development:

Please answer the following questions:

	Is the home New or Existing?
	Is this Single Family or Multi-Family?
	Is this home Affordable? List Funding Source

	Square Footage of home/unit
	Sales Price

Optional Information

Owner:
Company
Address:
City/ST/Zip:
Phone:
E-mail:

Signature:

Required Signatures: All parties signing this application acknowledge that each of the measures intended to qualify the home for the Florida Green Home Certification has been incorporated into construction/renovation of the home.

Date:

Project Point Summary

Minimum Points to Qualify (may be over 100 if a category minimum is missed)	**104**
Points Toward Qualification (points over category maximums excluded)	**135**
Total Points Achieved	**135**

Please refer to Standards Documents and Green Home Reference Guide for additional information.

Category	Your Score	Required Min - Max
Category 1: Energy	37	30 - 75
Category 2: Water	17	15 - 40
Category 3: Lot Choice	9	0 - 15
Category 4: Site	8	5 - 30
Category 5: Health	16	15 - 35
Category 6: Materials	6	10 - 35
Category 7: Disaster Mitigation	13	5 - 30
Category 8: General	29	0 - 40
Total:	135	
Total Needed:	104	
Certified Home Score	**131**	
Certification Level	**Silver**	

Version 10
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PREREQUISITES:

Prerequisite 1: Swimming Pool / Spa

P1.1	Yes	Sanitation system that reduces chlorine use
P1.2	N/A	Pool Cover
P1.3	N/A	Solar pool heating system
P1.4	N/A	Dedicated PV's to run pool equipment
P1.5	N/A	Home has no pool or spa

Prerequisite 2: Waterfront Considerations

P2.1	N/A	Use of native aquatic vegetation in shoreline area
P2.2	N/A	No turf adjacent to water (Low maintain plants instead)
P2.3	Yes	Use of terraces, swales, or berms to slow storm water
P2.4	Yes	Home site does not border natural water body

Prerequisite 3: No Invasive Exotic Species

P3.1	Yes	Landscape Considerations
	New	Is the landscape existing or new

CATEGORY 1: ENERGY

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Category Minimum 30 / Category Maximum 75

HERS Index - Energy Rating

E1.1	30	3 - 75	Confirmed Florida HERS Rating - 3 points for each HERS Index point below 80
	Yes		:Does the Home have a confirmed HERS Index
	70		:Confirmed HERS Index

Design, Finishes, Amenities

E2.1	0	1	Thermal Bypass Inspection
E2.2	1	1	Ductwork joints sealed with mastic
E2.3	0	1	Ductwork smoke tested allowing leaks to be sealed prior to drywall
E2.4	0	1	Cross vent and ceiling fans code credit
E2.5	0	1	Roofed porch, Min 100ft^2 AND 3 sides open
E2.6	0	1	Passive solar space heating system
E2.7	0	1	Passive solar day-lighting
E2.8	0	1	Deciduous trees on south
E2.9	0	1 - 4	House shaded on east and west by trees
			0 % of the designated wall areas (average of east and west walls) that are shaded by trees.
E2.10	0	1	Washer and dryer outside of conditioned space
E2.11	0	1	Floor joist perimeter insulated and sealed
E2.12	1	1	Light colored exterior walls (80% minimum)
			0 Enter the Solar Reflective Index (SRI) of Paint
E2.13	1	1 - 2	Light colored interior walls, ceilings, carpet/floors
			Yes all major living spaces wall and ceiling surfaces have a reflectance of at least 50%
			0 Enter the Light Reflectance Value (LRV) of Paint
			0 bedrooms and all major living spaces have floors, walls, & ceilings are light-colored
			0 Enter the Light Reflectance Value (LRV) of Paint
E2.14	1	1	Max 100W fixtures in bathrooms
E2.15	0	1	Pre-plumb for solar hot water
E2.16	0	2	Install a State Certified rated solar hot water system
E2.17	0	1	Compact hot water distribution
E2.18	0	1	Insulate all hot water pipes
E2.19	1	1	Energy-efficient clothes dryers
E2.20	1	1	Energy-efficient ovens/ranges
E2.21	1	1	Energy Star® clothes washers
E2.22	0	1	Efficient well pumping
E2.23	0	1	Efficient envelope volume
			0 Total Gross Wall Area
			1 Conditional Square Footage
			1 Number of Stories
E2.24	0	1	Dwelling unit attached, zero lot-line, row house
E2.25	N/A	2	Recessed, sealed IC fixtures
E2.26	0	3	Energy Star® Advanced Lighting Package
E2.27	0	2	Outdoor lights are energy efficient.
E2.28	0	1	Install motion sensors on a minimum of 60% of the hard wired lighting fixtures
E2.29	-	1	Energy Efficient Sheathing
	37	112	Total Points

37 Total points for Category 1 (30 min / 75 max)

Name of HERS Rater: 0

Certifying Agent Category 1: 0

CATEGORY 2: WATER

Version 10
Revised 8-25-16

Category Minimum 15 / Category Maximum 40

N/A — **Is the landscape existing or new**

W1 Fixtures			
W1.1	0	2 - 3	Water saving clothes washer
	0		: Water factor (WF) of clothes washer
W1.2	-	1	Low-flow shower heads (must be ≤ 2.0 gpm)
W1.3	0	1	All showers equipped with only 1 showerhead per shower
W1.4	-	1 - 2	all lavatory sink faucets have flow rates of ≤ 2.0 gpm (all ≤ 1.5 gpm = 2 pts)
W1.5	2	2	High Efficiency Dual-flush or Single Flush Toilets (all toilets ≤ 1.28 gpf)
W1.6	0	1	Toilet with UNAR Map Rating of 600 gpf or greater
W2 Greywater Reuse			
W2.1	0	1 - 3	Greywater System Installed
W3 Rainwater Harvesting			
W3.1	3	1 - 3	Rainwater Harvesting System installed
W4 Reclaimed Water Reuse			
W4.1	N/A	2	Water for irrigation
W4.2	0	2	Meter on reclaimed irrigation system
W4.3	0	2	Volume-based pricing arrangement
W4.4	0	2	For toilet flushing
W5 Installed Landscape			
W5.1	2	2	Drought-tolerant turf, no turf in densely shaded areas
W5.2	1	1 - 3	60%, 80%,100%, of plants/trees from drought-tolerant list
	60%		:Percentage of drought tolerant plant
W5.3	2	2	All plants/trees selected to be compatible with local environment / microclimate
W5.4	3	3	Turf less then 50% of landscape
W5.5	0	2	Evenly shaped turf areas, no turf on berms
W5.6	0	2	Plants with similar maintenance requirements grouped together
W5.7	1	1	Mulch applied 3 - 4 inches deep around plants / no volcano mulch
W5.8	1	1	Non-Cypress mulch used
W5.9	0	2	Soil tested and amended where necessary
W6 Installed Irrigation			
W6.1	-	10	No permanent installed irrigation system
W6.2	2	2	Innovative irrigation technology
W6.3	0	3	Irrigated land according to FGBC standard
	0		Separate zones for turf and landscape beds - multi program controller
	0		High-volume irrigation does not exceed 60% of landscape area
	0		Head to head coverage for rotor/spray heads
	0		Correctly installed Micro-irrigation in landscape beds and narrow areas
	0		Minimize overspray on impermeable surfaces
W6.4	0	1	
	OR		
	0		Pressure compensating spray heads installed in spray zones
	0		Pressure regulating valves are installed for spray zones
W6.5	0	1	In poor drainage (low) areas, heads are installed with check valves
W6.6	0	2	High volume irrigated areas have matched precipitation rates
W6.7	0	1	Pop-up sprinkler heads significantly rise above turf grass height
W7 Additional Water Certification Requirements			
W7.1	0	5	Meet or exceed Florida Water Star™ or WaterSense standards:
W7.2	0	2	Florida Friendly Landscape™ Program New Construction Certification
	17	57	Total Points

17 Total points for Category 2 (15 min / 40 max)

Certifying Agent Category 2:	0
Landscape Auditor:	0
Credentials of Auditor:	0

CATEGORY 3: LOT CHOICE

Version 10
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Category Minimum 0 / Category Maximum 15

LC1.1	0	1 - 6	House built within designated FGBC green land development
		0	Name of FGBC Green Development
		0	% of land development that scored beyond the minimum compliance of FGBC standard
LC1.2	0	2	Home within a certified green local government
LC1.3	2	2	Built on an infill site
LC1.4	1	1	Site within 1/8 mile of existing infrastructure
LC1.5	2	2	Site within 1/4 mile to mass transit
LC1.6	2	2	Site within 1/2 mile of public open/green space
LC1.7	2	2	Site within 1/4 mile of existing basic community resources
		1/2 Mile	away from basic community resources
		Yes	Arts and entertainment center
		Yes	Bank
		Yes	Community or civic center
		Yes	Convenience store
		0	Daycare center
		Yes	Fire station
		Yes	Fitness center or gym
		0	Laundry or dry cleaner
		0	Library
		Yes	Medical or dental office
		Yes	Pharmacy
		0	Police station
		0	Post office
		Yes	Place of worship
		Yes	Restaurant
		Yes	School
		Yes	Supermarket
		Yes	Other Neighborhood-serving retail
		Yes	Other office building or major employment center
LC1.8	0	2	Site located in small lot cluster development
LC1.9	0	2	Brownfield site
	9	21	Total Points

9 Total points for Category 3 (0 min / 15 max)

Certifying Agent Category 3: 0

CATEGORY 4: SITE

Version 10
Revised 8-25-16

Category Minimum 5 / Category Maximum 30

I	N/A	That all credits in this category deal only with buildable land. What this means is that if the land is not legally allowed to be disturbed then you may not count this as part of the percentage required for the given credit.

Native Tree and Plan Preservation

S1.1	2	2	Maximize tree survivability
S1.2	1	1 - 2	Minimize soil compaction
			Restrict all construction equipment from driving on site during construction except for area of <25% of site.
S1.3	0	2	Replant or donate removed vegetation
S1.4	0	1 - 9	Preserve or create wildlife habitat / shelter
			0 % of property that was created or preserved as a wildlife habitat or shelter

On Site Use of Cleared Materials

S2.1	0	2	Mill clear trees
S2.2	0	1 - 2	Reuse cleared materials for mulch / landscape
			Mulch is both cleared and reused: 0

Erosion Control / Topsoil Preservation

S3.1	0	2	Develop an erosion control site plan
S3.2	1	1	Stabilize disturbed soil
S3.3	0	2	Stage disturbance
S3.4	0	1	Control sediment runoff during construction
S3.5	1	1	Save and reuse any removed topsoil

Drainage / Retention

S4.1	2	2	Onsite designated retention area
S4.2	0	2	Direct filtered rooftop runoff to planted area(s)
S4.3	1	1 - 4	Maintain pervious surface area (If not taking points input 1 for Total Lot Area)

Partial Pervious

46	% Pervious Material	8633	Total Lot Area (sq. ft.)
4653	Coverage Area (sq. ft.)	0	100% Pervious sq. ft.
2140.38	Equivalent Pervious Area -->	2140.38	Equivalent Pervious Area (semi-pervious)
1	Total points for pervious area		

8	34	Total Points

8 Total points for Category 4 (5 min / 30 max)

Certifying Agent Category 4: 0

CATEGORY 5: HEALTH

Version 10
Revised 8-25-16

Category Minimum 15 / Category Maximum 35

Combustion

H1.1	0	3	Detached garage/carport OR air barrier between living space & garage AND no air handler or ducts in garage
H1.2	0	1	Garage (attached or detached)- exhaust fan on motion sensor and timer
H1.3	0	1	Interior Fireplace - Direct vent, sealed combustion w/electronic ignition, factory built wood burning or no fireplace
H1.4	0	1 - 2	No unsealed space or water heating combustion located inside the conditioned area - or electric

Space Heating		Water Heating	
N/A	Electric	N/A	Electric
N/A	Sealed combustion equipment	N/A	Sealed combustion equipment
N/A	Sealed combustion closet	N/A	Sealed combustion closet
		N/A	Outside of conditioned space

Moisture Control

H2.1	0	1	Drainage tile on and around top of footing
H2.2	0	1	Drainage board for below grade walls
H2.3	0	1	Gravel bed beneath slab on grade floors
H2.4	0	1	Seal slab penetration
H2.5	0	1	Capillary break between foundation and framing
H2.6	3	3	Central dehumidification system
H2.7	0	1	No vapor barrier on inside of assemblies
H2.8	1	1	Moisture control for tub/shower and shower surrounds

Source Control

H3.1	1	1	No exposed urea-formaldehyde wood products
H3.2	0	2	Zero VOC paints, stains, and finishes
H3.3	0	1	Low VOC paints, stains, and finishes
H3.4	0	1	Low VOC sealants and adhesives
H3.5	N/A	1 - 2	Minimize carpet use (<50% 1pt, No wall to wall carpet 2pts)
H3.6	0	1	Healthy flooring
H3.7	0	1	Healthy insulation
H3.8	1	1 - 2	Protect ducts, range hood, and bath exhaust fans during construction
H3.9	3	3	Integrated pest management plan

Cleanability

H4.1	0	1 - 2	Central vacuum system

N/A	System roughed in	N/A	Installed with exhaust outdoor
		N/A	Installed with exhaust indoor thru HEPA filter

H4.2	0	1	Useable entry area

Universal Design

H5.1	1	1 -3	Universally designed living area

Ventilation

H6.1	-	2 - 4	Controlled mechanical ventilation
H6.2	0	1	Radon/Soil gas vent system installed
H6.3	1	1	Floor drain sealed
H6.4	0	1	Energy Star® bath fans with timer or humidistat
H6.5	1	1	Kitchen range hood vented to exterior
H6.6	0	1	Laundry rooms inside conditioned space must have a make-up air source
H6.7	0	3	Whole house positive filtration
H6.8	2	1 - 2	Efficient HVAC filter
H6.9	1	1	HVAC filter easily accessible
H6.10	1	1	Install screens on all windows and doors
H6.11	0	1	Manual D duct design
	16	52	Total Points

16 Total points for Category 5 (15 min / 35 max)

Certifying Agent Category 5: 0

CATEGORY 6: MATERIALS

Version 10
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Category Minimum 10 / Category Maximum 35

Components

M1.1	0	1	Recycled content roof material
M1.2	0	2 - 3	Certified sustainable lumber
	0		homes with minimum of 1 story wood frame exterior walls have 80% of all lumber certified
	0		home has no exterior wood walls & 80% of remaining lumber used for the home is certified.
M1.3	0	1	Engineered / alternative material for outdoor living
M1.4	0	1	Concrete with fly ash or blast furnace slag
M1.5	0	1	Recycled content siding or soffit material
M1.6	0	1	Eco-friendly insulation
M1.7	0	1	Recycled content drywall
M1.8	0	1	Recycled content paint
M1.9	0	1	Steel interior studs
M1.10	0	1	Eco-friendly flooring material
M1.11	0	1	Eco-friendly ceiling materials
M1.12	0	1 - 3	Locally produced materials
	0		minimum 80% of all new windows & doors are from local manufacturers & are operable
	0		50% of all doors are reused doors **or** 50% of all windows are reused windows
	0		80% of all structural components are from local sources - includes panelized & modular systems

Waste Reduction

M2.1	0	3	Resource efficient wall system with integral insulation
M2.2	0	2	Develop a construction and demolition waste management plan
M2.3	3	2 - 4	Implement job site waste management
	4		# of items implemented
	0		List items (i.e.: a, b, c, etc.)
M2.4	0	1	Compost bin/built in collection of recyclables
M2.5	0	1 - 2	Engineered roof and floor components
	0		80% of floor (or code allowance)
	0		80% of roof (or code allowance)
M2.6	0	1	Finger jointed or laminated products
M2.7	0	1	Eco-friendly trim
M2.8	0	1	Perimeter based on 2 foot dimensions
M2.9	0	1	Over 50% of each interior wall adheres to a 2' layout
M2.10	0	1	Stack framing
M2.11	1	1	2-stud corners with drywall clips
M2.12	0	1	T-wall with drywall clips

Durability

M3.1	0	1	Roof slope ≥ 3:12 but ≤ 6:12
M3.2	1	1	Large overhangs (eave and gable)
M3.3	0	1	Air admittance vents
M3.4	0	1	Wood frame house and/or wood frame 2nd floors designed with vented rain screen
M3.5	-	1	Siding and exterior trim primed all sides
M3.6	1	1	Plants/turf minimum of 2ft. from foundation
M3.7	0	1	Sprinklers and emitters are located a minimum of 2 ft from foundation
M3.8	0	1	Use armored, PEX, or metal hoses (except copper) from service to all fixtures/appliances
M3.9	0	2	Automatic in home water sensor/shut off system installed
M3.10	0	1	Access panel to non-accessible plumbing fixture installed
M3.11	0	1	Laundry room below living floor or drain installed
	6	47	Total Points

6 Total points for Category 6 (10 min / 35 max)

Certifying Agent Category 6: 0

CATEGORY 7: DISASTER MITIGATION

Version 10
Revised 8-25-16

Category Minimum 5 / Category Maximum 30

Hurricane (wind, rain, storm surge)

DM1.1	-	2	Safe room
DM1.2	-	2	Unvented attic or No attic
DM1.3	2	2	Window, door, and skylight protection or impact resistant type
DM1.4	-	1	Attached garage and exterior door protection
DM1.5	1	1	Exterior structures and equipment properly anchored
DM1.6	2	2	Secondary water protection installed on roof
DM1.7	2	2	Adhesive applied to roof sheathing
DM1.8	-	5	Comply with Fortified For Safer Living Standards

Flood (must incorporate all three)

DM2	3	3	Yes	Finished floor level at least 12" above 100 yr flood plain
			Yes	Bottom of slab at least 8" above the top of backfilled dirt, graded for proper drainage
			Yes	Garage floor & driveway sloped to drain out. Garage floor at least 4" lower than living floor

Fire (must incorporate all three for 3.1)

DM3.1	3	3	Yes	Fire resistant exterior wall cladding
			Yes	Fire resistant roof covering or sub-roof
			Yes	Fire resistant soffit and vent material
DM3.2	0	3	-	Fire Sprinklers installed to cover 100% of living area of home

Lightning & Electronics Protection

DM4	-	1 - 2	Installed Surge Suppression or Lightning Protection System

Termites (must comply w/required credits listed below AND EITHER DM 4.1 OR DM 4.2 OR DM 4.3 to receive points)

	required		Seal slab penetrations
	required		Vegetation > 2 ft. from foundation
	required		Slopes graded away from building
DM 5.1	0	10	**DM 5.1: Chemical Soil Treatment Used**
			- Exterior cladding installed to prohibit intrusion
			- Rain gutters installed (downspouts discharge a minimum of 3' from home) **OR** meet large overhangs (≥2')
			- Condensate line(s) discharge a min of 2' from home & are located 5' or more from dryer vent
			- Irrigation/sprinkler water does not hit building
			- Damage replacement warranty issued and available for annual renewal
	OR		
DM 5.2		10	**DM 5.2: Chemical Soil Treatment Avoided**
			- Chemical soil treatment avoided
			- Alternative Florida Building Code approved method of foundation protection employed
	OR		
DM 5.3		12	**DM 5.3: Treated wood products**
			- All wood products serving structural or exterior finish purposes are borate or ACQ treated
DM5.4	-	1	80% of Cellulose insulation used is Borate treated
	13	38	Total Points

13 Total points for Category 7 (5 min / 30 max)

Certifying Agent Category 7: 0

CATEGORY 8: GENERAL

Version 10
Revised 8-25-16

Category Minimum 0 / Category Maximum 40

Small House Credit

G1.1	20	0 - 25	Conditioned house size *(enter **no** if not claiming any points)*
	1,235		:square feet of conditioned area

Adaptability

G2.1	0	2	Roof trusses designed for addition
G2.2	0	1 - 2	Unfinished rooms
G2.3	0	1	Install a minimum of 2 upgraded automation system

Renewable Power Generation

G3.1	0	1 - 5	Reduce peak demand or annual load
	0		1 point for each 2kW system size

Remodel

G4.1	0	10	Remodeling structure (HERS Index < 80)
G4.2	3	3	Toilets 1.6 gpf and showers 2.5 gpm or less
G4.3	0	2	Upgrade existing installed irrigation with rain gauge, timer and code irrigation heads
G4.4	0	2	Existing homes with pools - upgrade pump to variable speed or dual speed
G4.5	2	2	Roof to wall connection upgrades

Other

G5.1	0	1 - 2	Home builder/designer/architect/landscape architect member of FGBC
	0		:Number of members on the team that are members of FGBC
G5.2	2	2	Homeowner's manual, including information, benefits, operations - per reference guide
G5.3	0	2	Minimum 1 hour Hands on training provided to homeowner
G5.4	0	1	Plan for edible landscape/food garden
G5.5	2	2	Guaranteed energy bills
G5.6	0	1 - 5	INNOVATIVE CREDITS
			Description of innovation:
			0
	29	49	Total Points

29 Total points for Category 8 (0 min / 40 max)

Certifying Agent Category 8: 0

FGBC Home Score

Version 10

Category	Your Score	Required Min - Max
Category 1: Energy	37	30 - 75
Category 2: Water	17	15 - 40
Category 3: Lot Choice	9	0 - 15
Category 4: Site	8	5 - 30
Category 5: Health	16	15 - 35
Category 6: Materials	6	10 - 35
Category 7: Disaster Mitigation	13	5 - 30
Category 8: General	29	0 - 40

Total: **135**

Total Need: **104**

Certified Home Score **131**

Certification Level: **Silver**

The Total Need number will automatically adjust as points are earned for each criteria in the checklist.

Home Address
0
0

CATEGORY 6: MATERIALS

Category Minimum 10 / Category Maximum 35

Revised 8-25-16

	Points Achieved	Points Possible	Criteria	Certifying Agent Notes
Components				
M1.1		1	Recycled content roof material	
M1.2	0	2 - 3	Certified sustainable lumber	
			☐ homes with minimum of 1 story wood frame exterior walls have 80% of all lumber certified	
		OR	☐ home has no exterior wood walls & 80% of remaining lumber used for the home is certified.	
M1.3		1	Engineered / alternative material for outdoor living	
M1.4		1	Concrete with fly ash or blast furnace slag	
M1.5		1	Recycled content siding or soffit material	
M1.6		1	Eco-friendly insulation	
M1.7		1	Recycled content drywall	
M1.8		1	Recycled content paint	
M1.9		1	Steel interior studs	
M1.10		1	Eco-friendly flooring material	
M1.11		1	Eco-friendly ceiling materials	
M1.12	0	1 - 3	Locally produced materials	
			☐ minimum 80% of all new windows & doors are from local manufacturers & are operable	
			☐ 50% of all doors are reused doors **or** 50% of all windows are reused windows	
			☐ 80% of all structural components are from local sources - includes panelized & modular systems	
Waste Reduction				**Certifying Agent Notes**
M2.1		3	Resource efficient wall system with integral insulation	
M2.2		2	Develop a construction and demolition waste management plan	
M2.3	3	2 - 4	Implement job site waste management	
			4 # of items implemented	
			List items (i.e.: a, b, c, etc.)	
M2.4		1	Compost bin/built in collection of recyclables	
M2.5	0	1 - 2	Pre-Engineered roof and floor components	
			☐ 80% of floor (or code allowance) ☐ 80% of roof (or code allowance)	
M2.6		1	Finger jointed or laminated products	
M2.7		1	Eco-friendly trim	
M2.8		1	Perimeter based on 2 foot dimensions	
M2.9		1	Each interior wall adheres to 2-foot dimensions for minimum of 50% of the interior walls	
M2.10		1	Stack framing	
M2.11	1	1	2-stud corners with drywall clips	
M2.12		1	T-wall with drywall clips and/or ladder type exterior tee framing	
Durability				**Certifying Agent Notes**

M3.1		1	Roof slope ≥ 3 in 12 but ≤ 6 in 12	
M3.2	1	1	Large overhangs (eave and gable)	
M3.3		1	Air admittance vents	
M3.4		1	Wood frame house and/or wood frame 2nd floors designed with vented rain screen	
M3.5	-	1	Siding and exterior trim primed all sides	
M3.6	1	1	Plants/turf minimum of 2-ft. from foundation	
M3.7		1	Sprinklers and emitters are located a minimum of 2 ft from foundation	
M3.8		1	Use armored, PEX, or metal hoses (except copper) from service to all fixtures/appliances	
M3.9		2	Automatic in home water sensor/shut off system installed	
M3.10		1	Access panel to non-accessible plumbing fixture installed	
M3.11		1	Laundry room below living floor or drain installed	
	6	47	Total Possible Points	

6	Total points for Category 6 (10 min / 35 max)

Certifying Agent Category 6:	

CATEGORY 7: DISASTER MITIGATION

Category Minimum 5 / Category Maximum 30

Revised 8-25-16

	Points Achieved	Points Possible		Criteria	
Hurricane (wind, rain, storm surge)					**Certifying Agent Notes**
DM1.1	-	2		Safe room	
DM1.2	-	2		Unvented attic or No attic	
DM1.3	2	2		Window, door, and skylight protection or impact resistant type	
DM1.4	-	1		Attached garage and exterior door protection	
DM1.5	1	1		Exterior structures and equipment properly anchored	
DM1.6	2	2		Secondary water protection installed on roof	
DM1.7	2	2		Adhesive applied to roof sheathing	
DM1.8	-	5		Comply with Fortified For Safer Living Standards	
Flood (must incorporate all three)					**Certifying Agent Notes**
DM2	3	3	Yes	Finished floor level at least 12" above 100 yr flood plain	
			Yes	Bottom of slab at least 8" above the top of backfilled dirt, graded for proper drainage	
			Yes	Garage floor & driveway sloped to drain out. Garage floor at least 4" lower than living floor	
Fire (must incorporate all three for 3.1)					**Certifying Agent Notes**
DM3.1	3	3	Yes	Fire resistant exterior wall cladding	
			Yes	Fire resistant roof covering or sub-roof	
			Yes	Fire resistant soffit and vent material	
DM3.2	0	3	-	Fire Sprinklers installed to cover 100% of living area of home	
Lightning & Electronics Protection					**Certifying Agent Notes**
DM4	-	1 - 2		Installed Surge Suppression or Lightning Protection System	
Termites (must comply w/required credits listed below AND EITHER DM 5.1 OR DM 5.2 OR DM 5.3 to receive points)					**Certifying Agent Notes**
		required	N/A	Seal slab penetrations (Health: H2.4)	
		required	N/A	Vegetation > 2 ft. from foundation (Materials: M3.6)	
		required	N/A	Sprinklers & emitters are 2 feet from house (Materials: M3.7) OR no installed irrigation (Water: W6.1)	
DM 5.1	0	10		**DM 5.1: Chemical Soil Treatment Used**	
			-	Exterior cladding installed to prohibit intrusion	
			-	Rain gutters installed (downspouts discharge a minimum of 3' from home) OR meet large overhangs (≥2')	
			-	Condensate line(s) discharge a min of 2' from home & are located 5' or more from dryer vent	
			-	Irrigation/sprinkler water does not hit building	
			-	Damage replacement warranty issued and available for annual renewal	
	OR				

DM 5.2		10	**DM 5.2: Chemical Soil Treatment Avoided**	
		-	Chemical soil treatment avoided	
		-	Alternative Florida Building Code approved method of foundation protection employed	
	OR			
DM 5.3		12	**DM 5.3: Treated wood products**	
		-	All wood products serving structural or exterior finish purposes are borate or ACQ treated	
DM5.4	-	1	80% of Cellulose insulation used is Borate treated	
	13	41	Total Possible Points	
	13	Total points for Category 7 (5 min / 30 max)		
	Certifying Agent Category 7:			

CATEGORY 8: GENERAL

Category Minimum 0 / Category Maximum 40

Revised 8-25-16

	Points Achieved	Points Possible	Criteria	Certifying Agent Notes
Small House Credit				
G1.1	20	0 - 25	Conditioned house size *(enter **no** if not claiming any points)*	
			1,235 Square feet of conditioned area	
Adaptability				
G2.1		2	Roof trusses designed for addition	
G2.2		1 - 2	Unfinished rooms 1point for >100 SF, 2 points for > 200 SF	
G2.3		1	Install a minimum of 2 upgraded automation system	
Renewable Power Generation				
G3.1	0	1 - 5	Reduce peak demand or annual load	
			Enter size of PV System in kW (1 point for each 2kW)	
Remodel & Existing Homes - NOTE: Credits G4.1 - G4.5 are ONLY available for EXISTING homes				
G4.1		10	Remodeling structure (HERS Index ≤ 80)	
G4.2	3	3	Toilets 1.6 gpf and showers 2.5 gpm or less	
G4.3		2	Upgrade existing installed irrigation with rain gauge, timer and code irrigation heads	
G4.4		2	Existing homes with pools - Upgrade pump to variable speed or dual speed	
G4.5	2	2	Improve roof to wall connections	
Other				
G5.1	0	1 - 2	Home builder/designer/architect/landscape architect member of FGBC	
			:Number of members on the team that are members of FGBC	
G5.2	2	2	Homeowner's manual, including information, benefits, operations - per reference guide	
G5.3		2	Minimum 1 hour hands on training provided to homeowner	
G5.4		1	Plan for edible landscape/food garden	
G5.5	2	2	Guaranteed energy bills	
G5.6		1 - 5	INNOVATIVE CREDITS	
			Description of innovation:	
	29	49	Total Possible Points (49 for new homes, 68 for existing homes)	

29 Total points for Category 8 (0 min / 40 max)

Certifying Agent Category 8:	

PREREQUISITES:

At least one measure from each of the following:

Revised 8-25-16

Required: One item from each of the following 3 prerequisites MUST be incorporated in the home for FGBC Certification

Prerequisite 1: Swimming Pool / Spa			Certifying Agent Notes
P1.1	Yes	Sanitation system that reduces chlorine use	
P1.2	N/A	Pool Cover	
P1.3	N/A	Solar pool heating system	
P1.4	N/A	Dedicated PV's to run pool equipment	
P1.5	N/A	Home has no pool or spa	

Prerequisite 2: Waterfront Considerations			Certifying Agent Notes
P2.1	N/A	Use of native aquatic vegetation in shoreline area	
P2.2	N/A	No turf adjacent to natural water bodies(Low maintain plants instead)	
P2.3	Yes	Use of terraces, swales, or berms to slow storm water	
P2.4	Yes	Home site does not border natural water body	

Prerequisite 3: No Invasive Exotic Species				Certifying Agent Notes
P3.1	Yes	Landscape Considerations		
	New	Is the landscape existing or new		

CATEGORY 1: ENERGY

Category Minimum 30 / Category Maximum 75

Revised 8-25-16

	Points Achieved	Points Possible	Criteria		Certifying Agent Notes
HERS Index - Energy Rating					
E1.1	30	3 - 75	Confirmed Florida HERS Rating - 3 points for each HERS Index point below 80		
			Yes	:Does the Home have a confirmed HERS Index	
			70	:Confirmed HERS Index	
Design, Finishes, Amenities					**Certifying Agent Notes**
E2.1		1	Thermal Enclosure System Inspection		
E2.2	1	1	Ductwork joints sealed with mastic		
E2.3		1	Ductwork smoke tested allowing leaks to be sealed prior to drywall		
E2.4		1	Cross vent and ceiling fans code credit		
E2.5		1	Roofed porch, Min 100ft^2 AND meets cross-ventilation requirements		
E2.6		1	Passive solar space heating system		
E2.7		1	Passive solar day-lighting		
E2.8		1	Deciduous trees on south		
E2.9	0	1 - 4	House shaded on east and west by trees		
				% of the designated wall areas (average of east and west walls) that are shaded by trees.	
E2.10		1	Washer and dryer outside of conditioned space		
E2.11		1	Floor joist perimeter insulated and sealed		
E2.12	1	1	Light colored exterior walls (80% minimum)		
				Enter the Solar Reflecive Index (SRI) of Paint	
E2.13	1	1 - 2	Light colored interior walls, ceilings, carpet/floors		
			Yes	all major living spaces wall and ceiling surfaces have a reflectance of at least 50%	
				Enter the Light Reflectance Value (LRV) of Paint	
				bedrooms and all major living spaces have floors, walls, & ceilings are light-colored	
				Enter the Light Reflectance Value (LRV) of Paint	
E2.14	1	1	Max 100W fixtures in bathrooms		
E2.15		1	Pre-plumb for solar hot water		
E2.16		2	Install a State Certified rated solar hot water system		
E2.17		1	Compact hot water distribution		
E2.18		1	Insulate all hot water pipes		
E2.19	1	1	Energy-efficient clothes dryers		
E2.20	1	1	Energy-efficient ovens/ranges		
E2.21	1	1	Energy Star® clothes washers		
E2.22		1	Efficient well pumping		

E2.23	0	1	Efficient envelope volume	
			Total Gross Wall Area	
		1	Conditional Square Footage	
		1	Number of Stories	
E2.24		1	Dwelling unit attached, zero lot-line, row house	
E2.25	N/A	1 - 2	Ceiling Penetrations: No pentrations in ceiling (2 points), No penetrations in the themal envelope (1 point)	
E2.26		3	Energy Star® Advanced Lighting Package	
E2.27		2	Outdoor lights are energy efficient.	
E2.28		1	Lighting Motion Sensors	
E2.29		1	Energy Efficient Sheathing	
	37	112	Total Possible Points	
	37	Total points for Category 1 (30 min / 75 max)		
	Name of HERS Rater:			
	Certifying Agent Category 1:			

A NOTE ABOUT ENERGY

As you review the FGBC Green Home Standard you may wonder why many energy saving features do not appear as line items. The FGBC has elected to use a whole-house, performance-based energy rating for points versus offering an exhaustive list of prescriptive energy saving alternatives. The performance-based Energy Rating is called a HERS Index. For information purposes the adjacent chart lists many of the inputs used to calculate a home's HERS Index.

Energy Gauge USA / HERS Index		
Envelope		
Floors	Windows	Roof
Foundation type	# & size of windows	Roof Configuration / Slope
Insulation value	Tint / U-factor	Roof Material / Color
Perimeter / Area	Type of Frame	Attic Details
Floor covering	Overhang details	Conditioned ceiling Area
Walls	Ceilings	Solar absorbance
Orientation	Ceiling style	Roof deck insulation level
Area	Insulation value	Radiant barrier system
Insulation value	Area	Attic Ventilation ratio
Doors	Garage	Infiltration
Door Area / U Value	Attached or not	Building envelope leakage
Equipment		
Hot Water	Ducts	Appliances and Lights
Type / location	Insulation value	Programmable Thermostat
Efficiency	Duct Location	Refrigerator
Daily usage	Air Handler Location	% fluorescent lighting
Set Temperature	Amount of leakage	Ceilings fans
Solar or heat recovery	Duct surface area	Dishwasher
Cooling	Heating	Photovoltaic's
System Type	System Type	Array
Capacity	Efficiency	Inverter
SEER	Capacity	Batteries

CATEGORY 2: WATER

Category Minimum 15 / Category Maximum 40

Revised 8-25-16

N/A	Is the landscape existing or new

	Points Achieved	Points Possible	Criteria	Certifying Agent Notes
W1 Fixtures and Appliances				
W1.1	0	2 - 3	Water saving clothes washer	
			: Water factor (WF) of clothes washer	
W1.2	-	1	Low-flow shower heads (must be ≤ 2.0 gpm)	
W1.3		1	All showers equipped with only 1 showerhead per shower (1 showerhead/15sf allowed)	
W1.4	-	1 - 2	All lavatory sink faucets have flow rates of ≤ 1.5 gpm (all ≤ 1.0 gpm = 2 pts)	
W1.5	2	2	High-efficiency, dual-flush or single-flush toilets (all toilets ≤ 1.28 gpf)	
W1.6		1	Toilet with UNAR MaP Rating of 600 gpf or greater	
W2 Greywater Reuse				
W2.1		1 - 3	Greywater system installed	
W3 Rainwater Harvesting				
W3.1	3	1 - 3	Rainwater harvesting system installed	
W4 Reclaimed Water Reuse				
W4.1	N/A	1 - 2	Water for irrigation	
W4.2		1	Meter on reclaimed irrigation system	
W4.3		1	Volume-based pricing arrangement	
W4.4		2	For toilet flushing	
W5 Installed Landscape				
W5.1	2	2	Drought-tolerant turf, no turf in densely shaded areas	
W5.2	1	1 - 3	60%, 80%,100%, of plants/trees from drought-tolerant list	
			60% :Percentage of drought tolerant plant	
W5.3	2	2	All plants/trees selected to be compatible with their location in the landscape	
W5.4	3	3	Turf less then 50% of landscape	
W5.5		2	No turf in densly shaded areas	
W5.6		2	Plants with similar sun and water requirements grouped together	
W5.7	1	1	Mulch applied 3 - 4 inches deep around plants (no volcano mulch)	
W5.8	1	1	Non-cypress mulch used	
W5.9		2	Soil tested and amended where necessary	

W6 Installed Irrigation				Certifying Agent Notes
W6.1	-	10	No permanent in-ground irrigation system	
W6.2	2	2	Innovative irrigation technology	
W6.3	0	3	Landscape irrigated to FGBC standard	
			Separate zones for turf and landscape beds - multi program controller	
			High-volume irrigation does not exceed 60% of landscape area	
			Head to head coverage for rotor/spray heads	
			Micro-irrigation only in landscape beds and narrow areas	
			Provide owner & FGBC with plan and instructions	
W6.4	0	1		
	OR		Pressure compensating spray heads installed in spray zones	
			Pressure regulating valves are installed for spray zones	
W6.5		1	In poor drainage (low) areas, heads are installed with check valves	
W6.6		1	High volume irrigated areas have matched precipitation rates	
W6.7		1	Pop-up sprinkler heads significantly rise above turf grass height	

W7 Additional Water Certification Requirements				Certifying Agent Notes
W7.1		5	Meet or exceed Florida Water Star℠ or WaterSense standards	
W7.2		2	Florida Friendly Landscape™ Program new construction certification	
	17	57	Total Possible Points	

17	Total points for Category 2 (15 min / 40 max)

Certifying Agent Category 2:	
Landscape Auditor:	
Credentials of Auditor:	

CATEGORY 3: LOT CHOICE

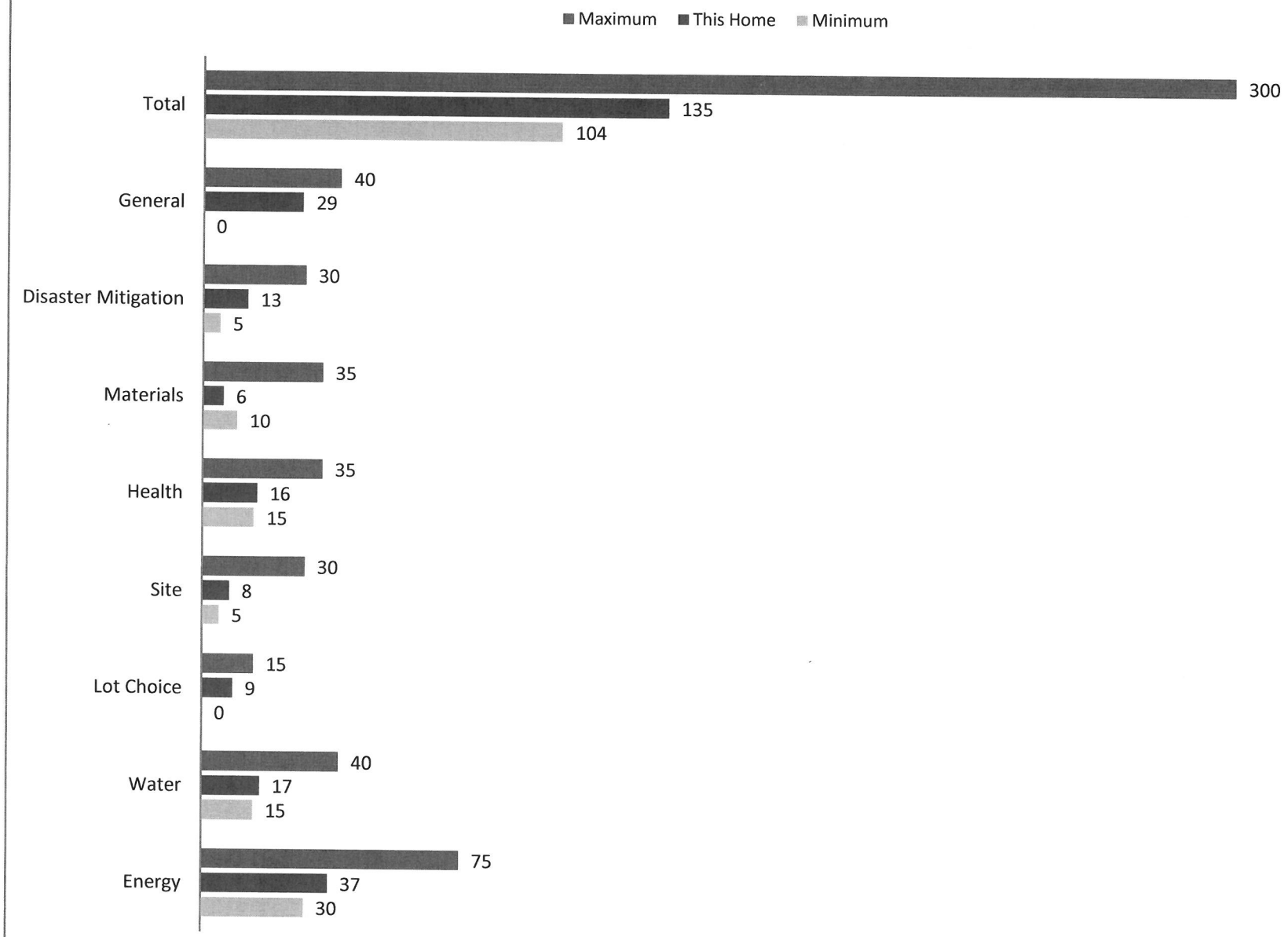
Category Minimum 0 / Category Maximum 15

Revised 8-25-16

	Points Achieved	Points Possible	Criteria			Certifying Agent Notes
LC1.1	0	2 - 6	House built within designated FGBC green land development			
					Name of FGBC Green Development	
				% above certification requirement of the FGBC Certified land development		
LC1.2		2	Home within a certified green local government			
LC1.3	2	2	Built on an infill site			
LC1.4	1	1	Site within 1/8 mile of existing infrastructure			
LC1.5	2	2	Site within 1/4 mile to mass transit			
LC1.6	2	2	Site within 1/2 mile of public open/green space			
LC1.7	2	2	Site within 1/4 mile or 1/2 mile of existing basic community resources			
			1/2 Mile	away from basic community resources		
			Yes	Arts and entertainment center		
			Yes	Bank		
			Yes	Community or civic center		
			Yes	Convenience store		
				Daycare center		
			Yes	Fire station		
			Yes	Fitness center or gym		
				Laundry or dry cleaner		
				Library		
			Yes	Medical or dental office		
			Yes	Pharmacy		
				Police station		
				Post office		
			Yes	Place of worship		
			Yes	Restaurant		
			Yes	School		
			Yes	Supermarket		
			Yes	Other Neighborhood-serving retail		
			Yes	Other office building or major employment center		
LC1.8		2	Site located in small lot cluster development			
LC1.9		2	Brownfield site			
	9	21	Total Possible Points			

9	Total points for Category 3 (0 min / 15 max)
Certifying Agent Category 3:	

FGBC Green Home Certification Summary Chart



FGBC FLORIDA GREEN BUILDING COALITION

FGBC FLORIDA GREEN BUILDING COALITION

Florida Green Home Standard

Version 10

Instructions

Effective October 1, 2013

Revised 8-25-16

Please read the "Standard & Policies" document for complete compliance requirements and operating principles.

FOR NEW HOMES

Each home must comply with the three prerequisites in order to be eligible for certification. Select items to obtain the minimum number of points listed for each category (category minimums). (The sum of the minimums totals 80 points.) Accumulate at least an additional 20 points of your choice to obtain the required 100 TOTAL* to qualify for the program.

* If any category minimums cannot be achieved, point deficiencies may be added to the total minimum required score of 100, creating an "adjusted project minimum required points" (the points YOUR project must achieve for certification). (Example: Applicant elects to achieve only 10 points from a category with a minimum of 15. Project may still qualify if: total points equal or exceed 100 + [15-10] = 105.) **Note that category maximums cannot be exceeded at any time.** Some items require submittals that are colored red. Suggested submittals for other items are colored black.

FOR EXISTING HOMES (REMODELS)

Existing homes are exempt from the three prerequisites and the category minimums that are required for new construction. Please refer to the "Standards & Policies" document Section 2 for the Standards definition of an existing home. Use Tabs 15 (Existing Home Application). Homes meeting the following requirements will receive a **Green Remodel Designation**.

- Existing homes must accumulate a total of 100 points to achieve certification
- Each existing home/remodel MUST achieve the required 13 REMODEL points (found in the General category)
- The remaining 87 points required for certification may be earned using any combination of credits.
- Category maximums can not be exceeded at any time.
- The minimum HERS Index to qualify for the FGBC Green Remodel Designation is 80.

Some items require submittals that are colored red. Suggested submittals for other items are colored in black.

FOR MULTI-FAMILY PROJECTS

For Multi-family projects. Use this checklist and the application form found on Tab 18. Green Home Certification is awarded to each individual unit that accumulates the appropriate number of points toward certification. Each unit is treated as a "home."

- Please refer to the Reference Guide for additional details regarding how to score common spaces for multi-family projects
- Please refer to the Standards & Policies document, Section 2-k. for additional information on streamlined submittal options.

IMPORTANT GUIDELINES:

1. The FGBC Home Standard Version in effect when the home is permitted is the checklist that must be used to certify the home. However, you may opt to use a newer version if available and applicable. Any application submitted using a previous version of the standard must provide a copy of the building permit.
2. Checklists and supporting documentation must be submitted by an Active FGBC Certifying Agent (CA).
3. If this Excel file is altered in any way, the application will not be accepted. Altered files will be returned unprocessed to the submitter.
4. Duing the review process, the project evaluator may request additional information and/or copies of "suggested submittals" indicated in the Reference Guide to verify that the project has achieved the credit point.

FGBC CERTIFICATION LEVELS

The FGBC Green Home Certification program uses a tiered rating system. Certification is awarded at different levels according to points achieved over the minimum point threshold.

Bronze	0-30 points over the project's required minimum
Silver	31-60 points over the project's required minimum
Gold	61-90 points over the project's required minimum
Platinum	91 + points over the project's required minimum

FEES

Single Family New and Existing Home Fees

Fee	Builder or Homeowner Must Be Member
$75	Member of FGBC **and** FHBA
$100	Member of FGBC **or** FHBA
$125	Non Member

Multi-Family Fees

Members	$100 application fee + $100 per building + $25 per unit
Non Members	$100 application fee + $100 per building + $35 per unit

Additional Options

$50	Pre-Application (next tab) use to receive your "application pending" yard sign, fee is deducted from your final application cost
$39	FGBC Certified Home Bronze Plaque

For Additional Information:
Contact your Certifying Agent
or
Contact FGBC: www.FloridaGreenBuilding.org
PH: 850-894-3422
Email: info@FloridaGreenBuilding.org

Instructions for Submission:

Electronic Submissions (Required)

Complete the credit card authorization above.

(Note: Payment by check is acceptable - see mailing instructions below)

Upload the application, checklist and supporting documents via the FGBC link below. All application packages must be submitted as one zipped file.

https://dropbox.hightail.com/certifications

Mailing Instructions

Make check payable to "FGBC" based on fee schedule OR submit credit card payment information

Mail fees and a printed copy of the completed application with an electronic version of the Checklist and supporting documents to:

FGBC
1415 E. Piedmont Dr. Suite 5
Tallahassee, FL 32308-7954

FGBC FLORIDA GREEN BUILDING COALITION

Florida Green Home Standard

Version 10

Pre-Application & Request for Yard Sign

(Use this form to order an "Application Pending Yard Sign for site use during construction)

Builder Information

FGBC # _____ FHBA #: _____
Name: _____
Company: _____
Address: _____
City / Zip: _____
Phone: _____
E-mail: _____
DBPR License #: _____

Home Information

Address: _____
City/ST _____
Zip Code _____

Certifying Agent Information

Name: _____
Company: _____
Address: _____
City / Zip: _____
Phone: _____
Fax: _____
E-mail: _____

Amount Due: **$75** (Will be Applied to Final Application Fee)

Payment Information

Credit Card Payment: _____ Visa _____ Mcard _____ Amex _____ Discover

Card Number: _____

Expiration Date: _____ Billing Zip Code _____

Name on Card: _____

Cardholder Signature: _____

Send To:

FGBC, 1415 E. Piedmont Dr. Suite 5, Tallahassee, FL 32308-7954
Fax: 850-671-4897 **Email: cooksb@nettally.com**

CATEGORY 4: SITE

Category Minimum 5 / Category Maximum 30 — Revised 8-25-16

I	N/A		That all credits in this category deal only with buildable land. What this means is that if the land is not legally allowed to be disturbed then you may not count this as part of the percentage required for the given credit.
	Points Achieved	Points Possible	Criteria

				Certifying Agent Notes
Native Tree and Plant Preservation				
S1.1	2	2	Maximize tree survivability	
S1.2	1	1 - 2	Minimize soil compaction	
			Restrict all construction equipment from driving on site during construction except for area of <25% of site.	
S1.3		2	Replant or donate removed vegetation	
S1.4	0	1 - 9	Preserve or create wildlife habitat / shelter	
			% of property that was created or preserved as a wildlife habitat or shelter	
On Site Use of Cleared Materials				Certifying Agent Notes
S2.1		2	Mill clear trees	
S2.2	0	1 - 2	Reuse cleared materials for mulch / landscape	
			Mulch is both cleared and reused:	
Erosion Control / Topsoil Preservation				Certifying Agent Notes
S3.1		2	Develop and implement an erosion control site plan	
S3.2	1	1	Stabilize disturbed soil	
S3.3		2	Stage disturbance	
S3.4		1	Control sediment runoff during construction	
S3.5	1	1	Save and reuse any removed topsoil	
Drainage / Retention				Certifying Agent Notes
S4.1	2	2	Onsite designated retention area	
S4.2		2	Direct filtered rooftop runoff to planted area(s)	
S4.3	1	1 - 4	Maintain pervious surface area (If not taking points input 1 for Total Lot Area)	
			Partial Pervious	
			46 % Pervious Material — 8633 Total Lot Area (sq. ft.)	
			4653 Coverage Area (sq. ft.) — 0 100% Pervious sq. ft.	
			2140.38 Equivalent Pervious Area --> — 2140.4 Equivalent Pervious Area (semi-pervious)	
			1 Total points for pervious area	
	8	34	Total Possible Points	

8	Total points for Category 4 (5 min / 30 max)
Certifying Agent Category 4:	

CATEGORY 5: HEALTH

Category Minimum 15 / Category Maximum 35 — Revised 8-25-16

	Points Achieved	Points Possible	Criteria	Certifying Agent Notes
Combustion				
H1.1		3	Detached or Air Sealed Garage or Carport	
H1.2		1	Garage (attached or detached)- exhaust fan on motion sensor and timer	
H1.3		1	Interior Fireplace - Direct vent, sealed combustion w/electronic ignition, factory built wood burning or no fireplace	
H1.4	0	1 - 2	No unsealed space or water heating combustion located inside the conditioned area - or electric	

Space Heating		Water Heating	
N/A	Electric	N/A	Electric
N/A	Sealed combustion equipment	N/A	Sealed combustion equipment
N/A	Sealed combustion closet	N/A	Sealed combustion closet
		N/A	Outside of conditioned space

Moisture Control				**Certifying Agent Notes**
H2.1		1	Drainage tile on and around top of footing	
H2.2		1	Drainage board for below grade walls	
H2.3		1	Gravel bed beneath slab on grade floors	
H2.4		1	Seal slab penetration	
H2.5		1	Capillary break between foundation and framing	
H2.6	3	3	Central dehumidification system	
H2.7		1	No vapor barrier on inside of assemblies	
H2.8	1	1	Moisture control for tub/shower and shower surrounds	

Source Control				**Certifying Agent Notes**
H3.1	1	1	No exposed urea-formaldehyde wood products	
H3.2		2	Zero VOC paints, stains, and finishes	
H3.3		1	Low VOC paints, stains, and finishes	
H3.4		1	Low VOC sealants and adhesives	
H3.5	N/A	1 - 2	Minimize carpet use (<50% 1pt, No wall to wall carpet 2pts)	
H3.6		1	Healthy flooring	
H3.7		1	Healthy insulation	
H3.8	1	1	Protect ducts, range hood, and bath exhaust fans during construction	
H3.9	3	3	Integrated pest management plan	

Cleanability							Certifying Agent Notes
H4.1	0	1 - 2	Central vacuum system				
			N/A	System roughed in	N/A	Installed with exhaust outdoor	
					N/A	Installed with exhaust indoor thru HEPA filter	
H4.2		1	Useable entry area				

Universal Design				Certifying Agent Notes
H5.1	1	1 -3	Universally designed living area	

Ventilation				Certifying Agent Notes
H6.1	-	2 - 4	Controlled mechanical ventilation	
H6.2		1	Radon/Soil gas vent system installed	
H6.3	1	1	Floor drain sealed	
H6.4		1	Energy star® bath fans with timer or humidistat	
H6.5	1	1	Kitchen range hood vented to exterior	
H6.6		1	Laundry rooms inside conditioned space must have a make-up air source	
H6.7		3	Whole house positive filtration	
H6.8	2	1 - 2	Efficient HVAC filter	
H6.9	1	1	HVAC filter easily accessible	
H6.10	1	1	Install screens on all windows and doors	
H6.11		1	Manual D duct design	
	16	52	Total Possible Points	

16	Total points for Category 5 (15 min / 35 max)

Certifying Agent Category 5:	

Draft Ranking

CITY OF KEY WEST, FLORIDA
PLANNING DEPARTMENT

1300 White Street ■ Key West, Florida 33040 ■ Main: 305.809.3720

December 21, 2020

Gregory S. Oropeza
221 Simonton Street
Key West FL 33040

Re: Staff Comments for Year 8 (2020-2021) Building Permit Allocation System (BPAS) Application
3450 Duck Avenue (RE # 00053150-000000)

Dear Mr. Oropeza,

Thank you for your BPAS application for one (1) market-rate residential dwelling unit and one (1) affordable-rate residential unit on property located at 3450 Duck Avenue. The application has been reviewed for compliance with the criteria established in Chapter 108, Article X of the Land Development Regulations (LDRs) of the City's Code of Ordinances and reviewed for completeness with the application submittal requirements. The following are the planning department staff comments related to the review of the application.

Completeness

- ✓ The application included all of the documentation required.

BPAS Scoring Criteria

The points claimed in Exhibit C and D have been verified by staff.

Additional Documentation & Comments

The proposesd plans do not indicate a rainwater catchment system nor electronic charging units. Please submit revised plans including a rainwater catchment system that meets the minimum requirements and electronic charging units claimed as additional points. The proposed design may need a variance to Section 122-1181, " No accessory uses or structure shall be erected in any required front or side yard, and the accessory uses or structure shall not cover more than 30 percent of any required rear yard."

General Information

Deadline: Please submit one (1) paper copy and an electronic copy of your response and the requested revisions to the Planning Department no later than **5:00 p.m. on Friday, January 8, 2021**.

Assistance: Please contact us with any questions or need for clarification. Planning staff is available to meet with you to discuss your application in greater detail. More information is available at www.cityofkeywest-fl.gov/bpas.

Sincerely,

M. Paul-Leto

Melissa Paul-Leto
Planner I
P: 305.809.3724 ▪ E: mleto@cityofkeywest-fl.gov

Revised Plans

3450 DUCK AVENUE, KEY WEST, FL

SITE DATA

SITE ADDRESS:	3450 DUCK AVE, KEY WEST, FLORIDA 33043
LEGAL DESC.:	KW FWDN SUB PLAT 2 PB1-189 LTS 23 AND 24 SQR 10 G48-97/103
FLOOD ZONE:	AE (EL 7') MAP & PANEL 12087C 1509K; EFFECTIVE 02-18-2005
LOT AREA:	5,853.6 SF
ZONING:	SINGLE FAMILY RESIDENTIAL
F.L.U.M.:	LOW DENSITY RESIDENTIAL
SETBACKS:	FRONT - 20 FT
	STREET SIDE - 10 FT; SIDE - 5 FT
	REAR - 25 FT
MAX. BUILDING HEIGHT:	30 FT
MAX. BUILDING COVERAGE:	35% (MAX. IMPERVIOUS - 50%)

DESIGN DATA

DESIGN LOADS (MINIMUM):

A.	ROOF DEAD LOAD	17 PSF (METAL)
B.	ROOF LIVE LOAD	20 PSF
C.	DEAD LOAD FOR UPLIFT CALCULATION	7PSF
D.	FLOOR DEAD LOAD (WOOD FRAMING)	20 PSF
E.	FLOOR DEAD LOAD (12" CONCRETE)	150 PSF
F.	FLOOR LIVE LOAD (LIVING AREAS)	40 PSF
G.	FLOOR LIVE LOAD (BALCONY AREAS)	60 PSF
H.	STAIRS LIVE LOAD	60 PSF AND 300 LBS NON-CONCURRENT
I.	GUARD RAILS/HANDRAILS	200 LBS

WIND DESIGN SPECIFICATIONS:

A.	BUILDING OCCUPANCY CATEGORY	II
B.	CONSTRUCTION TYPE	VB
C.	WIND SPEED	
a.	ULTIMATE (LRFD) =	180 MPH
b.	ALLOWABLE (ASD)=	140 MPH
E.	WIND EXPOSURE CATEGORY	D
F.	ENCLOSURE CLASSIFICATION	ENCLOSED
G.	INTERNAL PRESSURE COEFFICIENT	+/- 0.18
H.	WIND-BORNE DEBRIS AREA	YES
I.	REFER TO DRAWINGS FOR STRUCTURE HEIGHT AND AREA	
J.	STRUCTURAL LOADS AND DESIGN PRESSURES LISTED IN THESE PLANS ARE ALLOWABLE (ASD) UNLESS NOTED OTHERWISE	

LOCATION MAP

NOT TO SCALE

NORTH

DRAWING INDEX

SCOPE OF WORK

- NEW RESIDENTIAL CONSTRUCTION
- NEW ACCESSORY UNIT CONSTRUCTION

DESIGN CODE

- 2017 FLORIDA BUILDING CODE, 6th EDITION, BUILDING, FBC
- 2017 FLORIDA BUILDING CODE, 6th EDITION, RESIDENTIAL, FBC-R
- 2017 FLORIDA MECHANICAL CODE FBC-M
- 2014 NATIONAL ELECTRICAL CODE, NEC 2014
- 2017 FLORIDA PLUMBING CODE, FBC-P
- 2017 FLORIDA FUEL GAS CODE, 6th EDITION, FFPC
- FLORIDA FIRE PREVENTION CODE, FBC-FG
- NATIONAL FIRE PROTECTION ASSOCIATION, NEBA

COVER SHEET

ABBREVIATIONS

A.B.	Anchor Bolt	F.G.	Fixed Glass	Plt Ht.	Plate Height
Abv.	Above	Flr.	Floor	Plt Sh.	Plant Shelf
A/C	Air-Conditioner	Fnd.	Foundation	PSF	Pounds per square foot
Adj.	Adjustable	Flr. Sys.	Floor System	P.T.	Pressure Treated
A.F.F.	Above Finished Floor	F/P	Fireplace	Pwd.	Powder Room
A.H.U.	Air Handler Unit	Ft.	Foot / Feet	Rad.	Radius
ALT.	Alternate	Ftg.	Footing	Ref.	Refrigerator
B.C.	Base Cabinet	F.V.	Field Verify	Req'd.	Required
B.F.	Bifold Door	FX	Fixed	Rm.	Room
B.F.F.	Below Finished Floor	Galv.	Galvanized	Rnd.	Round
Bk Sh	Book Shelf	G.C.	General Contractor	R & SH	Rod and Shelf
Bm.	Beam	G.F.I.	Ground Fault Interrupter	SD.	Smoke Detector
BOT.	Bottom	G.T.	Girder Truss	S.F.	Square Ft.
B.P.	Bypass door	Hdr.	Header	Sh.	Shelves
Brg.	Bearing	Hgt.	Height	SHT	Sheet
Cir.	Circle	HB	Hose Bibb	S.L.	Side Lights
Clg.	Ceiling	Int.	Interior	S.P.F.	Spruce Pine Fir
Col.	Column	K/Wall	Kneewall	Sq.	Square
Comp.	A/C Compressor	K.S.	Knee Space	S.Y.P.	Southern Yellow Pine
C.T.	Ceramic Tile	Laun.	Laundry	Temp.	Tempered
D	Dryer	Lav.	Lavatory	Thik'n.	Thicken
Dec.	Decorative	L.F.	Linear Ft.	T.O.B.	Top of Block
Ded.	Dedicated Outlet	L.T.	Laundry Tub	T.O.M.	Top of Masonry
Dbl.	Double	Mas.	Masonry	T.O.P.	Top of Plate
Dia.	Diameter	Max	Maximum	Trans.	Transom Window
Disp.	Disposal	M.C.	Medicine Cabinet	Typ.	Typical
Dist.	Distance	Mfgr.	Manufacturer	UCL	Under Cabinet Lighting
D.S.	Drawer Stack	Micro.	Microwave	U.N.O.	Unless Noted Otherwise
D.V.	Dryer Vent	Min.	Minimum	VB	Vanity Base
D.W.	Dishwasher	M.L.	Microlam	Vert.	Vertical
Ea.	Each	Mir.	Mirror	V.L.	Versalam
E.W.	Each Way	Mono	Monolithic	VP	Vapor Protected
Elec.	Electrical	N.T.S.	Not to Scale	VTR	Vent through Roof
Elev.	Elevation	Opn'g.	Opening	W	Washer
Ext.	Exterior	Opt.	Optional	w/	With
Exp.	Expansion	Pc.	Piece	W.C.	Water Closet
F.B.C.	Florida Bldg. Code	Ped.	Pedestal	W.A.	Wedge Anchor
F.B.C.R.	Florida Bldg. Code Resid.	P.L.	Parallam	Wd.	Wood
F.F.	Finished Floor	PLF	Pounds per linear foot	WP	Water Proof

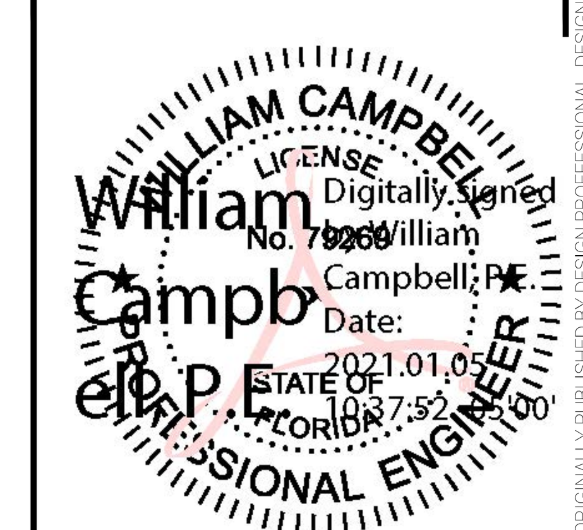
CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC

William R. Campbell, P.E.
Email: will@cecflk.com
Phone #: 305-735-4626
License #: 79269
CA/Registry #: 31437

PLANS ARE NOT VALID UNLESS SIGNED AND DATED



PROJECT #: 1838

Date: OCTOBER 26, 2020

SHEET 1 of 14

SHEET # CS

GENERAL NOTES

STRUCTURAL LUMBER
1. All wood members shall meet or exceed requirements stated in "ANSI/AF&PA National Design Specification for Wood Construction" and all referenced standards.
2. All wood members shall be Southern Pine #2, MC 19%, NO. 2 Dense or greater kiln dried as referenced in the Standards.
3. All wood members exposed to the exterior or directly contacting concrete or steel shall be Pressure Treated (PT) UC3B grade per AWPA Standards and treated with chemicals to protect from insects and decay. Allow wood to dry after treatement.
4. All field cuts in Pressure Treated lumber shall be treated on site.
5. Nailing shall be in accordance with FBC 2017. Nails and other fasteners for Pressure Treated wood shall be Stainless Steel or ACQ Approved treated.
6. Sheathing shall be $\frac{19}{32}$" CDX Plywood Sheathing Grade, unless otherwise stated specified in the plans.
7. Use 10d ring-shank nails with spacing of 4" o.c. on all edges and 6" o.c. in the field with all edges blocked.
8. Cutting and notching of wood members including but not limited to floor joist shall not exceed one-sixth of the depth of the member and cannot be located in the middle one-third of the span.
9. The depth of the notching at the ends of the wood members shall not exceed one-fourth of the depth of the member.
10. Beams, joist, and rafters with a thickness equal or greater than 4" shall only be notched at the ends of the members and shall not be notched on the tension side of the member.
11. Holes cut into wood members shall have a diameter less than one-third of the depth of the member and shall not be located closer than two inches to the top or bottom of the member.
12. Blocking shall be placed between all joist at a spacing not to exceed 8' on center.
13. Install Simpson LUS Series Galvanized Joist Hangers at locations where structural wood members including but not limited to joist and beams connect into other members

HARDWARE
1. Hardware shall meet or exceed 304 Stainless Steel properties or be Zmax galvanized for non exposed Simpson products, unless otherwise specified.
2. All connectors shall have stainless steel screws and fasteners or ACQ Approved treated for non exposed areas.
3. All connectors and fasteners shall be applicable for use and compatible with pressure treated wood.
4. Apply a bond breaker between the wood surface an any connector or fastener that is not compatible with pressure treated wood.
5. All connectors and fasteners shall be manufactured by Simpson Strong Tie or an approved equal and installed as per the manufactures recommendations prior to loading the connected wood member.
6. All structural members shall have a connector or fastener securing and anchoring the member for hurricane protection.

CAST IN PLACE CONCRETE
1. The concrete shall have the following properties:
   1. Compressive strength at 28 days equal to or greater than 4000PSI
   2. Ready Mix as per ASTM C94
   3. Type 1 Portland Cement shall adhere to ASTM C 150
   4. Normal weight aggregates shall adhere to ASTM C33
   5. Light weight aggregates shall adhere to ASTM C330
   6. No calcium chloride
   7. Air entraining shall adhere to ASTM C260
   8. Water reducing shall adhere to ASTM C494
   9. Water used shall be fresh water which is clean and potable
   10. Concrete slump range shall be within the range of 3" to 5" unless otherwise stated.
   11. Applicable code is ACI 318 latest addition and ACI 301.

FOUNDATION AND CONCRETE
1. All footings including shall be placed on firm, undisturbed, natural rock unless otherwise noted.
2. All footings shall be centered under the walls, columns, or specified line unless otherwise noted
3. Auger piles shall be drilled no less than 3' into the cap rock and must be 16" in diameter unless otherwise noted.
4. All exposed concrete edges shall be constructed and finished with a $\frac{1}{2}$" chamfer edge.
5. All concrete works including but not limited to mixing, placing, and curing shall conform with ACI 305R Hot Weather Concrete.
6. Concrete shall be water cured with a continuous flow of water over the surface of the concrete for 7 days or until 75% concrete compressive strength has been achieved. At this time, a concrete curing compound shall be applied to the surface of the concrete while the concrete is still damp or moist from the prior water curing event.
7. All soil below the concrete slab on grade shall be treated and covered with a 10MIL vapor barrier.

REINFORCING STEEL
1. The reinforcing steel shall be ASTM A615 Grade 60.
2. The splicing length shall be 45 times the bar diameter unless otherwise noted.
3. The rebar shall have a minimum clear cover of 3" for concrete placed at the existing grade elevation and a 2" minimum clear cover for concrete placed above the referenced elevation unless otherwise noted.
4. The welded wire fabric shall be in conformance with ASTM A-185.
5. The splice length of the welded wire fabric shall be one full mesh section with the ends and sides connected by tie wire.
6. All rebar accessories including but not limited to rebar chairs shall be installed in accordance with ACI 318.

GENERAL REQUIREMENTS
1. Prior to starting any work the Contractor shall review these plans and site conditions and notify the Engineer if any discrepancies are discovered or conflicts with these plans, specifications, or dimensions which affect the execution of construction or safety .
2. This set of plans is solely intended to be utilized for construction at the specified location.
3. The Contractor shall not scale the drawings and shall request additional information required for construction from the Engineer of Record.
4. The Contractor shall be responsible for calling Sunshine Utility Locate Service prior to performing any construction activities in any areas which underground utilities may be present. The Engineer of Record shall not be responsible for providing the location of utilities.
5. The Engineer of Record is not responsible for the supervision of the Contractor nor their employees during the construction.
6. The Contractor is responsible for providing and implementing the means and methods for the construction process and perform all works in conformance with the standards and requirements of the 2017 Florida Building Code, manufacturer's recommendations, local county and city codes and ordinances, and specifications referenced within these plans.
7. The Contractor must complete the construction in accordance with the Building Envelope Energy Requirements of the Florida Model Energy Code.
8. Quality of the work must meet or exceed the industry standard practices.
9. Any deviations from these plans shall be reviewed and approved by the Engineer of Record.
10. Install shoring as required for all structural members of the existing structure.
11. Contractor is responsible for all means and methods as required to improve or maintain the existing condition, structural integrity, and safety of the structure including but not limited to the design and installation of structural shoring or tie-downs and diligently performing works. The contractor is responsible for the safety of all personnel entering the designated working area.
12. The Contractor shall coordinate their work with all other trades in order to avoid scheduling conflicts.
13. The Engineer of Record certifying this document shall not be held liable for any financial or time related damages including but not limited to damages to the structure, personnel, time related delays, and structural issues that result from the construction in accordance with the applicable specifications of this certified document. The Contractor shall notify the Engineer of Record if any conditions or issues arise that do not adhere to the details specified.

PORTLAND CEMENT PLASTERING STUCCO NOTES
1. The Contractor shall perform all work in conformance with the 2017 Florida Building Code.
2. Comply with ASTM C 926 in regards to project conditions while performing plastering/stucco works.
3. PVC Lath shall be fabricated from PVC, paper backed, and self furring. The product shall be Plastic Components, Inc. Ultra Plastic Lath or approved equal.
4. All accessories shall comply with ASTM C 1063
5. Plastic accessories shall be high impact PVC.
6. Corner beads shall be small nose corner beads with perforated flanges.
7. Casing beads shall be bull nose style.
8. Control joints shall be one piece, M-shaped configuration, with perforated flanges and removable protective tape on plaster face of control joint.

PORTLAND CEMENT PLASTERING STUCCO NOTES (cont'd)
9. Expansion joints shall be two piece, formed with a slip joint and square edge 1 -1/2" wide reveal with perforated concealed flanges.
10. Water for mixing shall be potable and free of any contaminants.
11. Fiber for base coat shall be alkaline resistant glass or polypropylene fibers 1 /2 inch long, free of contaminants, manufactured for use in portland cement plaster.
12. The bonding compound shall conform with ASTM C 932
13. Steel drill screws shall comply with ASTM C 1002 or ASTM C 954
14. Fasteners used for attaching the PVC lath to the substrates shall comply with the lath manufacturers requirements.
15. Fasteners used for attaching metal lath to substrates shall comply with ASTM C 1063
16. The Contractor shall perform all work in conformance with the 2017 Florida Building Code.
17. Masonry cement shall conform with ASTM C 91 Type N
18. Lime shall comply with ASTM C 206 Type S or ASTM C 207
19. Sand aggregate shall comply with ASTM C 897
20. Perlite aggregate shall comply with ASTM C 35
21. Plaster mixes shall comply with ASTM C 926
22. Comply with fiber manufacturers recommendations for quantity of fiber and mixing procedure.
23. Control joints shall be delineated into areas with the maximum sizes for vertical surfaces at 144 SQ. FT. and non vertical surfaces at 100 SQ. FT. with length to width ratios of $2\frac{1}{2}$:1.
24. Distances between control joints shall not exceed 18 FT.
25. Install control joints at locations where control joints occur in the main wall behind the plaster.
26. The plaster application shall conform with ASTM C 926.
27. The plaster application shall not deviate more than $\frac{1}{4}$" in 10 FT.
28. Three coat plaster work shall contain base coat mixes for over PVC lath with scratch and brown coats.

FRAMING NOTES
1. Unless stated otherwise, all framing lumber shall be Southern Pine #2, MC 19%, NO. 2 Dense
2. All timber construction shall conform to the latest edition of AFTC, T.P.I, and National Design Specifications for Wood Construction.
3. All wood shall be PT(Pressure Treated) to prevent decay and protect from insects and must be dry prior to use.
4. All wood fasteners and connectors shall be compatible with PT wood.
5. For all non-compatible members with PT wood, building paper or an approved equal material must be used as a barrier between the referenced members.
6. All PT wood framing connections must utilize a products manufactured by Simpson Strong Tie or an approved equal and must be installed as per the manufacturers recommendations.
7. Blocking must be placed between all joist with a spacing not to exceed 8' O.C.
8. Simpson LUS Type Joist Hangars must be used at intersection points of all structural wood members including but not limited to joist and beams.
9. All structural wood members shall have a fiber stress of at least 1200PSI
10. Wood Studs shall be stress graded standard American Lumber (Fb=625 PSI, Fv=400PSI Minimum, E=1,000,000 PSI) #2 Southern Yellow Pine
11. General Sheathing Notes: 10d Ring Shank Nails, 4" O.C. for Short Side, 6" O.C. Long Side, 6" O.C. Field
12. General Bucking Notes: Exterior Windows: 1"x6" PT Buck on Jambs and Head, Exterior Doors: 2"x6" PT Buck on Jambs and Head, Install sufficient fasteners of specified type in order to meet or exceed stated loads.
13. Fasteners shall be spaced in equal distance across the length of the buck and shall be no closer than 2" or further than 4" from the end of the buck
14. The minimum fasteners for a top buck is 2 and the minimum fasteners for a side buck is 3.
15. The approved fasteners are as follows: $\frac{3}{16}$ Tapcon with $1\frac{3}{4}$" Penetration and 230LBS of Connection Strength Capacity; $\frac{1}{4}$" Tapcon with 2" Penetration and 380LBS of Connection Strength Capacity.
16. Refer to manufacturers installation recommendations and specifications for the fasteners required for entry doors and windows

STRUCTURAL NOTES
1. The design and applicable scope of work is intended to comply with the 2017 Florida Building Code and ASCE 7-10.
2. The structure referenced in these documents is designed to withstand the applicable forces from 180MPH wind load and a floor live load of 40PSF in accordance with ASCE 7-10.
3. The soil bearing capacity must meet or exceed 2,000LBS per SQ. FT. Compaction required (Modified Proctor) typical under slabs, pile caps, grade beams, and foundation or where concrete is in contact with the soils at 98%.
4. The engineer must be notified and submit a written approval for all modifications or deviations from the specified design.
5. The contractor shall provide all temporary shoring as required to resist all loads generated from wind or the construction sequence until all structural members, connectors, and fasteners are installed including shear walls and decking.
6. The contractor must submit material certifications/specifications, shop drawings and erection plans/drawings for all components and construction methods required for the structure to be constructed.
7. All major structural shop drawings must be submitted with calculations and the seal of a Florida Professional Engineer.

METAL AND STEEL BUILDING NOTES

1. GENERAL
A. Metal building erector shall be responsible for erection of the steel and associated work in compliance with the metal building manufacturers association.
B. The builder is responsible for designing, supplying, locating and installing temporary supports and bracing during erection of the building. Metal building bracing is designed for code required loads after building completion and shall not be considered as adequate erection bracing. Tension brace rods work in pairs to balance forces caused by initial tensioning. care must be taken while tightening brace rods so as not to cause accidental or misalignment of components. all rods must be installed loose and then tightened. Rods shall not exhibit excessive sag. for long or heavy rods or angles, it may be necessary to support the rod at mid-bay by suspending it from a secondary member.
C. Equipment bracing and suspension connections must not impose torsion or minor axis loads, or cause local distortion in any structural components.
D. All field welding must be done at the direction of a design professional, and done in accordance with aws (americian welding society) by welders qualified to perform the work as directed by the applicable welding procedure specification (wps). a wps shall be prepared by the contractor for each welding variation specified. the contractor is responsible for any special welding inspections as required by local jurisdiction.

2. MATERIALS
All structural plates, channels and miscellaneous metals shall be in accordance with astm specification below.

Material	ASTM Description	Yield strength (min)
Structural steel plate	a529/ a572 / a1011	50 ksi
Hollow structural	a500	42 ksi
Hot rolled str. shapes	a500 / a572 / a592 / a992	50 ksi
Hot rolled angles	a36	36 ksi
Cold formed shapes	a653 / a1011	
Roof and wall sheeting	a653 / a792	
Bolts	a307 / a325	
Rods	a572 / a108	
Anchor rods	f1554	36 ksi

E. All steel exposed to weather shall be galvanized or coated with primer and marine grade epoxy.
F. Weld filler material shall be 70 ksi tensile strength.

3. EXECUTION
A. Install metals as detailed on metal building drawings and permit drawings.
B. Steel work shall conform to the latest edition of the design, fabrication and erection of structural steel for building as adopted by the aisc and metal building manufacturers assocation.
C. All steel shall be painted with one coat of primer and shall be touched up after installation, unless the material is stainless steel.
D. Steel exposed to the elements shall also be coated with a marine grade epoxy unless the material is stainless steel.
E. Coat all steel members with marine grade epoxy for corrosion resistance.

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

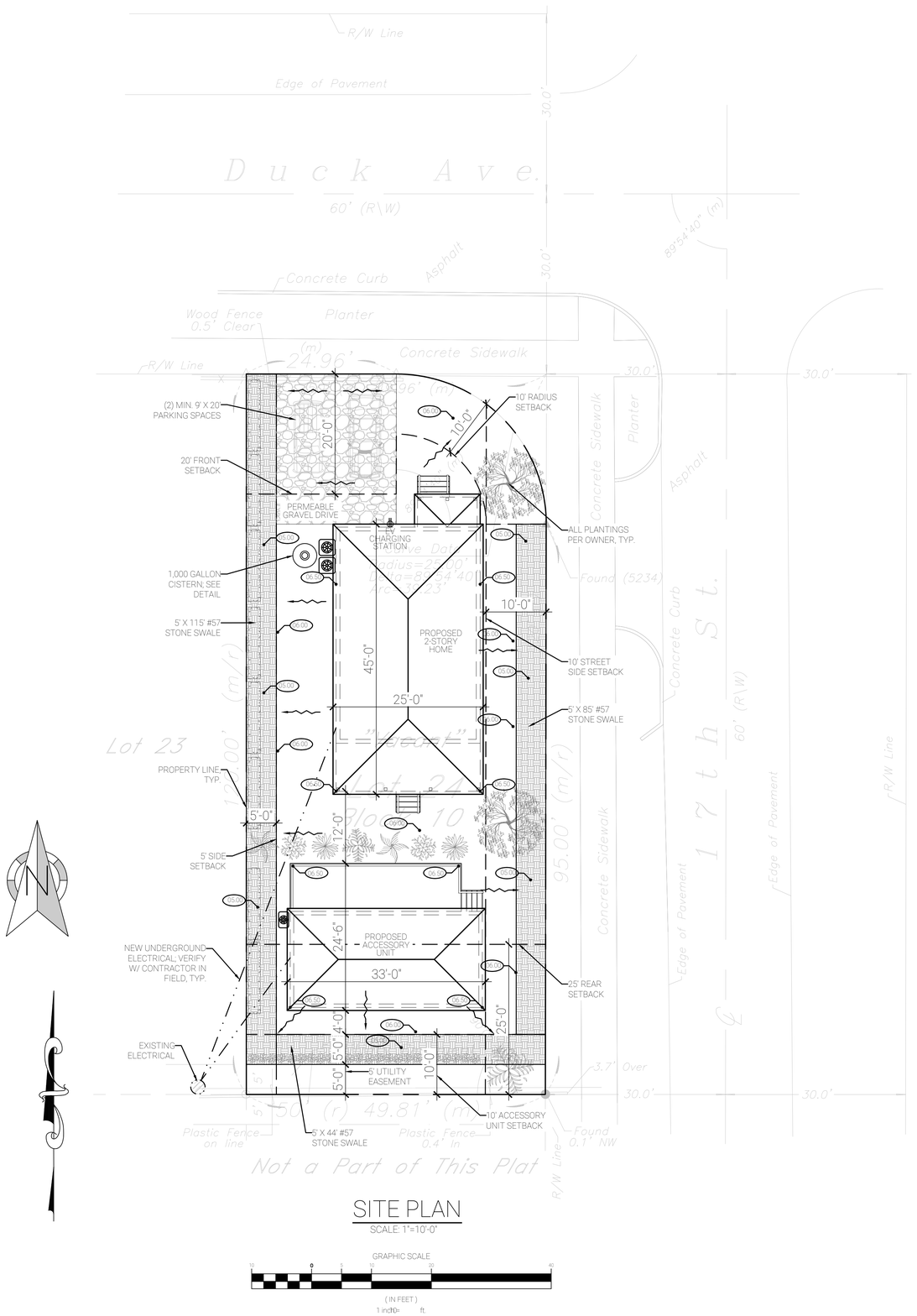
CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License #: 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone #: 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

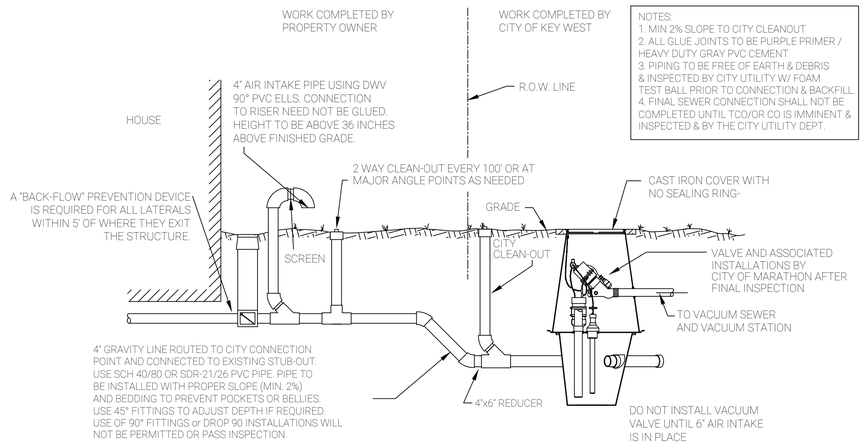
WILLIAM CAMPBELL LICENSE No. 79269 STATE OF FLORIDA PROFESSIONAL ENGINEER
William Campbell P.E. Digitally signed by William Campbell, P.E. Date: 2021.01.05 10:37:52 -05'00'

PROJECT #: 1838
Date: OCTOBER 26, 2020

SHEET 2 of 14
SHEET # GN

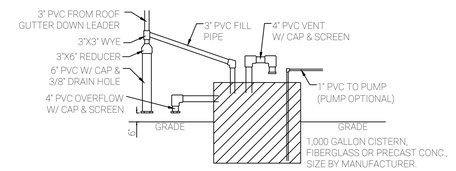


SITE PLAN
SCALE: 1"=10'-0"



NOTES:
1. MIN 2% SLOPE TO CITY CLEANOUT
2. ALL GLUE JOINTS TO BE PURPLE PRIMER / HEAVY DUTY GRAY PVC CEMENT
3. PIPING TO BE FREE OF EARTH & DEBRIS & INSPECTED BY CITY UTILITY W/ FOAM TEST BALL PRIOR TO CONNECTION & BACKFILL.
4. FINAL SEWER CONNECTION SHALL NOT BE COMPLETED UNTIL TCO/OR CO IS IMMINENT & INSPECTED & BY THE CITY UTILITY DEPT.

TYPICAL SEWER CONNECTION
NOT TO SCALE



TYP. CISTERN DETAIL
SCALE: NOT TO SCALE

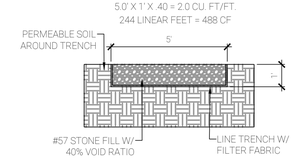
SITE PLAN ELEVATION & DRAINAGE LEGEND

	DRAINAGE FLOW
+ X.XX	EXISTING SPOT GRADE
XX.XX	PROPOSED SPOT GRADE
	PROPOSED SWALE CONTOUR

SITE DRAINAGE CALCULATIONS

TOTAL LOT SIZE	5,853.6 SQ. FT.
IMPERVIOUS COVERAGE:	
BUILDING AREA, STAIRS, PORCHES (TOTAL BUILDING COVERAGE & TOTAL IMPERVIOUS)	1,993 SF = 34.1%
TOTAL DISTURBED AREA:	5,853.6 SF
5,853.6 SF X 0.083 = CUBIC FT. REQ'D	485.8 CF REQ'D
CUBIC FT. PROVIDED	488 CF
REAR SETBACK AREA ACCESSORY UNIT AREA IN REAR SETBACK	1,245.81 SF 363.1 SF = 29.1%

*CONTRACTOR TO VERIFY SWALE LENGTH



#57 STONE SWALE SECTION

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License #: 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone #: 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

WILLIAM CAMPBELL LICENSE No. 79269 STATE OF FLORIDA PROFESSIONAL ENGINEER
William Campbell, P.E.
Digitally signed by William Campbell, P.E.
Date: 2021.01.05 10:47:52 -05'00'

PROJECT #:
1838
Date:
OCTOBER 26, 2020

SHEET 3 of 14

SHEET #
SP

EXTERIOR DOOR SCHEDULE

MARK	NOMINAL SIZE (W X H)	TYPE	WINDLOAD REQUIREMENT (ASCE 7-10)	MANUFACTURER & MODEL NUMBER	WINDLOAD RATING & APPROVAL NUMBER
01	3'-0" x 6'-8" ZONE 4	IMPACT DOOR	+57.3 / -62.1	BY CONTRACTOR	PROVIDED BY CONTRACTOR
02	(2)3'-0" x 6'-8" ZONE 4	IMPACT FRENCH DOORS	+54.0 / -62.9	BY CONTRACTOR	PROVIDED BY CONTRACTOR
03	(2)3'-0" x 6'-8" ZONE 5	IMPACT FRENCH DOORS	+54.0 / -67.4	BY CONTRACTOR	PROVIDED BY CONTRACTOR

- CONTRACTOR TO PROVIDE THE NOA'S.
- CONTRACTOR TO FIELD VERIFY ALL DOOR DIMENSIONS.
- CONTRACTOR TO FOLLOW ALL MANUF. INSTRUCTIONS FOR INSTALLATION.

WINDOW SCHEDULE

MARK	NOMINAL SIZE (W X H)	TYPE	WINDLOAD REQUIREMENT (ASCE 7-10)	MANUFACTURER & MODEL NUMBER	WINDLOAD RATING & APPROVAL NUMBER
01	(2)2'-3" x 4'-0" ZONE 4	SINGLE HUNG	+54.5 / -64.7	BY CONTRACTOR	PROVIDED BY CONTRACTOR
02	2'-3" x 5'-0" ZONE 4	SINGLE HUNG	+57.4 / -62.2	BY CONTRACTOR	PROVIDED BY CONTRACTOR
03	3'-0" x 5'-0" ZONE 5	SINGLE HUNG	+56.5 / -74.7	BY CONTRACTOR	PROVIDED BY CONTRACTOR
04	2'-0" x 6'-0" ZONE 4	SINGLE HUNG	+57.3 / -62.1	BY CONTRACTOR	PROVIDED BY CONTRACTOR
05	(2)3'-0" x 5'-0" ZONE 4 *EGRESS	SINGLE HUNG	+54.0 / -62.4	BY CONTRACTOR	PROVIDED BY CONTRACTOR
06	3'-0" x 5'-0" ZONE 4 *EGRESS	SINGLE HUNG	+56.5 / -61.3	BY CONTRACTOR	PROVIDED BY CONTRACTOR
07	5'-0" x 1'-6" ZONE 4	CLERESTORY AWNING	+57.8 / -69.6	BY CONTRACTOR	PROVIDED BY CONTRACTOR
08	3'-0" x 1'-6" ZONE 4	CLERESTORY FIXED	+57.8 / -62.5	BY CONTRACTOR	PROVIDED BY CONTRACTOR
09	2'-0" x 4'-0" ZONE 4	SINGLE HUNG	+57.8 / -62.5	BY CONTRACTOR	PROVIDED BY CONTRACTOR

NOTE: ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW TO MEET FL. BLDG. CODE 2017 FOR EGRESS. A MIN. 5.7 SQ. FT. NET CLEAR OPENING IS REQUIRED WITH A MIN. NET CLEAR HEIGHT OF 24" & MIN. NET CLEAR WIDTH OF 20" & A MAX. SILL HEIGHT OF 44" ABV. FINISHED FLOOR.

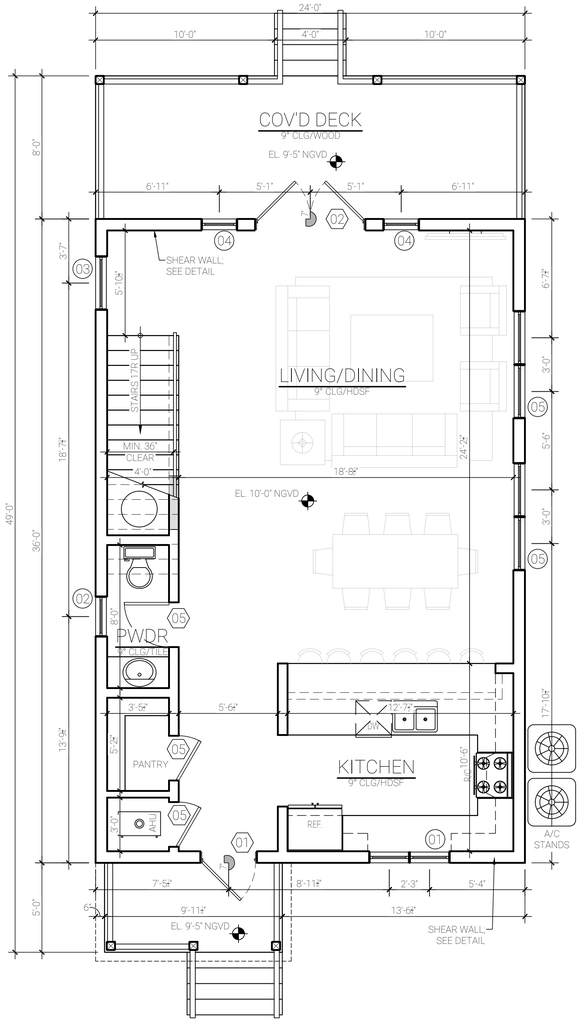
ADDITIONAL NOTES:
1. CONTRACTOR TO PROVIDE THE NOA'S.
2. CONTRACTOR TO FIELD VERIFY ALL WINDOW DIMENSIONS.
3. CONTRACTOR TO FOLLOW ALL MANUF. INSTRUCTIONS FOR INSTALLATION.

INTERIOR DOOR SCHEDULE

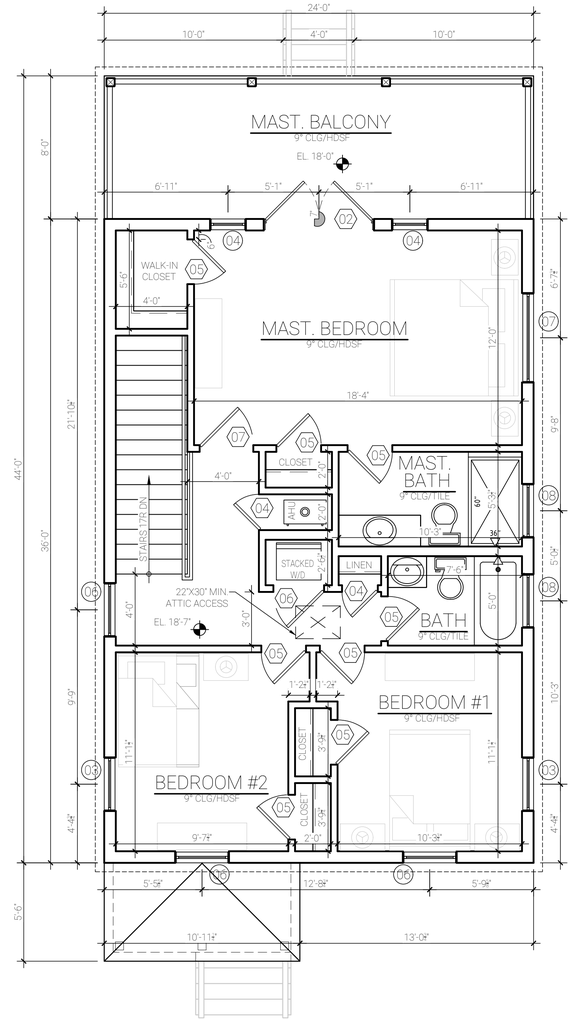
MARK	NOMINAL SIZE (W X H)	DESCRIPTION	ROUGH OPENING	MANUFACTURER / MODEL	FINISH	HARD-WARE
04	2'-0" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
05	2'-6" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
06	2'-8" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
07	3'-0" x 6'-8"	2 PANEL/SOLID WOOD SWING DOOR	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
08	(2)2'-0" x 6'-8"	2 PANEL/SOLID WOOD FRENCH DOORS	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD
09	6'-0" x 6'-8"	2 PANEL/SOLID WOOD BI-PASS DOORS	VERIFY	JELD-WEN / 0066 OR EQUAL	TBD	TBD

BUILDING AREA

1st FLOOR LIVING A/C	864 SQ. FT.	
2nd FLOOR LIVING A/C	864 SQ. FT.	
TOTAL LIVING A/C		1728 SQ. FT.
1st FLOOR ENTRY	68 SQ. FT.	
1st FLOOR REAR DECK	192 SQ. FT.	
2nd FLOOR REAR DECK	192 SQ. FT.	
TOTAL EXTERIOR LIVING		452 SQ. FT.
TOTAL MAIN HOME FOOTPRINT		1208 SQ. FT.
ACCESSORY UNIT A/C	512 SQ. FT.	
ACCESSORY UNIT DECK	240 SQ. FT.	
ACCESSORY UNIT TOTAL FOOTPRINT		785 SQ. FT.
TOTAL SITE FOOTPRINT		1993 SQ. FT.



PROPOSED FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

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CONSULTANTS LLC
William R. Campbell, P.E. License # 79269
Email: will@cecflk.com CA/Registry #: 31437
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Date: 2021.01.05 10:37:52 -05'00'

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1838
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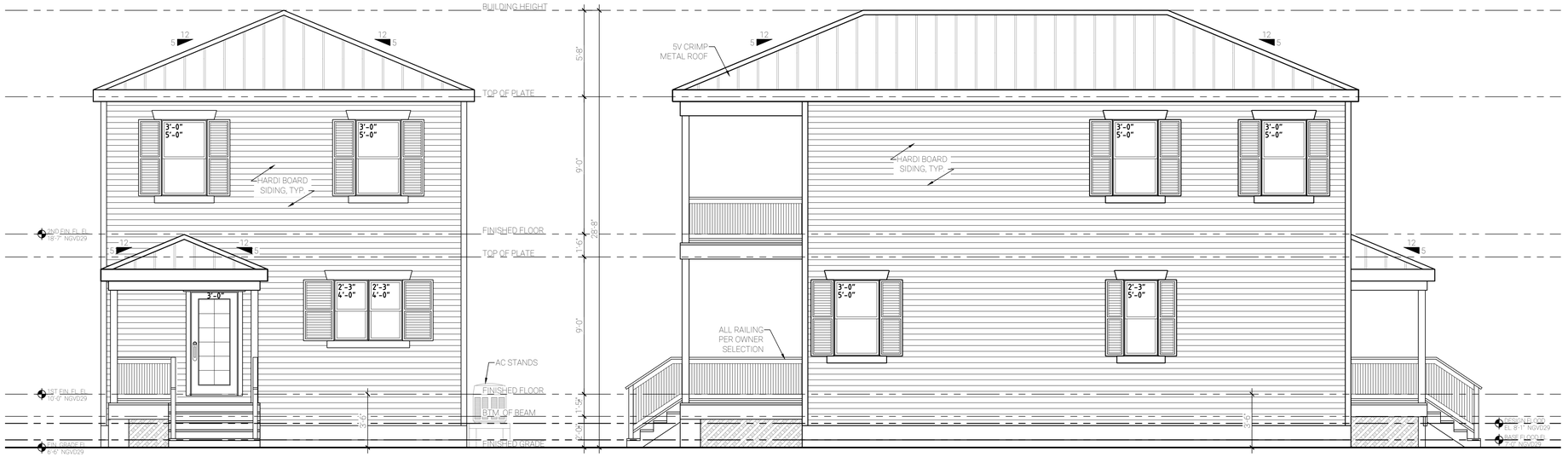
SHEET 4 of 14

SHEET #
A-1

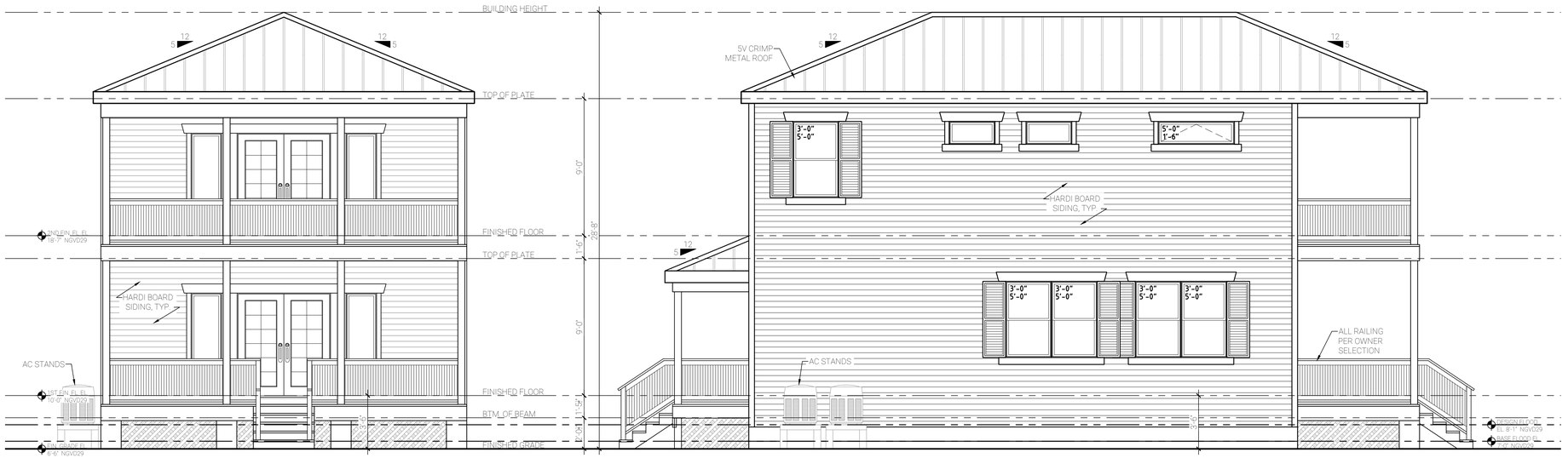


PROPOSED FRONT ELEVATION

SCALE: 1/4"=1'-0"

PROPOSED LEFT ELEVATION

SCALE: 1/4"=1'-0"



PROPOSED REAR ELEVATION

SCALE: 1/4"=1'-0"

PROPOSED RIGHT ELEVATION

SCALE: 1/4"=1'-0"

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KEY WEST, FLORIDA

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STATE OF FLORIDA
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SHEET 5 of 14

SHEET #
A-2

EXTERIOR DOOR SCHEDULE

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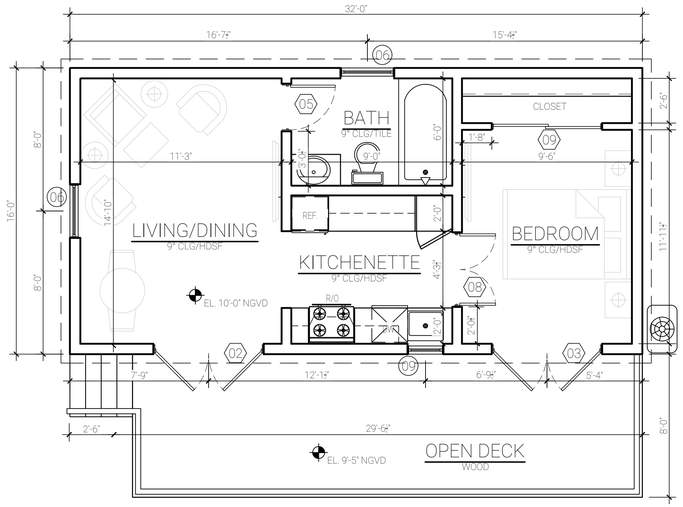
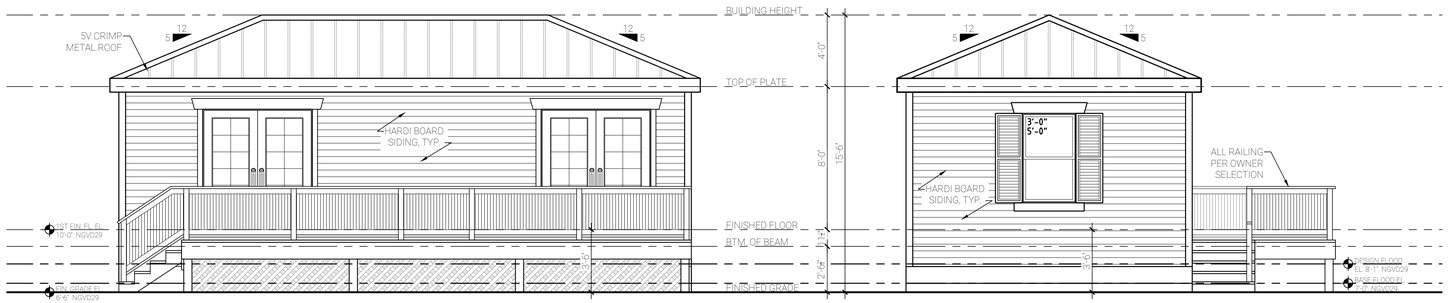


ACCESSORY UNIT FLOOR PLAN
SCALE: 1/4"=1'-0"



PROPOSED FRONT ELEVATION
SCALE: 1/4"=1'-0"

PROPOSED LEFT ELEVATION
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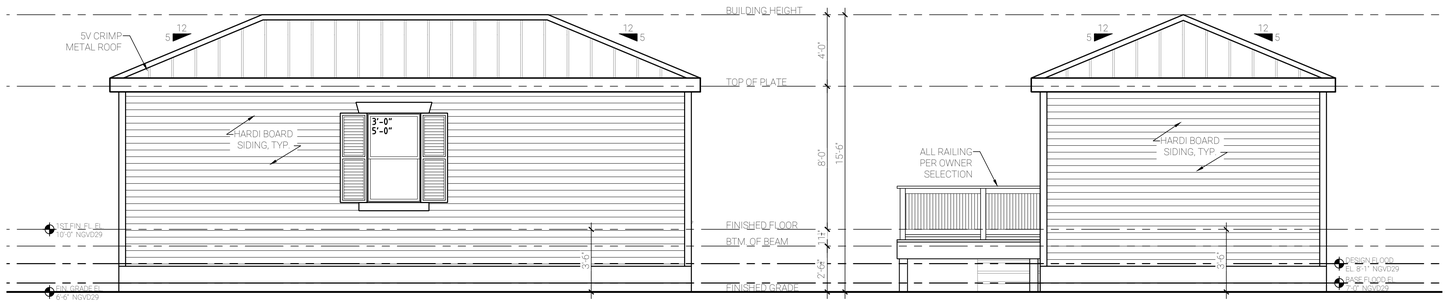

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SHEET 6 of 14

SHEET #
A-3

ELECTRICAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT AND SUPERVISION NECESSARY TO PROVIDE THE WORK COMPLETE AND READY TO USE.
2. ALL DEVICES, EQUIPMENT, MATERIAL AND LABOR SHALL LBE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
3. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE MOUNTED AS PER EQUIPMENT AND DEVICE MANUFACTURER RECOMMENDATIONS.
4. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE CODES AND STANDARDS.
5. NO PIPE, CONDUIT OR JUNCTION BOX SHALL BE INSTALLED IN STRUCTURAL SLABS, COLUMNS OR BEAMS UNLESS SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.
6. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING EXISTING CONDITIONS AT THE SITE AND WITHIN THE BUILDING PRIOR TO BID.
7. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY FOR NEW SERVICE AND ANY SPECIAL REQUIREMENTS. SECONDARY SERVICE OVERHEAD FEEDER BY KEYS. ELECTRICAL CONTRACTOR SHALL COORDINATE SPLICE LOCATION WITH KEYS SERVICE REQUIREMENTS.
8. ELECTRICAL DRAWINGS (PLANS, DIAGRAMS, ETC.) ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED. THE DRAWINGS DO NOT SHOW EVERY BEND, OFFSET, ELBOW AND OTHER FITTINGS WHICH MAY BE REQUIRED FOR PROPER INSTALLATION IN THE SPACE ALLOCATED OR AS REQUIRED TO COORDINATE WORK WITH THAT OF OTHER TRADES. ANY WORK NOT SHOWN BUT CONSIDERED NECESSARY FOR PROPER COMPLETION OF THE WORK SHALL BE PROVIDED WITHOUT ADDITIONAL CHARGES TO THE OWNER.
9. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER.
10. ALL MAERIALS AND EQUIPMENT TO BE INSTALLED SHALL BE NEW AND FREE OF DEFECTS. ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION (NEMA) STANDARDS AND SHALL BE UL LABELED.
11. THE CONTRACTOR SHALL SATISFACTORILY REPAIR AND/OR REPLACE EXISTING WORK, FEATURES AND EQUIPMENT DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHES SHALL BE RESTORED TO MATCH ADJACENT AREAS.
12. ALL CUTTING AND NOTCHING REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK SHALL BE ACCOMPLISHED IN AN APPROVED MANNER. APPROVAL SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CUTTING OR DRILLING STRUCTURAL MEMBERS UNLESS SPECIFICALLY ADDRESSED HEREIN.
13. EXISTING ELECTRICAL WORK, FEATURES AND EQUIPMENT INDICATED AND/OR REQUIRED TO BE REMOVED SHALL BE PROPERLY DISPOSED BY THE CONTRACTOR INCLUDING ABANDONED RACEWAYS, WIRING, BOXES, SWITCHES AND OTHER ELECTRICAL ITEMS NOT PLANNED TO REMAIN IN USE.
14. ALL DEVICE BOXES SHALL BE INSTALLED FLUSH AND CONDUITS RUN CONCEALED IN FINISHED AREAS EXCEPT AS SPECIFICALLY SHOWN OR NOTED OTHERWISE.
15. ALL CONDUITS INSTALLED INTERIOR SHALL BE EMT. ALL CONDUITS INSTALLED EXTERIOR SHALL BE GALVANIZED RIGID METAL CONDUIT.
16. ALL WIRE SIZE SHALL BE #12 UNLESS OTHERWISE NOTED ON DRAWINGS. CONDUCTIORS #10 AND SMALLER SHALL BE SOLID COPPER. CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER. UNLESS NOTED OTHERWISE, CONDUCTOR INSULATION SHALL BE DUAL RATED AT THHN/THWN.
17. ALL MATERIAL SHALL BE UL APPROVED.
18. A TYPEWRITTEN PANEL TALLY SHALL BE AFFIXED TO THE PANEL DOOR AFTER COMPLETION OF WORK THAT REFLECTS ALL CHANGES AND ADDITIONS.
19. CONTRACTOR TO PROVIDE COMPUTER PRINTED ON WHITE WRAPAROUND PAPER WITH CLEAR PLASTIC PROTECION FOR TAIL FOR ALL WIRE MARKERS. MARKER SHALL STATE PANELBOARD NAME AND CIRCUIT NUMBER ON ALL WIRES IN JUNCTION AND PULL BOXES AND IN EQUIPMENT TERMINAL BOXES.
20. CONTRACTOR TO PROVIDE PUNCH TAPE LABELS ON ALL WIRING DEVICES FOR IDENTIFICATION. SHALL BE 1/2" BLACK TAPE WITH WHITE RAISED LETTERS. TAPE LABELS SHALL STATE PANELBOARD NAME AND CIRCUIT NUMBER.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE SET OF RECORD DRAWINGS TO THE OWNER AT THE END FOR THE CONSTRUCTION.
22. ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED WITHIN 10%.
23. ALL FLOOR PENETRATIONS SHALL BE SEALED WITH A FIRE SEAL SIMILAR TO 'OZ' FLAMESEAL.
24. ALL NON-POWER RELATED WIRING IN CEILING A/C PLENUM RUNNING WITHOUT CONDUIT SHALL BE TEFLON COATED CLASSIFIED FOR USE IN PLENUMS.
25. ALL OUTLETS, SWITCHES AND COVER PLATES SHALL HAVE WHITE FINISH OR OTHER COLOR SELECTED BY OWNER AND LEVITON 5350/5252 SERIES OR EQUAL.
26. ALL BRANCH CIRCUITS SHALL BE EQUIPPED WITH A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC 250.95.
27. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH NYLON PULL STRINGS.
28. FUSES SHALL BE DUAL ELEMENT, TIME DELAY UNLESS OTHERWISE NOTED.
29. ALL LUMINAIRES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH CEILING MANUFACTURER RECOMMENDATIONS IF APPLICABLE AND LOCAL REQUIREMENTS. MOUNTING DEVICES MUST BE CAPABLE OF SUPPORTING CEILING FAN FIXTURES.
30. ALL RECESS CANS SHALL BE IC RATED, AND CONTROLLED BY DIMMER SWITCHES.
31. ALL CABLES SHALL BE RUN WITHOUT SPLICES UNLESS OTHERWISE NOTED.
32. PROVIDE REQUIRED CONNECTION FOR GARAGE DOOR OPENER(S), KITCHEN APPLIANCES, AND MECHANICAL EQUIPMENT.
33. ALL BATHROOM, GARAGE AND EXTERIOR RECEPTACLE OUTLETS AND KITCHEN RECEPTACLE OUTLETS WITHIN 6' OF WATER SOURCE SHALL BE GFI PROTECTED. ALL KITCHEN AND LAUNDRY RECEPTACLES WILL ALSO BE ARC-INTERRUPT. ALL EXTERIOR RECEPTACLE OUTLETS SHALL BE WATER-PROOF PROTECTED. ALL BEDROOM RECEPTACLE OUTLETS SHALL BE ARC FAULT PROTECTED IN ACCORDANCE WITH NEC 210-12.
34. MECHANICAL VENTILATION, WHEN REQUIRED, SHALL OPERATE WHENEVER THE ROOM IS OCCUPIED.
35. CEILING BOXES USED FOR THE SOLE SUPPORT OF PADDLE FANS SHALL BE LISTED FOR THE PURPOSE.
36. NEW RECEPTICLES INSTALLED IN DWELLING UNITS SHALL BE LISTED TAMPER RESISTANT.
37. A MINIMUM OF 75% OF PERMANENTLY INSTALLED LUMINRIES SHALL BE HIGH EFFICIENCY.
38. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF DRAWINGS TO INDICATE ALL CHANGES MADE TO THE ELECTRICAL DESIGN. THE AS-BUILT DRAWINGS SHALL BE DELIVERED TO THE OWNER AFTER COMPLETION OF THE WORK.
39. ALL SMOKE DETECTORS SHALL BE WIRED IN TANDEM. SMOKE DETECTORS WITHIN 20' OF COOKING APPLIANCES SHALL BE SILENCEABLE.

ELECTRICAL LEGEND

WALL SWITCH (60" FROM T.O.F.F. TO CENTER)	BAR LIGHT
3 3-WAY WALL SWITCH	FLUORESCENT STRIP
4 4-WAY WALL SWITCH	FLUORESCENT FIXTURE
D DIMMER WALL SWITCH	WALL MOUNT SCONCE LIGHT
DUPLEX OUTLET (STANDARD 18" FROM T.O.F.F. TO CENTER)	RECESSED CAN
DUPLEX OUTLET - HALF SWITCHED	DIRECTIONAL RECESSED CAN
SINGLE OUTLET - FLOOR MOUNT	RECESSED CAN/EXHAUST COMBO
DUPLEX OUTLET - CEILING MOUNT	SPOT LIGHT/FLOOD LIGHT
220 220 VOLT OUTLET	CEILING FAN W/ LIGHT (U.N.O.)
+44 GFI DUPLEX W/ MOUNTING HT ABV F.F.	EXHAUST FAN
TV TV OUTLET	FOOD DISPOSAL
PH PHONE OUTLET	SD SMOKE DETECTOR
DATA DATA OUTLET	CM CARBON MONOXIDE ALARM
HOME OFFICE PORT (2 RG6-2 CAT5)	ELECTRICAL PANEL
MEDIA OUTLET (1 RG6-1 CAT5)	THERMOSTAT
U USB PORT	GAS VALVE
PEND PENDANT LIGHT	ELECTRIC PUSH BUTTON FOR CHIMES
WALL MOUNT FIXTURE	DOOR CHHIMES
TRACK LIGHTING	DESIGNATES CIRCUIT #
CEILING FIXTURE	220 CIRCUIT
DECORATIVE CEILING FIXTURE	AHU DISCONNECT

AR = ARC-FAULT PROTECTED
GFI = GROUND FAULT INTERRUPT
WP = WATERPROOF / WEATHERPROOF
ALL EXTERIOR OUTLETS SHALL BE GFI, WEATHER PROOF, AND TAMPER PROOF

KITCHEN DUPLEX:
RANGE - OVEN IS 220 @ 8" A.F.F.
COOK TOP IS 220 @ 36" A.F.F.
DOUBLE OVEN IS 220 @ 70" A.F.F.

SMOKE DETECTOR NOTE:

- RE: Smoke Detectors - Provide smoke detection per 2018 IRC section R314.2. Smoke detection systems. All smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.
- Smoke alarms shall be installed in the following locations:

1. Inside each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms
3. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

- When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.

MAIN HOUSE
UNIT ELECTRICAL LOAD CALCULATIONS
(BASED UPON N.E.C. ARTICLE 220)
UNIT SQUARE FOOTAGE HEAT STRIP GREATER THAN CONDENSING UNIT ADDITION/REMODEL AREA SERVICE REQUIREMENTS

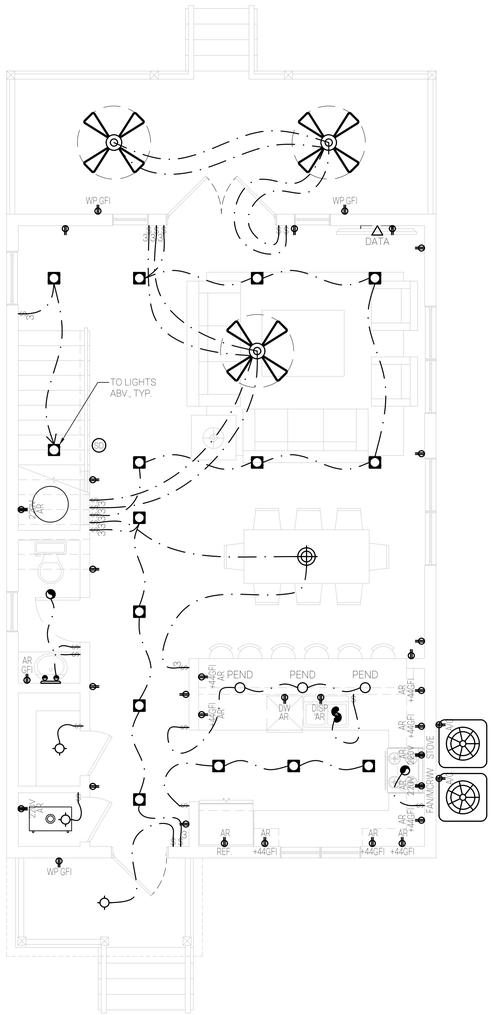
EQUIPMENT SERVED	BREAKER SIZE	CONDUCT OR SIZE	LOAD IN WATTS
REFRIGERATOR	20A/1P	#12	830
DUAL FUEL RANGE	40A/1P	#8	8,000
DISHWASHER 1	20A/1P	#12	1,200
WATER HEATER	40A/2P	#8	8,000
DRYER	30A/2P	#10	5,600
WASHER	20A/1P	#12	1,600
GARBAGE DISPOSAL	20A/1P	#12	900
EXHAUST HOOD	20A/1P	#12	1,000
MICROWAVE	20A/1P	#12	1,000
APPLIANCE CIRCUITS			
(3 @ 1500 WATTS EACH)	20A/1P	#8	4,500
GENERAL LIGHTING & RECEPTACLES			
(3 WATTS PER SQUARE FOOT)	15A/1P	#14	5,184
OUTDOOR LIGHTING & RECEPTACLES			
(1 WATT PER SQUARE FOOT)	15A/1P	#14	423
SUBTOTAL			38,237
AIR CONDITIONING REQUIREMENTS			
BLOWER MOTOR LOAD			600
HEATING LOAD (8,000 WATTS X .65)			5,200
AIR CONDITIONING SUBTOTAL			5,800
CALCULATION PER N.E.C. 220-30			
FIRST 10,000 WATTS @ 100%			10,000
REMAINDER OF WATTS @ 40%			11,295
AIR CONDITIONING LOAD SUBTOTAL			5,800
TOTAL UNIT LOAD			27,095

28,176 WATTS/240 VOLTS = 118 AMPS

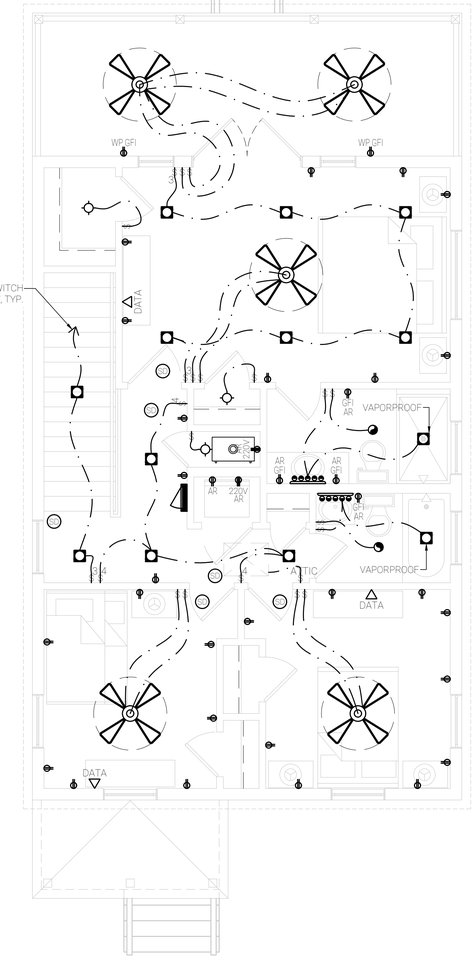
ACCESSORY UNIT
UNIT ELECTRICAL LOAD CALCULATIONS
(BASED UPON N.E.C. ARTICLE 220)
UNIT SQUARE FOOTAGE HEAT STRIP GREATER THAN CONDENSING UNIT ADDITION/REMODEL AREA SERVICE REQUIREMENTS

EQUIPMENT SERVED	BREAKER SIZE	CONDUCT OR SIZE	LOAD IN WATTS
REFRIGERATOR	20A/1P	#12	830
DUAL FUEL RANGE	40A/1P	#8	8,000
DISHWASHER	20A/1P	#12	1,200
WATER HEATER (UNDER SINK ON-DEMAND)	50A/1P	#8	28,000
GARBAGE DISPOSAL	20A/1P	#12	900
EXHAUST HOOD	20A/1P	#12	1,000
MICROWAVE	20A/1P	#12	1,000
APPLIANCE CIRCUITS			
(2 @ 1500 WATTS EACH)	20A/1P	#8	3,000
GENERAL LIGHTING & RECEPTACLES			
(3 WATTS PER SQUARE FOOT)	15A/1P	#14	1,536
OUTDOOR LIGHTING & RECEPTACLES			
(1 WATT PER SQUARE FOOT)	15A/1P	#14	245
SUBTOTAL			45,711
AIR CONDITIONING REQUIREMENTS (MINI-SPLIT)			
BLOWER MOTOR LOAD			2,400
HEATING LOAD			2,300
AIR CONDITIONING SUBTOTAL			4,700
CALCULATION PER N.E.C. 220-30			
FIRST 10,000 WATTS @ 100%			10,000
REMAINDER OF WATTS @ 40%			14,284
AIR CONDITIONING LOAD SUBTOTAL			4,700
TOTAL UNIT LOAD			28,984

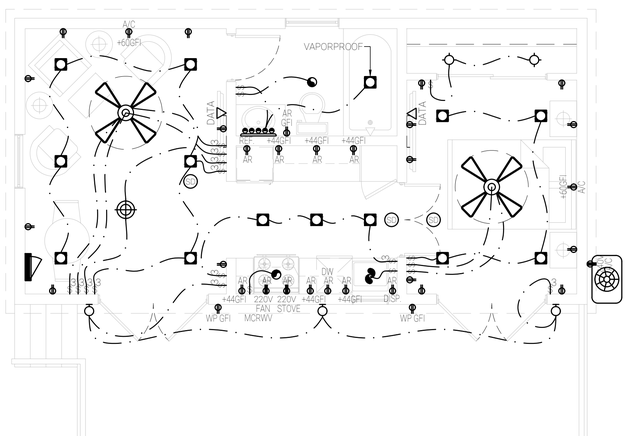
44,476 WATTS/240 VOLTS = 185 AMPS



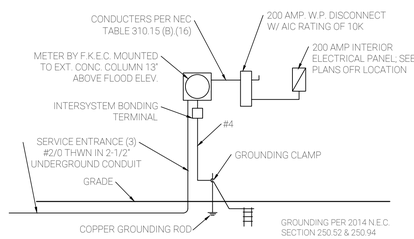
PROPOSED FIRST FLOOR ELECTRICAL PLAN
SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR ELECTRICAL PLAN
SCALE: 1/4"=1'-0"



ACCESSORY UNIT ELECTRICAL PLAN
SCALE: 1/4"=1'-0"



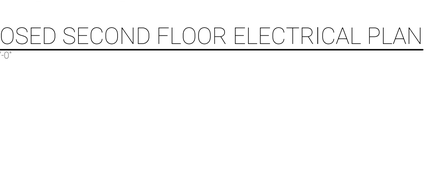
ELECTRICAL SERVICE RISER DIAGRAM
SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License # 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone # 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED



PROJECT #:
1838
Date:
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E-1

MECHANICAL NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2017 MECHANICAL CODE, FLORIDA ENERGY EFFICIENCY CODE AND ALL LOCAL ORDINANCES.
2. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, SUPERVISION, PERMITS, FEES AND INSPECTIONS NECESSARY TO PROVIDE THE WORK COMPLETE AND READY FOR USE.
3. CONTRACTOR SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AND SHALL COORDINATE WORK WITH ALL OTHER TRADES PRIOR TO FABRICATING DUCTWORK OR INSTALLING EQUIPMENT OR PIPING.
4. PRIMARY DUCTWORK SHALL BE CONSTRUCTION OF ONE AND HALF-INCH THICK (R-6 MINIMUM) FIBERGLASS DUCTBOARD WITH REINFORCED ALUMINUM FOIL FACED COVERING FABRICATED AND INSTALLED PER SMACNA RECOMMENDATIONS.
5. ALL VENTILATION AND EXHAUST DUCTWORK SHALL BE OF GALVANIZED SHEET METAL CONSTRUCTION PER SMACNA RECOMMENDATIONS.
6. REFRIGERANT PIPING SHALL BE TYPE "L" COPPER TUBING SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. INSULATED SUCTION AND CONDENSATE PIPING WITH 1/4" THICK FOAM PLASTIC OF FIRE RETARDANT TYPE 25/30 MAXIMUM SMOKE DEVELOPED AND FLAME SPREAD RATING RESPECTIVELY PER TESTS IN MFPA-255. FINISH WHERE EXPOSED WITH TWO COATS OF ACRYLIC LACQUER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
7. ALL EQUIPMENT, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE. COMPRESSORS SHALL CARRY A FIVE-YEAR FACTORY GUARANTEE.
8. AIR CONDITION SYSTEM SHALL BE BALANCED TO OBTAIN COMFORT CONDITIONS IN ALL AREAS WITHOUT DRAFTING
9. THERMOSTATS SHALL BE HEAT/COOL TYPE WITH FAN AND SYSTEM SELECTOR SWITCH ON SUB BASE. MOUNT FIVE FEET ABOVE FINISHED FLOOR WHERE SHOWN.
10. ALL DUCT ELBOWS GREATER THAN FORTY FIVE (45) DEGREES SHALL BE FITTED WITH TURNING VANES.
11. PROVIDE READY ACCESSIBILITY TO DAMPERS AND OTHER PARTS OF THE SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.
12. VERIFY ALL VOLTAGES WITH ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT.
13. VIBRATION ISOLATION SHALL BE PROVIDED FOR ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS.
14. ALL OUTSIDE EQUIPMENT SHALL BE SECURED TO WITHSTAND FORCES GENERATED BY 150 MPH WINDS.
15. FLEXIBLE DUCT SHALL BE FACTORY FABRICATED ROUND DUCTWORK COMPOSED OF CORROSION-RESISTANT REINFORCING WITH HELIX PERMANENTLY BONDED AND ENCLOSED IN POLYESTER FILM THEN COVERED WITH 1-1/2 INCH THICK 1/4 PCF (R-6 MINIMUM) DENSITY FIBERGLASS INSULATION BLANKET SHEATHED IN A VAPOR BARRIER OF ALUMINUM METALIZED POLYESTER FILM LAMINATED TO GLASS MESH, ELASTOMER BACK COATED. THE DUCT SHALL COMPLY WITH MFPA BULLETIN 90-A AND BE LISTED A CLASS 1 AIR DUCT. UL 181 DUCT SHALL BE "WIRE HOLD" TYPE WG OR EQUAL.

MECHANICAL NOTE:
CONTRACTOR TO VERIFY PLAN CONFIGURATIONS..
FOLLOW ALL APPLICABLE CODES, INCLUDING THE FLORIDA MECHANICAL CODES.

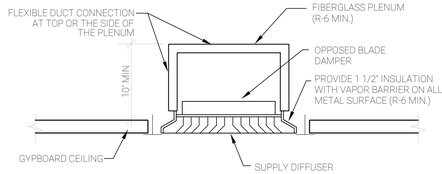
MECHANICAL LEGEND

- SUPPLY VENT
- RETURN VENT
- HVAC DUCTWORK (PRIMARY)
- HVAC DUCTWORK (SECONDARY)

NOTE:
MECHANICAL PLANS PROVIDED ARE CONCEPTUAL AND TO BE CERTIFIED BY A MECHANICAL ENGINEER AND MUST MEET ALL FBC 2017 REQUIREMENTS.

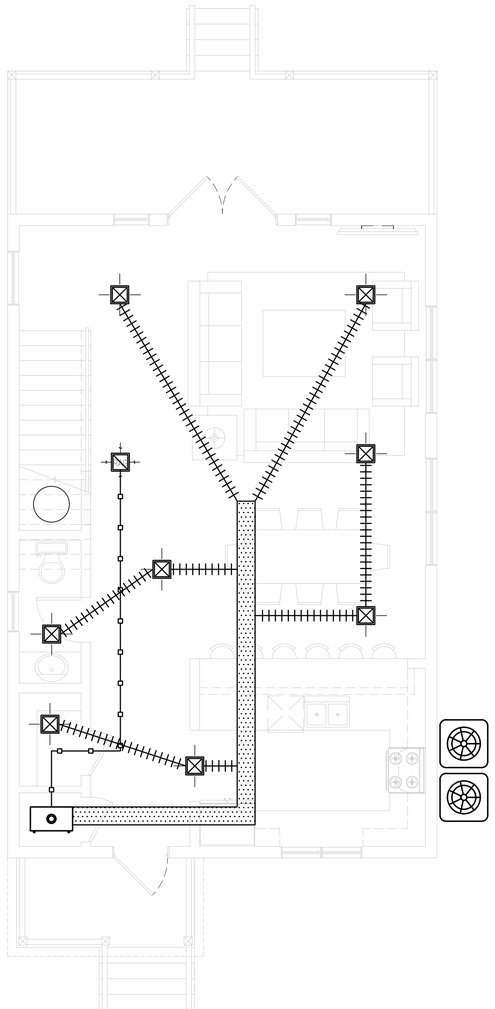
NOTE:
ALL AIR HANDLER UNITS TO BE EQUIPPED WITH RETURN AIR SUPPLY MEETING ALL FBC 2017 REQUIREMENTS.

NOTE:
HVAC TO HAVE AN ENERGY RATING OF 12 OR HIGHER



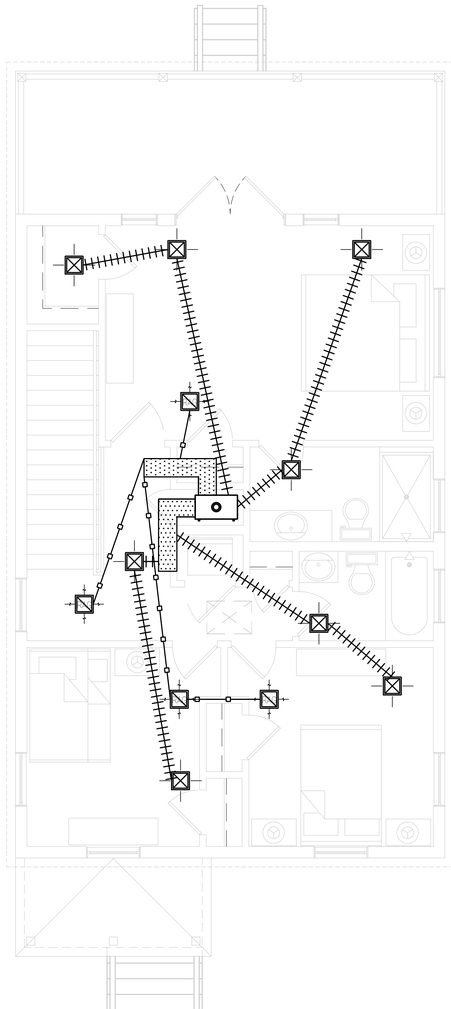
DIFFUSER DETAIL

NOT TO SCALE



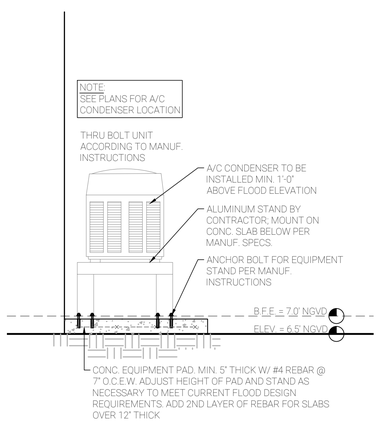
PROPOSED FIRST FLOOR MECHANICAL PLAN

SCALE: 1/4"=1'-0"



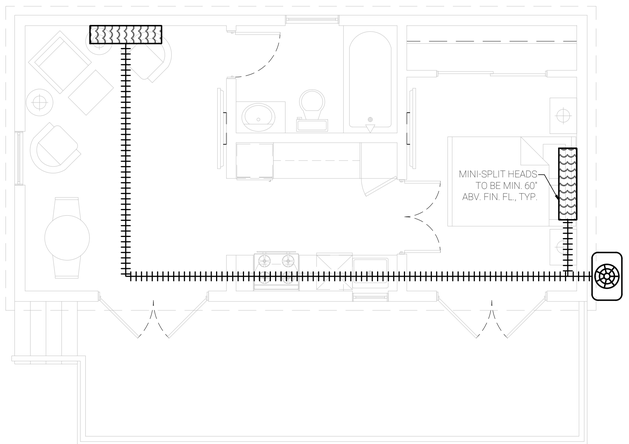
PROPOSED SECOND FLOOR MECHANICAL PLAN

SCALE: 1/4"=1'-0"



AC STAND DETAIL

SCALE: 1/2"=1'-0"



ACCESSORY UNIT MECHANICAL PLAN

SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License # 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone #: 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

WILLIAM CAMPBELL LICENSE No. 79269 STATE OF FLORIDA PROFESSIONAL ENGINEER
William Campbell, P.E.
Digitally signed by William Campbell, P.E.
Date: 2021.01.05 10:47:52 -05'00'

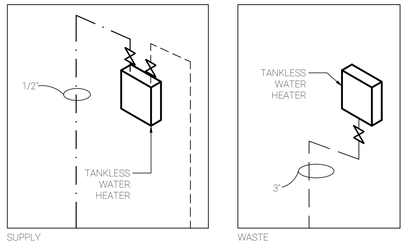
PROJECT #:
1838
Date:
OCTOBER 26, 2020

SHEET 8 of 14

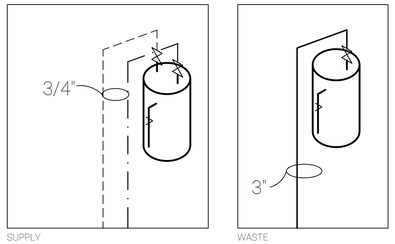
SHEET #
M-1

PLUMBING NOTES:

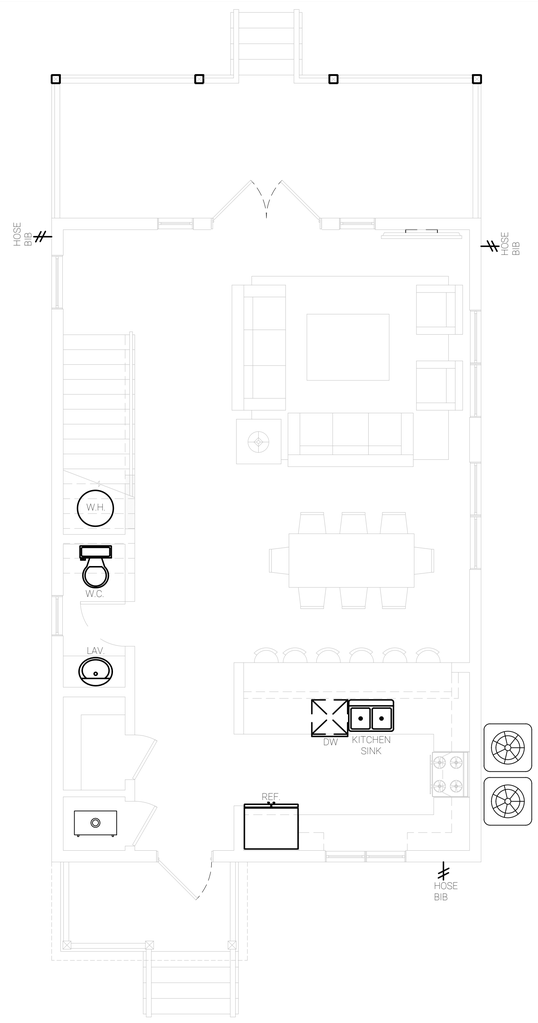
1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, EQUIPMENT AND SUPERVISION NECESSARY TO PROVIDE THE WORK COMPLETE AND READY FOR USE. THE NEW WORK SHALL INCLUDE COMPLETE HOT AND COLD WATER SYSTEMS AND VENT, WASTE AND DRAIN SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
2. ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2017 PLUMBING CODE, THE ENERGY CONSERVATION CODE AND ALL APPLICABLE LOCAL ORDINANCES.
3. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING.
4. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR.
5. PLUMBING DRAWINGS (PLANS, DIAGRAMS, ETC.) ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED. THE DRAWINGS DO NOT SHOW EVERY BEND, OFFSET, ELBOW AND OTHER FITTINGS WHICH MAY BE REQUIRED FOR PROPER INSTALLATION IN THE SPACE ALLOCATED NOR AS REQUIRED TO COORDINATE WORK WITH THAT OF OTHER TRADES. ANY WORK NOT SHOWN ON THE DRAWINGS BUT CONSIDERED NECESSARY FOR THE PROPER COMPLETION OF THE WORK SHALL BE PROVIDED WITHOUT ADDITIONAL CHARGE TO THE OWNER.
6. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER WORK UNDER THIS CONTRACT.
7. THE OWNER WILL NOT BE HELD LIABLE FOR ANY CHANGES THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER OR FIELD CHANGES THAT ARISE FROM CONTRACTOR ERROR OR OMISSION OF MATERIAL OR POOR WORKMANSHIP.
8. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING MAIN, WATER AND SEWER CONNECTIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOTIFY AND RECEIVE CLEARANCE FROM THE APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATING.
9. VERIFY ALL DIMENSIONS AND CLEARANCES AT THE SITE AND IN THE BUILDING PRIOR TO FABRICATION AND INSTALLATION.
10. THE CONTRACTOR SHALL SATISFACTORILY REPAIR AND/OR REPLACE EXISTING WORK, FEATURES AND EQUIPMENT DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHES SHALL BE RESTORED TO MATCH ADJACENT SURFACES AND FINISHES.
11. THE CONTRACTOR SHALL INSPECT EXISTING CONDITIONS PRIOR TO BID AND BECOME FAMILIAR WITH THE SCOPE OF WORK. NO EXTRAS WILL BE ALLOWED FOR THE CONTRACTORS FAILURE TO COMPLY WITH THIS REQUIREMENT.
12. PLUMBING FIXTURES SHALL BE SELECTED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. (PLUMBING FIXTURES INDICATED ON DRAWING ARE FOR REFERENCE ONLY, FIXTURES OR EQUAL QUALITY, AND CRAFTSMANSHIP MAY BE USED AS DIRECTED).
13. ALL FIXTURES SHALL BE PROTECTED FROM WATER HAMMER WITH AIR CHAMBER SIZED IN ACCORDANCE WITH P.D.I. STANDARDS. (JOSAN OR EQUAL)
14. PROVIDE CONTROL VALVES TO ALL RISERS, BRANCHES, GROUPS OF FIXTURES AND EACH PIECE OF EQUIPMENT. CONTROL VALVES SHALL BE CAST BRASS OR BRONZE GATE VALVES.
15. PROVIDE FULLY ACCESSIBLE CLEANOUTS ON SANITARY PIPING AT THE BASE OF EACH SOIL AND WASTE PIPE AND AT EVERY CHANGE OF DIRECTION.
16. PROVIDE MINIMUM PITCH OF ¼" PER FOOT FOR ALL HORIZONTAL BRANCHES AND SEWER TRADES.
17. ALL WATER PIPING SHALL BE TYPE M COPPER WITH WROUGHT COPPER SOLDERED JOINT FITTINGS.
18. PROVIDE DIELECTRIC FITTINGS FOR JOINING DISSIMILAR METALS.
19. SANITARY DRAIN PIPING WITHIN THE BUILDING AND BELOW THE GROUND SHALL BE SCHEDULE 40 PVC.
20. WATER HEATER SHALL BEAR LABEL INDICATING COMPLIANCE WITH ASHRAE STD. 90. WATER HEATER SHALL BE EQUIPPED WITH A DRAIN PAN WITH 2" MIN. SIDES AND 2" CLEARANCE ON ALL SIDES. PROVIDE ¾" DRAIN OUTLET LOCATED ½" ABOVE BOTTOM OF PAN. P&T RELIEF VALVE AND DRAIN PAN PIPING SHALL BE TYPE M COPPER.
21. ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS TO PROTECT TRAP SEAL.
22. ALL VENTS THROUGH ROOF SHALL MAINTAIN MINIMUM 10' HORIZONTAL CLEARANCE FROM ANY MECHANICAL AIR INTAKE.
23. ALL PIPING SHALL BE SUPPORTED RIGIDLY.
24. ALL CUTTING AND NOTCHING REQUIRED FOR THE INSTALLATION OF PLUMBING WORK SHALL BE ACCOMPLISHED IN AN APPROVED MANNER. APPROVAL SHALL BE OBTAINED FROM THE ENGINEER OF RECORD PRIOR TO CUTTING OR DRILLING STRUCTURAL MEMBERS UNLESS SPECIFICALLY ADDRESSED HEREIN.
25. WATER USAGE FOR PLUMBING FIXTURES SHALL NOT EXCEED THE FOLLOWING:
WATER CLOSETS: 1.6 GALLONS PER FLUSH
SHOWERS: 2.5 GALLONS PER MINUTE
FAUCETS: 2.0 GALLONS PER MINUTE
26. HOSE BIBS SHALL BE PROTECTED BY APPROVED BACK-SIPHONAGE BACKFLOW PREVENTERS.
27. TEST ALL WATER PIPING AT 100 PSI HYDROSTATIC PRESSURE A MINIMUM OF 2 HOURS.
28. TEST ALL SOIL, WASTE AND VENT PIPING WITH A 10' HEAD OF WATER. WATER LEVEL TO REMAIN UNCHANGED FOR 2 HOURS MINIMUM.
29. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF DRAWINGS TO INDICATE ALL CHANGES MADE TO THE PLUMBING DESIGN. THE AS-BUILT DRAWINGS SHALL BE DELIVERED TO THE OWNER AFTER COMPLETION OF WORK.
30. CONTRACTOR TO COORDINATE INSPECTION WITH MONROE COUNTY AND KEY WEST RESORT UTILITIES.



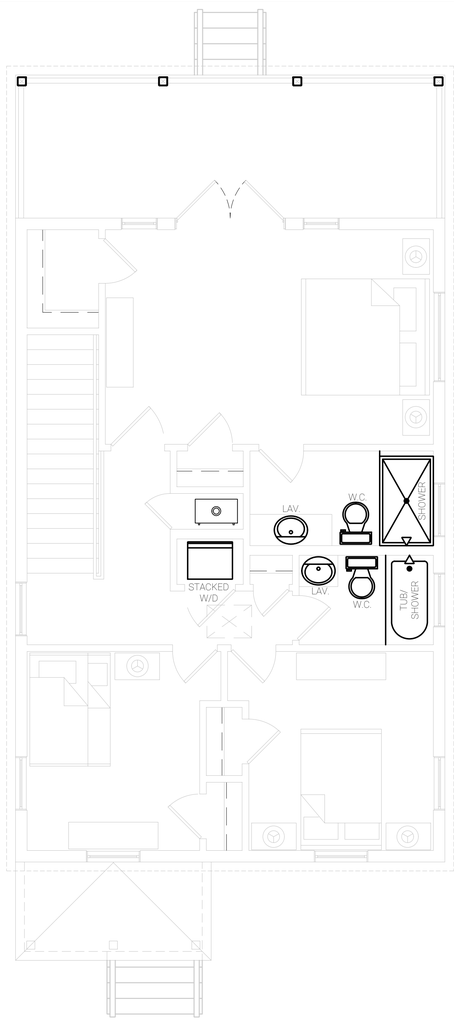
TYP. WATER HEATER RISER DIAGRAM
SCALE: 1/2"=1'-0"



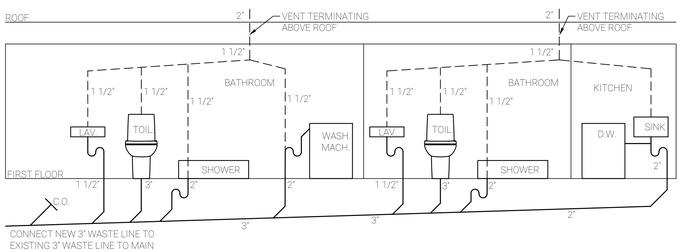
TYP. WATER HEATER RISER DIAGRAM
SCALE: 1/2"=1'-0"



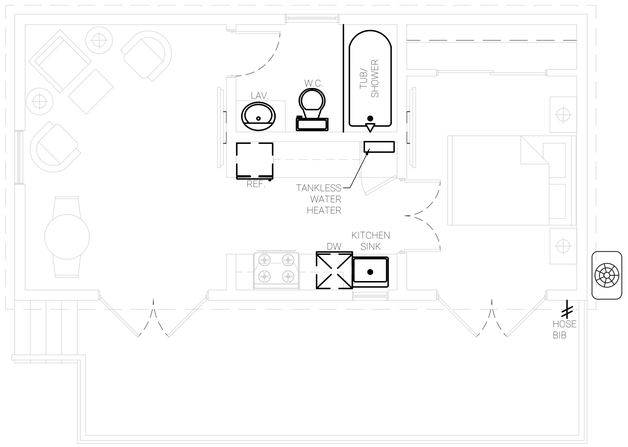
PROPOSED FIRST FLOOR PLUMBING LAYOUT
SCALE: 1/4"=1'-0"



PROPOSED SECOND FLOOR PLUMBING LAYOUT
SCALE: 1/4"=1'-0"



TYPICAL PLUMBING RISER DIAGRAM
SCALE: 1/4"=1'-0" NOT REPRESENTATIVE OF ACTUAL FIXTIRE LOCATIONS



ACCESSORY UNIT PLUMBING LAYOUT
SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License # 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone #: 305-735-4626

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

WILLIAM CAMPBELL LICENSE No. 79269 STATE OF FLORIDA PROFESSIONAL ENGINEER
William Campbell, P.E.
Digitally signed by William Campbell, P.E.
Date: 2021.01.05 10:37:52 -05'00'

PROJECT #:
1838
Date:
OCTOBER 26, 2020

SHEET 9 of 14

SHEET #
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COLUMN LEGEND:

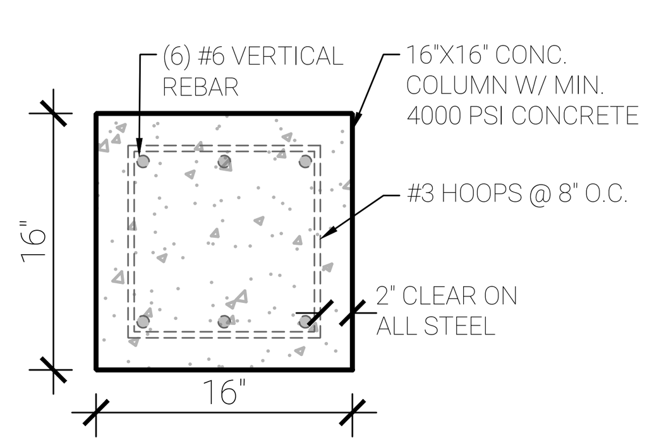
1 — 6"X6" PT WOOD COLUMN

2 — 16"X16" CONC. COLUMN

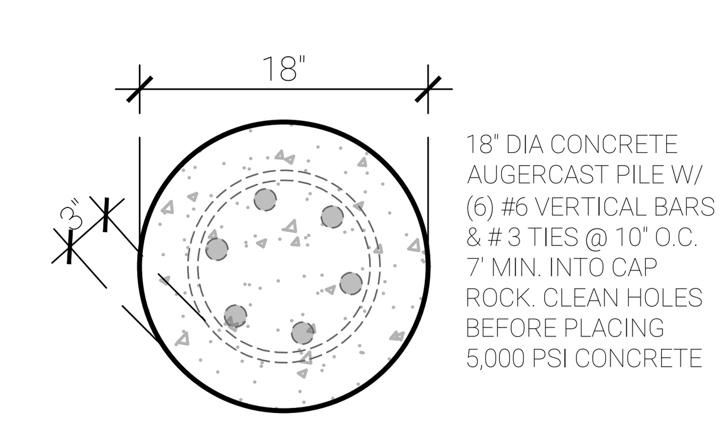
CONNECTOR NOTES:

A — SIMPSON HD9B TO EACH COL. BELOW W/ (2) AT EACH CORNER

B — SIMPSON HD5B TO EACH COL. BELOW W/ (2) AT EACH CORNER



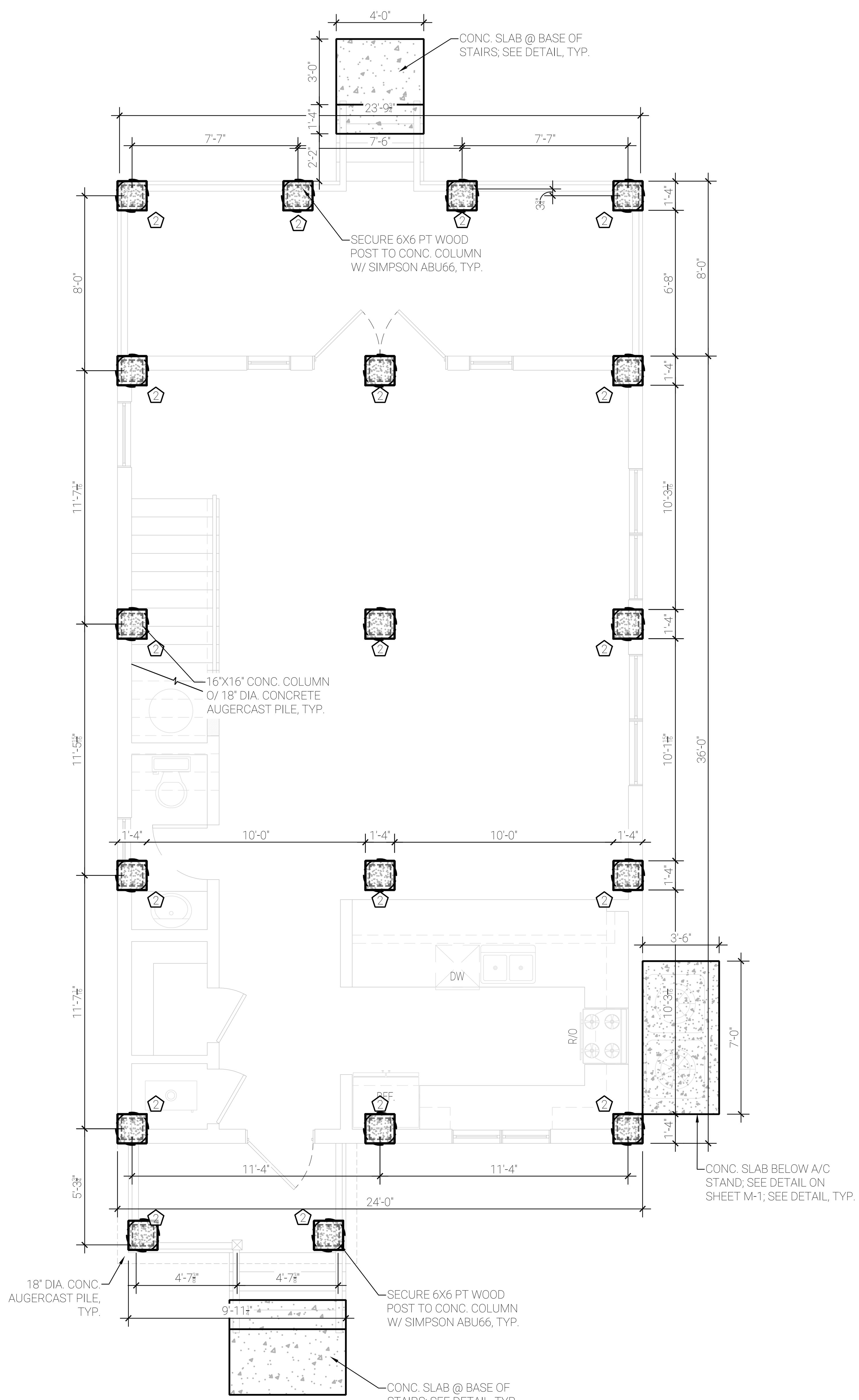
16"X16" CONC. COLUMN



18" AUGERCAST PILE

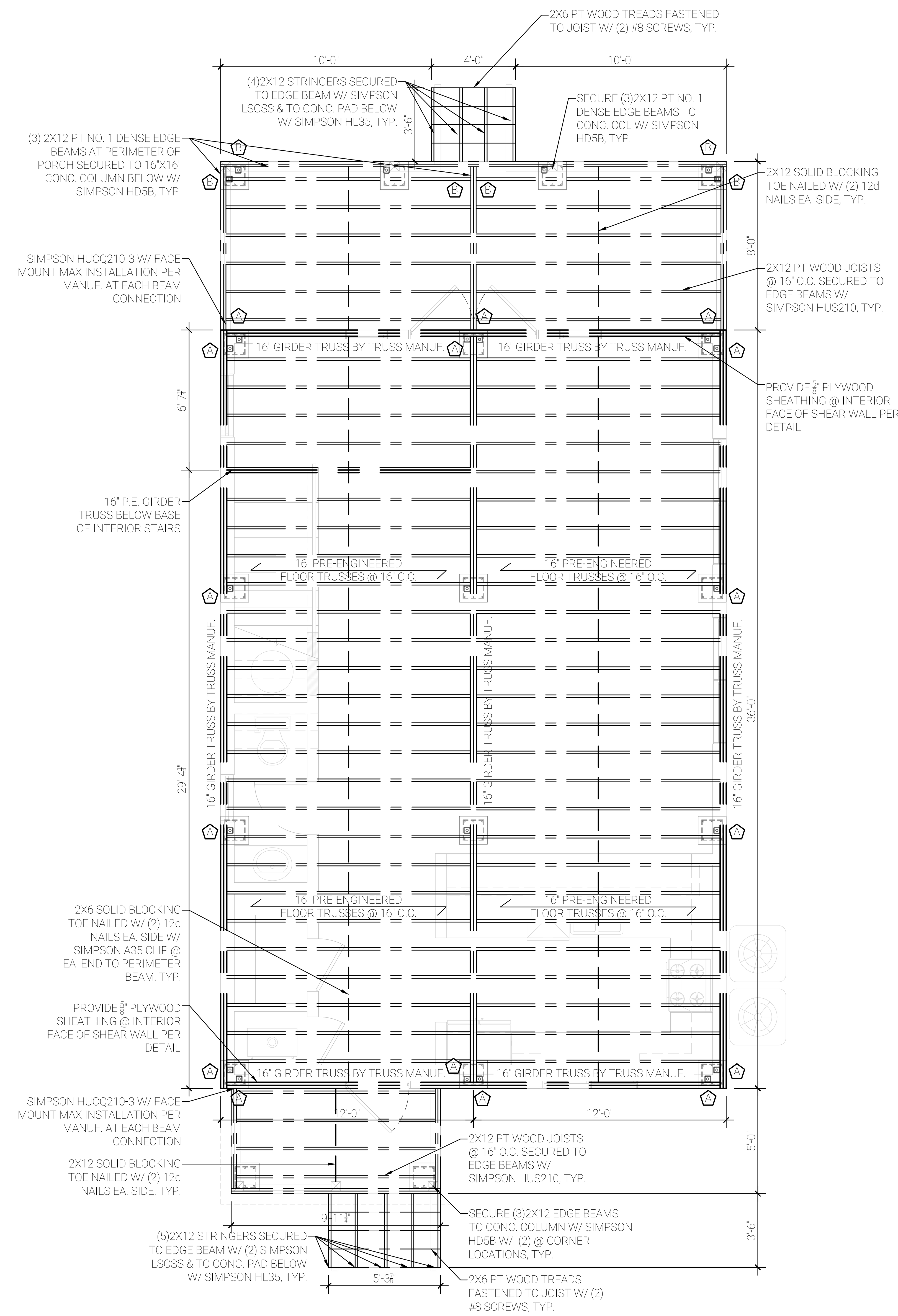
BEAM, COLUMN & AUGER DETAILS

SCALE: 1"=1'-0"



FOUNDATION PLAN

SCALE: 1/4"=1'-0"



FIRST FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING CONSULTANTS LLC

William R. Campbell, P.E. License #: 79269
Email: will@cecflk.com CA/Registry #: 31437
Phone #: 305-735-4626

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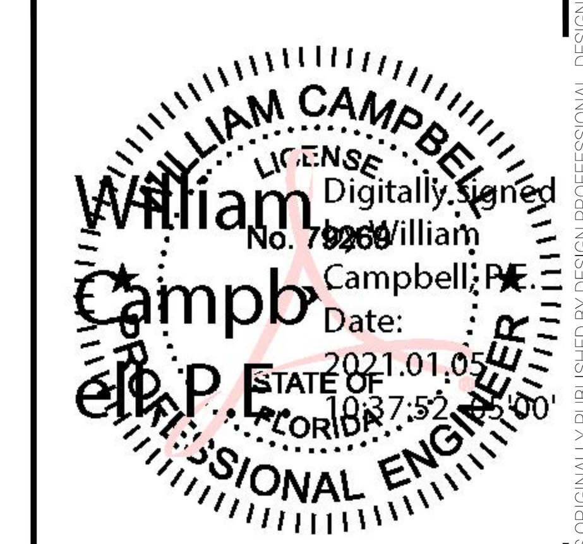

PROJECT #: 1838

Date: OCTOBER 26, 2020

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CONNECTOR NOTES:

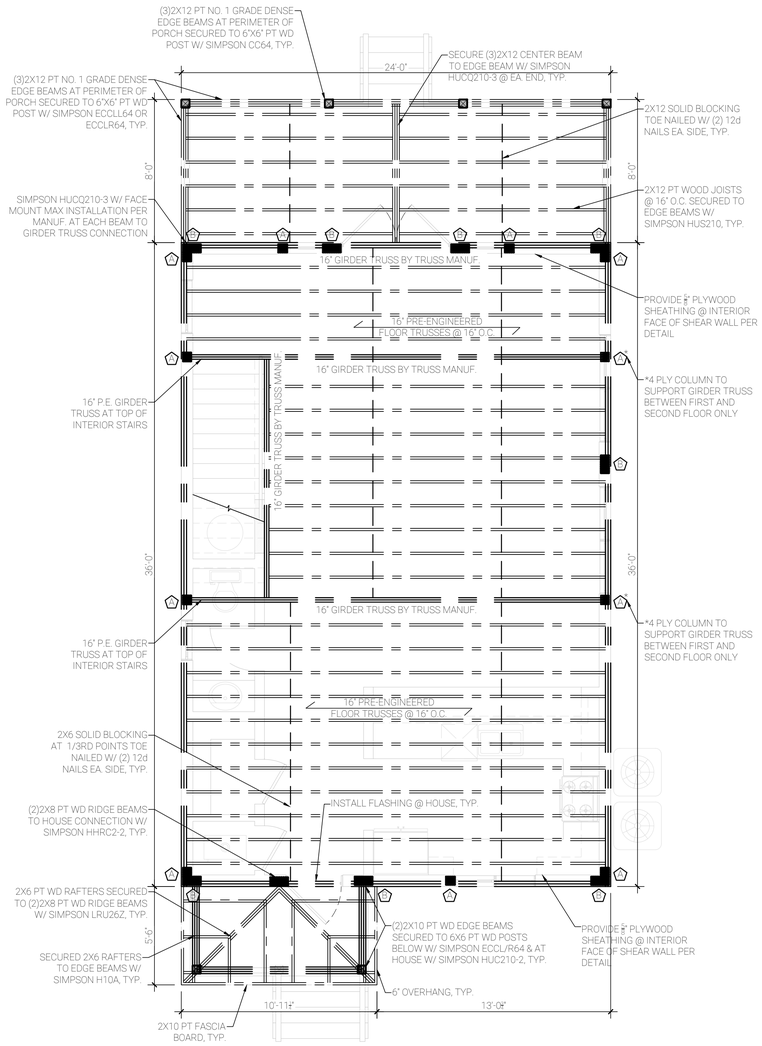
SIMPSON HDU8 AT 4 PLY COL. BELOW

SIMPSON HDU8 AT 8 PLY COL. BELOW

SHEAR WALL NOTES:

SEE SHEET A-1 FOR SHEAR WALL LOCATIONS.

SEE SHEET S-3 FOR SHEAR WALL DESIGN INFO.



SECOND FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

CONNECTOR NOTES:

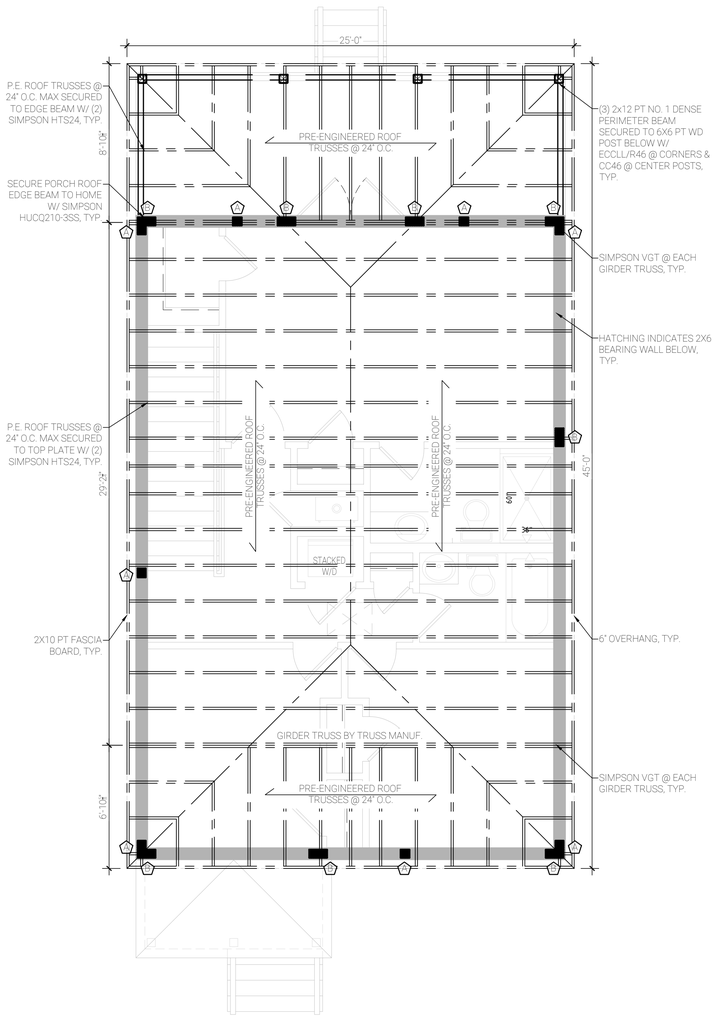
SIMPSON HDU8 AT 4 PLY COL. BELOW

SIMPSON HDU8 AT 8 PLY COL. BELOW

SHEAR WALL NOTES:

SEE SHEET A-1 FOR SHEAR WALL LOCATIONS.

SEE SHEET S-3 FOR SHEAR WALL DESIGN INFO.



ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

CONSTRUCTION PROPOSED FOR THE FOLLOWING LOCATION:

3450 DUCK AVENUE
KEY WEST, FLORIDA

CAMPBELL ENGINEERING
CONSULTANTS LLC

William R. Campbell, P.E.
Email: will@cecflk.com
Phone #: 305-735-4626

License #: 79269
CA/Registry #: 31437

PLANS ARE NOT VALID UNLESS SIGNED AND DATED

WILLIAM CAMPBELL LICENSE No. 79269 STATE OF FLORIDA PROFESSIONAL ENGINEER

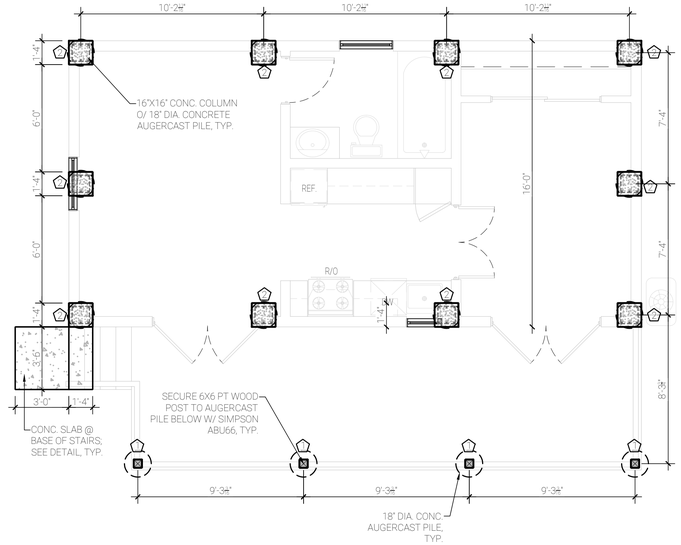
William Campbell, P.E.
Digitally signed by William Campbell, P.E.
Date: 2021.01.05 10:37:52 -05'00'

PROJECT #:
1838

Date:
OCTOBER 26, 2020

SHEET 11 of 14

SHEET #
S-2

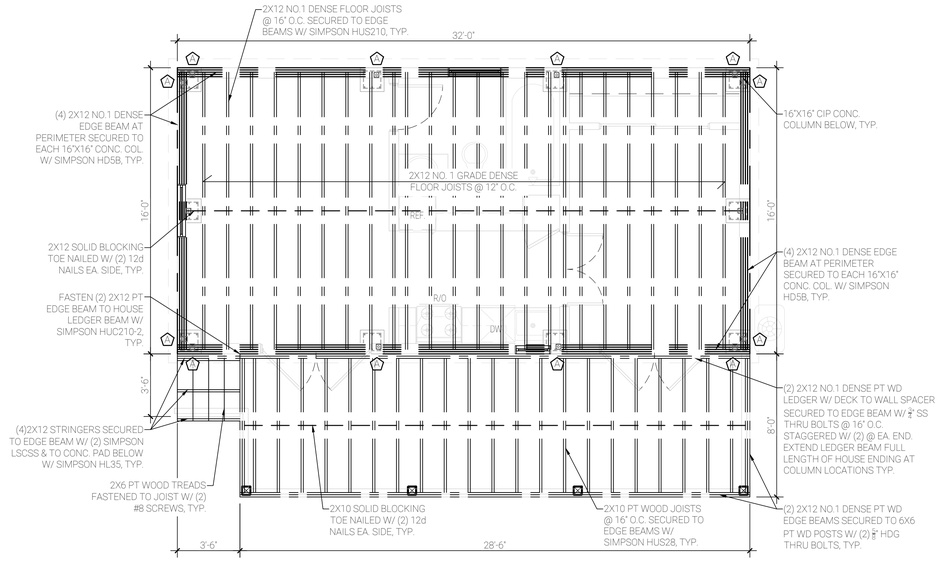


ACCESSORY UNIT FLOOR PLAN

SCALE: 1/4"=1'-0"

COLUMN LEGEND:

- 6"X6" PT WOOD COLUMN
- 16"X16" CONC. COLUMN

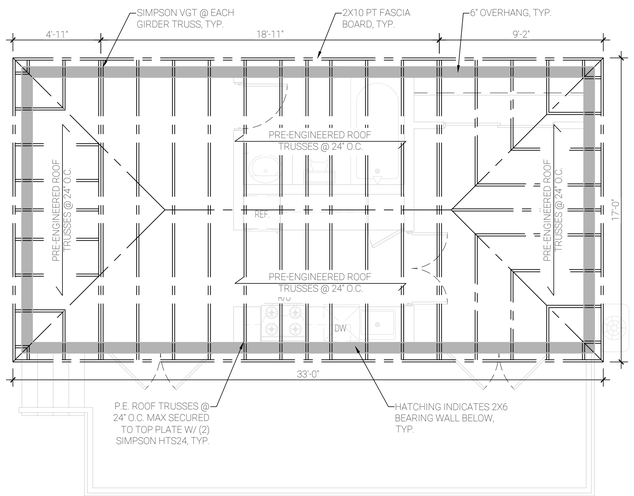


ACCESSORY UNIT FLOOR PLAN

SCALE: 1/4"=1'-0"

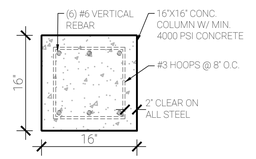
CONNECTOR NOTES:

- SIMPSON HD9B TO EACH COL. BELOW W/ (2) AT EACH CORNER

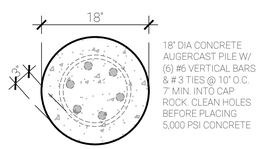


ACCESSORY UNIT FLOOR PLAN

SCALE: 1/4"=1'-0"



16"X16" CONC. COLUMN



18" AUGERCAST PILE

BEAM, COLUMN & AUGER DETAILS

SCALE: 1"=1'-0"

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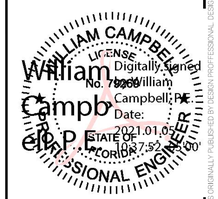

PROJECT #:

1838

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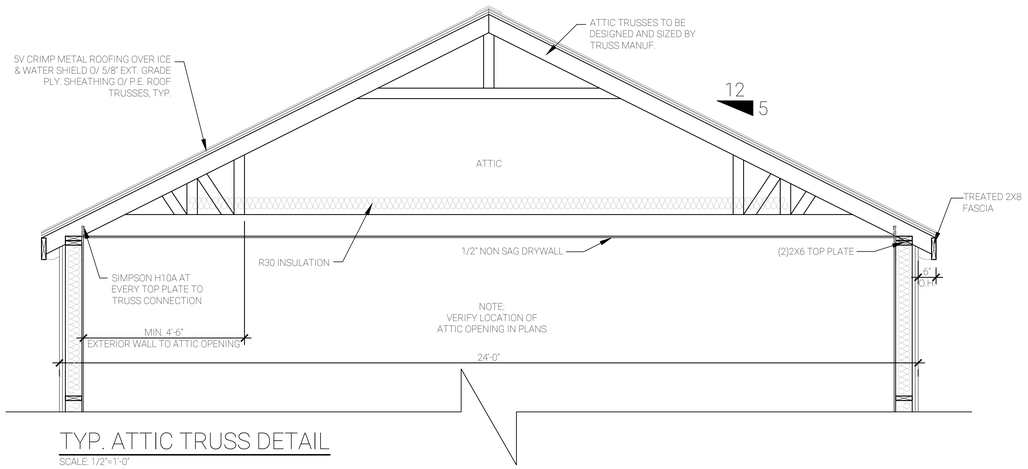
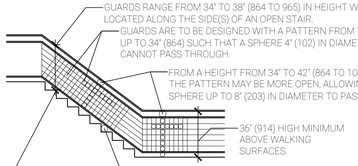
S-3



TYP. ATTIC TRUSS DETAIL

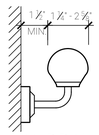
SCALE: 1/2"=1'-0"



STAIR AND RAILING REQUIREMENTS DIAGRAM

HANDRAIL AND GUARDS LOAD REQUIREMENTS

- HANDRAILS AND GUARDS ARE TO BE DESIGNED TO RESIST A LOAD OF 50 POUNDS PER LINEAL FOOT (0.73 kN/m) APPLIED IN ANY DIRECTION AT THE TOP AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE SUPPORTING THE RAIL OR GUARD,
- HANDRAIL ASSEMBLIES ARE ALSO TO BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 POUNDS (0.89 kN) APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP. THIS LOAD CAN BE CONSIDERED INDEPENDENTLY OF THE UNIFORM LOAD NOTED PREVIOUSLY.
- INTERMEDIATE RAILS, THAT IS, THOSE NOT THE HANDRAIL, ARE TO BE ABLE TO RESIST A LOAD OF 50 POUNDS (0.22 kN) ON AN AREA NOT TO EXCEED 1 S.F. (0.09 M) INCLUDING THE OPENINGS AND SPACES BETWEEN RAILS. THESE ARE NOT REQUIRED TO BE SUPERIMPOSED WITH OTHER RAILING LOADS NOTED ABOVE.

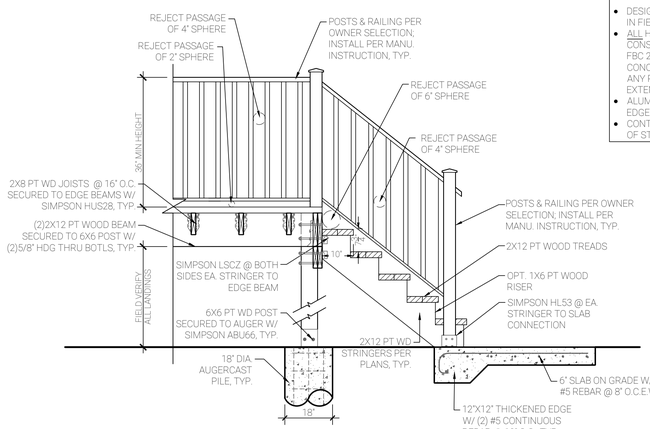


HANDRAIL DETAIL

NO SCALE

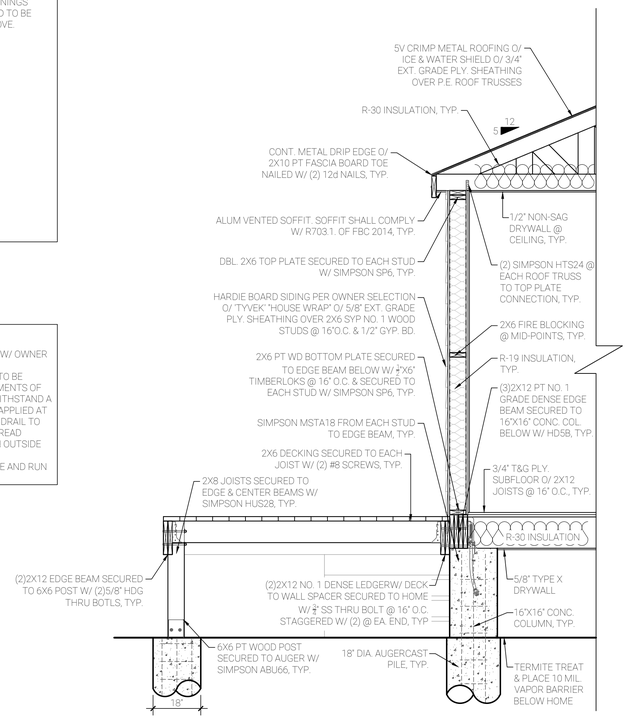
TYPICAL STAIR/RAILING NOTES:

- DESIGN MAY VARY; VERIFY DESIGN W/ OWNER IN FIELD.
- ALL HANDRAILS AND GUARDRAILS TO BE CONSTRUCTED TO MEET REQUIREMENTS OF FBC 2017 AND MUST BE ABLE TO WITHSTAND A CONCENTRATED LOAD OF 200LBS. APPLIED AT ANY POINT IN ANY DIRECTION. HANDRAIL TO EXTEND TO BEGINNING OF FIRST TREAD
- ALUMINUM RAILING SHALL RUN ON OUTSIDE EDGE OF STAIRS AND DECK
- CONTRACTOR TO FIELD VERIFY RISE AND RUN OF STAIRS



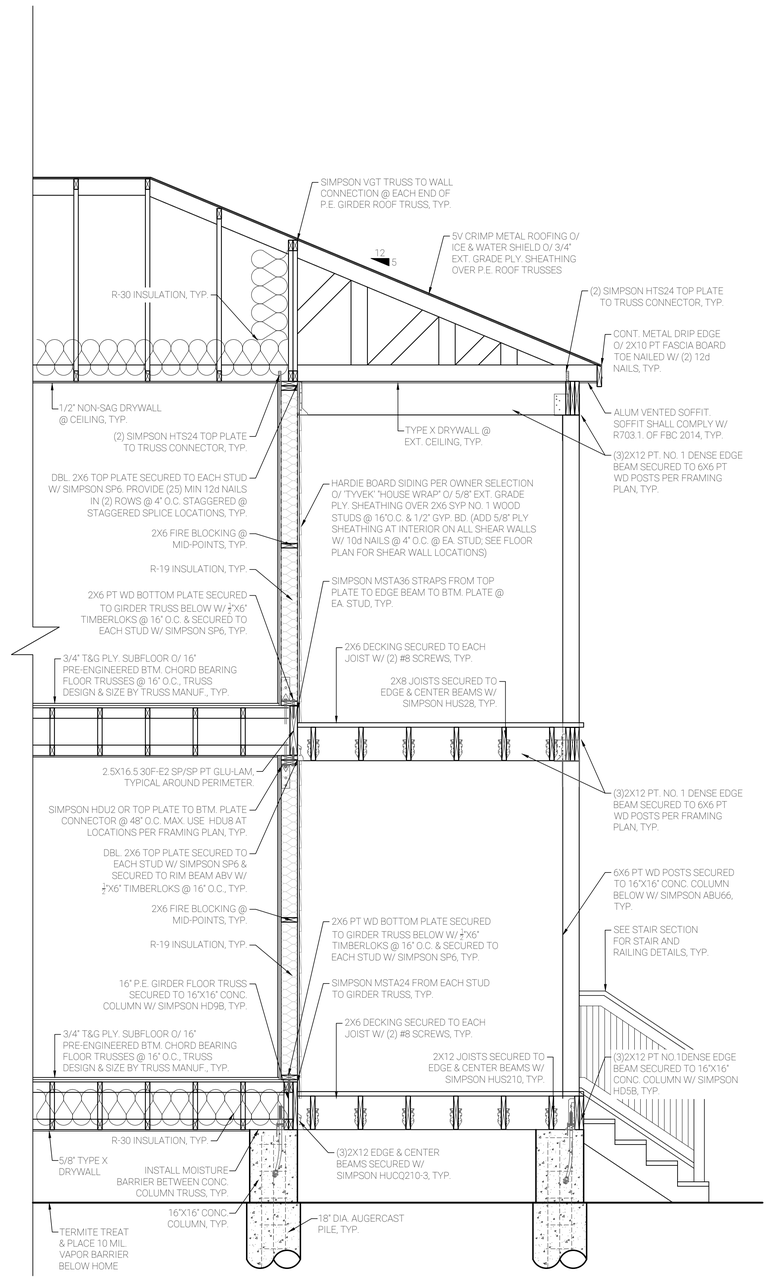
TYPICAL STAIR DETAIL

SCALE: 1/2"=1'-0"



ACCESSORY UNIT BUILDING SECTION

SCALE: 1/2"=1'-0"



MAIN HOME BUILDING SECTION

SCALE: 1/2"=1'-0"

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CAMPBELL ENGINEERING
CONSULTANTS LLC
William R. Campbell, P.E. License #: 79269
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WILLIAM CAMPBELL
LICENSE
No. 79269
STATE OF FLORIDA
PROFESSIONAL ENGINEER
William Campbell, P.E.
Digitally signed by William Campbell, P.E.
Date: 2021.01.05 10:37:52 -05'00'

PROJECT #:
1838
Date:
OCTOBER 26, 2020

SHEET 13 of 14

SHEET #
S-4

ASCE 7-10 WIND LOAD DATA
PER FBC 2017 - CH. 28, 30

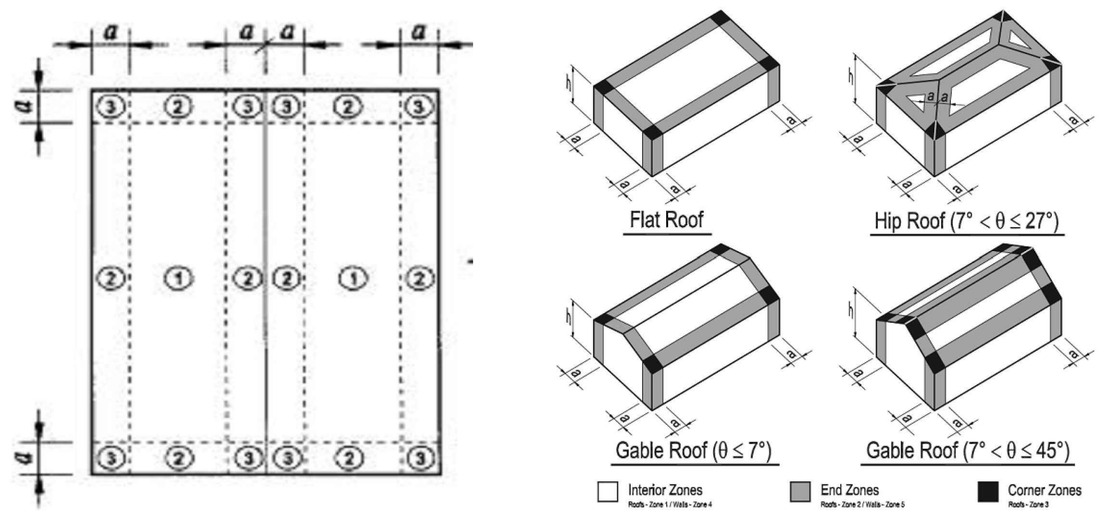
WIND SPEED 180 MPH
CATAGORY/EXPOSURE: II/D
MEAN ROOF HEIGHT: 26'-1"
ROOF ANGLE: 22.62 DEG.
WIND PRESSURES (PSF)
(PER FBC MULTIPLY BY 0.6 FOR APPLIED LOADS)

NOMINAL ROOF ZONES:	ULTIMATE ROOF ZONES:
ZONE 1: +33.2/-52.9	ZONE 1: +55.8/-88.5
ZONE 2: +33.2/-92.0	ZONE 2: +55.8/-154.2
ZONE 3: +33.2/-136.1	ZONE 3: +55.8/-227.9

Interior Zones
Roofs - Zone 1 / Walls - Zone 4

End Zones
Roofs - Zone 2 / Walls - Zone 5

Corner Zones
Roofs - Zone 3



UPPER ROOF

ASCE 7-10 WIND LOAD DATA
PER FBC 2017 - CH. 28, 30

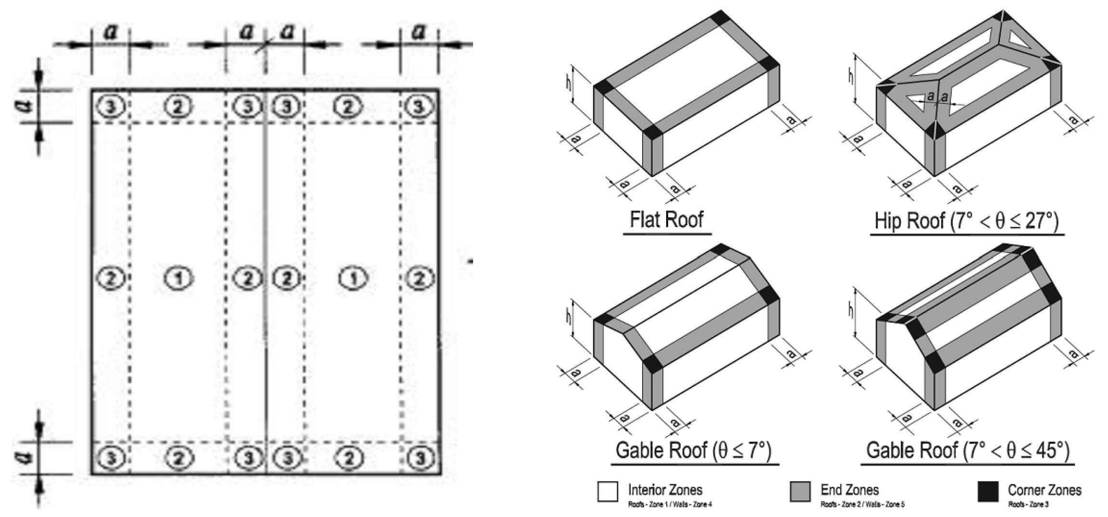
WIND SPEED 180 MPH
CATAGORY/EXPOSURE: II/D
MEAN ROOF HEIGHT: 12'-10"
ROOF ANGLE: 22.62 DEG.
WIND PRESSURES (PSF)
(PER FBC MULTIPLY BY 0.6 FOR APPLIED LOADS)

NOMINAL ROOF ZONES:	ULTIMATE ROOF ZONES:
ZONE 1: +41.2/-61.5	ZONE 1: +68.6/-102.6
ZONE 2: +41.2/-121.8	ZONE 2: +68.6/-203.0
ZONE 3: +41.2/-121.8	ZONE 3: +68.6/-203.0

Interior Zones
Roofs - Zone 1 / Walls - Zone 4

End Zones
Roofs - Zone 2 / Walls - Zone 5

Corner Zones
Roofs - Zone 3



FRONT PORCH ROOF

ASCE 7-10 WIND LOAD DATA
PER FBC 2017 - CH. 28, 30

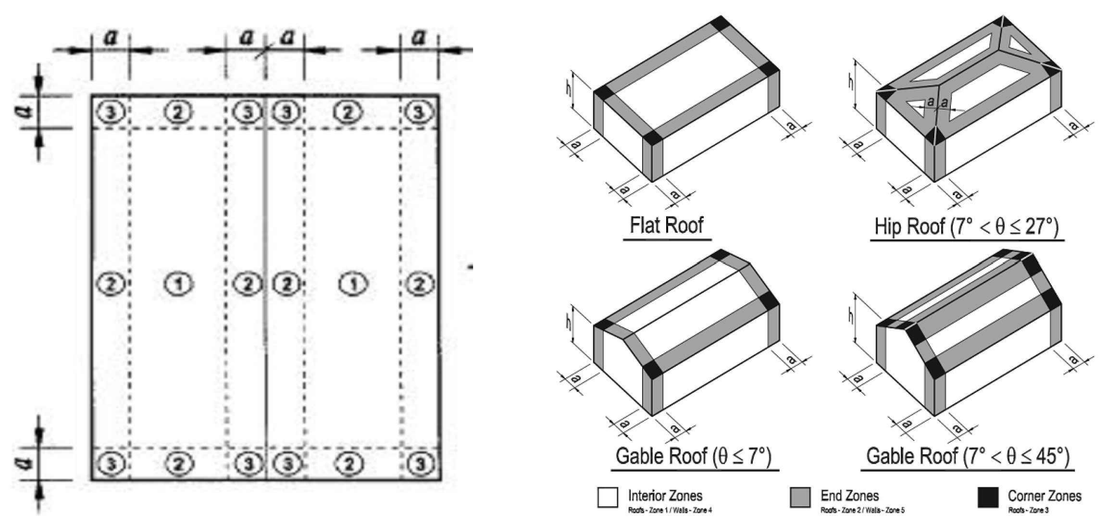
WIND SPEED 180 MPH
CATAGORY/EXPOSURE: II/D
MEAN ROOF HEIGHT: 13'-9"
ROOF ANGLE: 22.62 DEG.
WIND PRESSURES (PSF)
(PER FBC MULTIPLY BY 0.6 FOR APPLIED LOADS)

NOMINAL ROOF ZONES:	ULTIMATE ROOF ZONES:
ZONE 1: +29.4/-46.8	ZONE 1: +49.4/-78.4
ZONE 2: +29.4/-81.5	ZONE 2: +49.4/-136.6
ZONE 3: +29.4/-120.5	ZONE 3: +49.4/-201.8

Interior Zones
Roofs - Zone 1 / Walls - Zone 4

End Zones
Roofs - Zone 2 / Walls - Zone 5

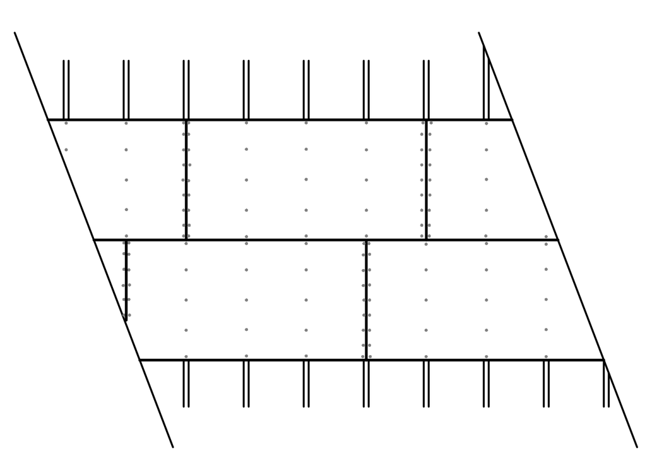
Corner Zones
Roofs - Zone 3



ACCESSORY UNIT

ROOF CONSTRUCTION NOTES:

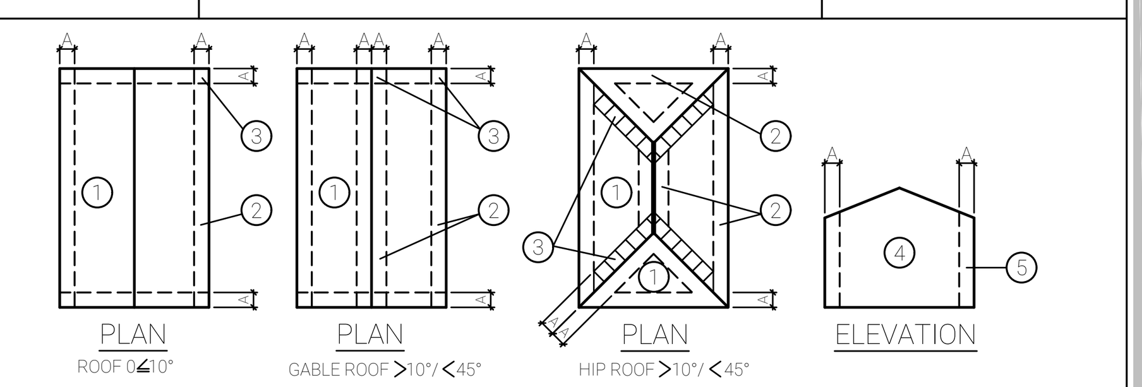
1. PROVIDE ATTIC VENTS AS SPECIFIED IN WALL SECTIONS.
2. TIE ROOF TRUSSES TO INTERIOR PARTITIONS WITH METAL CLIPS, TIES OR STRAPS AS SPECIFIED IN STRAPPING SCHEDULE.
3. PROVIDE ALL REQUIRED TRUSS BRACING AS SPECIFIED ON ENGINEERED TRUSS PLAN.
4. PRE-FAB, PRE-ENGINEERED ROOF TRUSSES ARE TO BE SPACED @ 2'-0", O.C..
5. SBCCI APPROVED ANCHORS CAPABLE OF MEETING UPLIFT REQUIREMENTS AS PROVIDED BY THE TRUSS MANUFACTURER AT EACH TRUSS TO PROVIDE A CONTINUOUS TRANSFER OF UPLIFT LOADS FROM TRUSS TO FOUNDATION.
6. TRUSS MANUFACTURER TO SUBMIT PROFILES & PLANS, PRIOR TO FABRICATION, TO THE CONTRACTOR FOR APPROVAL.
7. ROOF PLAN FOR DESIGN PURPOSES ONLY.
8. ALL CONNECTORS IN CONTACT WITH PT. WOOD SHALL BE Z-MAX COATED OR EQUAL.
9. ALL TRUSSES TO TIEBEAM CONNECTIONS: SIMPSON (HETA-20) UP TO 1810 # UNLESS OTHERWISE NOTED.
10. ALTERNATE FASTENERS MAY BE USED PROVIDED THEY MEET UPLIFT AND LOAD REQUIREMENTS AND ARE NO LESS THAN THE VALUES LISTED ABOVE FOR UPLIFTS.
11. ATTACH ALL STRAPS WITH GALVANIZED NAILS OF SIZE AND QUANTITY SPECIFIED BY STRAP MANUFACTURER.
12. ALL HURRICANE RESISTANT TIE DOWNS STRAPPING AND ANCHORS SHALL HAVE A CONTINUOUS PATH FROM THE ROOF TO FOUNDATIONS. ALL STRAPPING AND ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
13. ROOF TRUSSES SHALL BE HANDLED, STORED, ERECTED, TEMPORARILY BRACED & PERMANENTLY BRACED PER "BCSI1-03" GUIDE TO GOOD PRACTICES FOR HANDLING, INSTALLING & BRACING METAL PLATE CONNECTED WOOD TRUSSES.
14. ADD SEALANT AT SEAMS FOR 5V CRIMP ROOF UNDER 3:12 PITCH.
15. INSTALL SHEATHING WITH 1/8" GAP AT ALL EDGES.

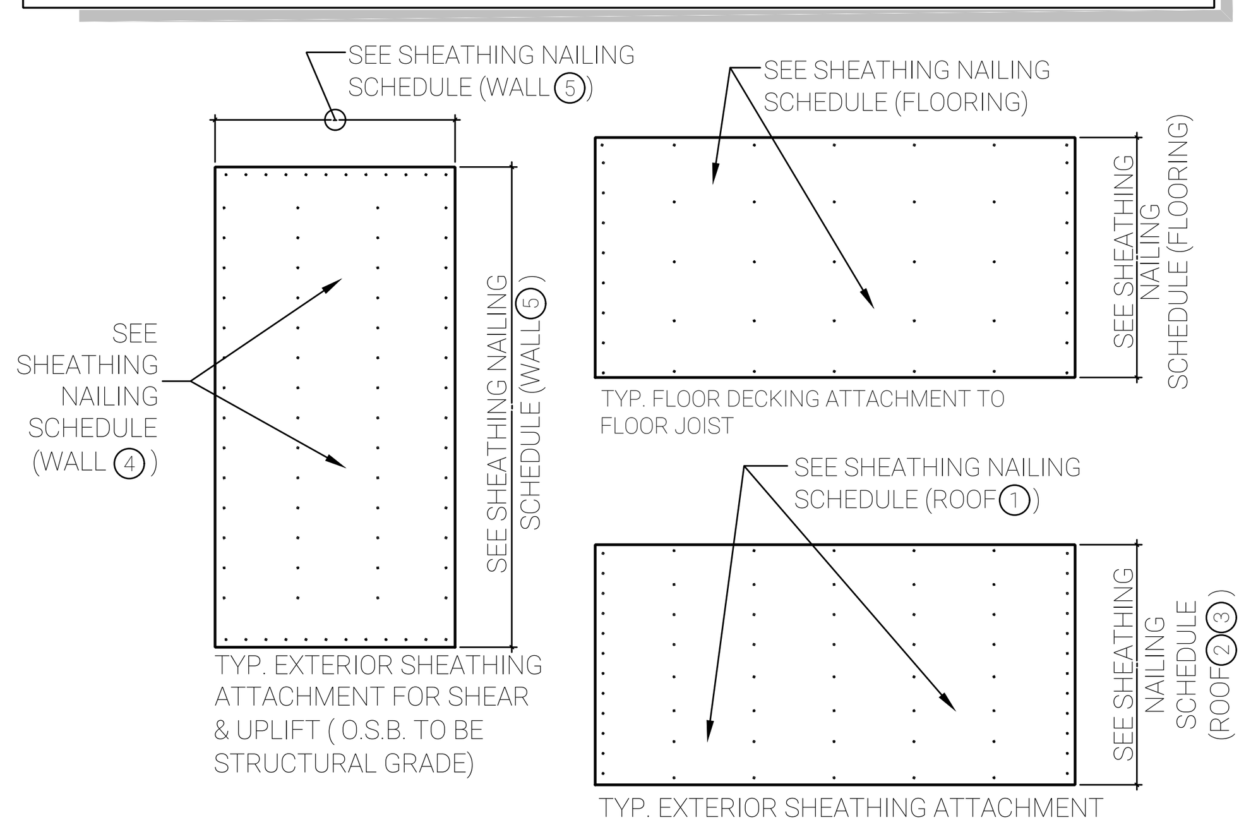


ROOF & WALL NAILING REQUIREMENTS
SCALE = N.T.S.

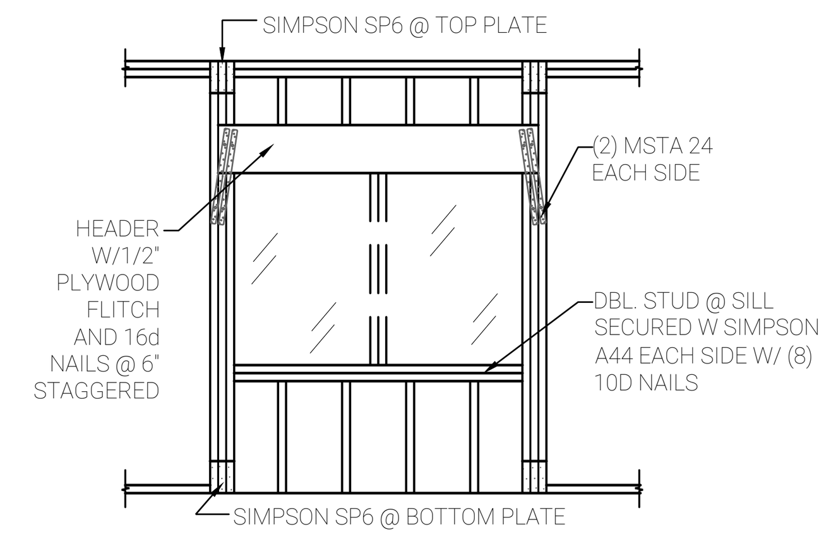
SHEATHING NAILING SCHEDULE
(WALLS AND ROOF)

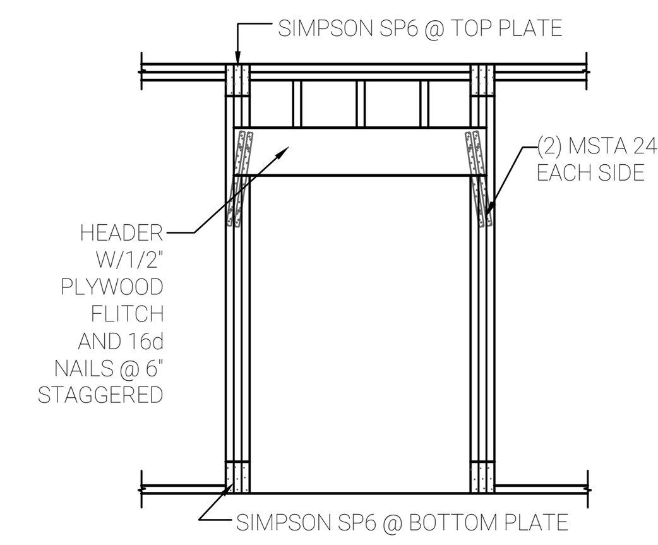
NAIL SIZE	NAIL SPACING	ZONE
10d RING SHANK	4" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF ③
10d RING SHANK	4" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF ① ②
10d RING SHANK	4" @ EDGES, 8" @ INTERMEDIATE SUPPORTS	WALL ⑤
10d RING SHANK	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	WALL ④
#10 SCREWS	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	FLOORING



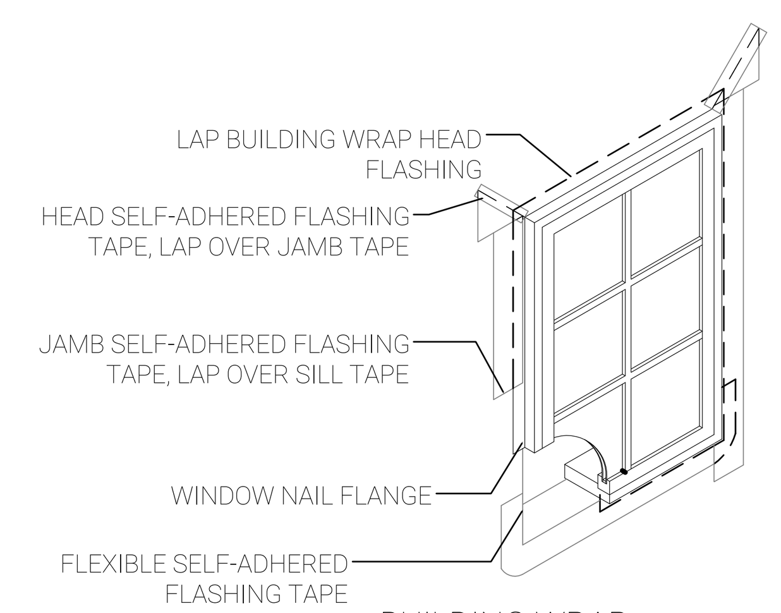


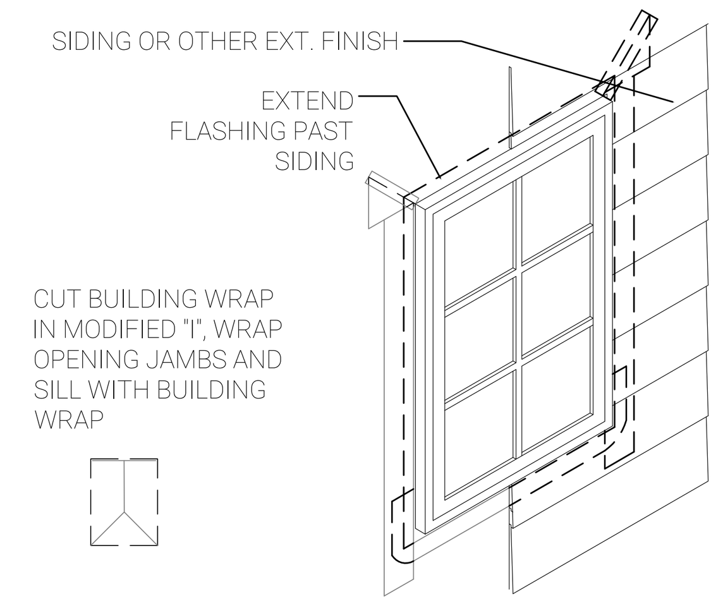
TYP. NAILING DETAIL
SCALE: N.T.S.



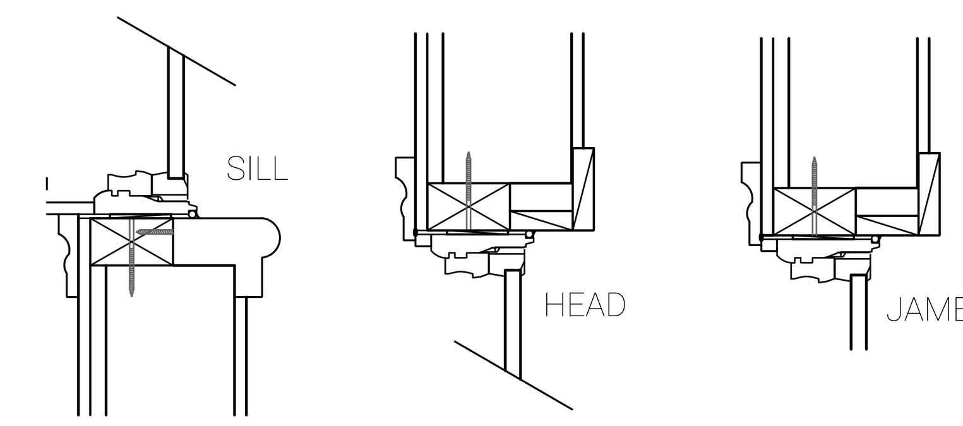


WINDOW/DOOR FRAMING DETAILS



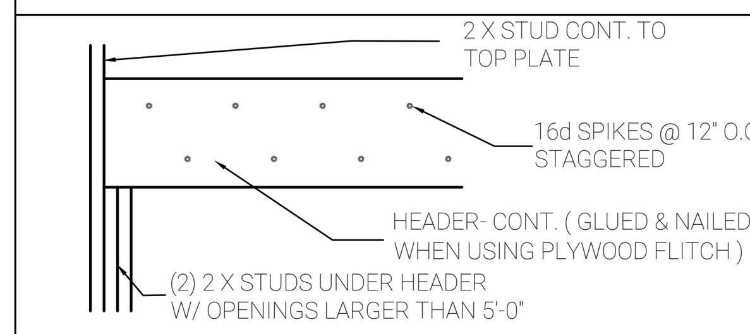


WINDOW BLDG. WRAP/FLASHING DETAILS



TYPICAL WINDOW DETAIL
SCALE: N.T.S.

HEADER SCHEDULE



OPENING WIDTH	BEARING WAL OR SHEAR WALL	NONBEARING WALLS
0'-0" TO 3'-0"	(2) - 2 X 6's	(2) - 2 X 4's
3'-1" TO 5'-0"	(2) - 2 X 10's	(2) - 2 X 6's
5'-1" TO 7'-0"	(2) - 2 X 12's	(2) - 2 X 8's
7'-1" TO 9'-0"	(2) - 2 X 12's W/ 1/2" PLYWOOD FLITCH	(2) - 2 X 12's

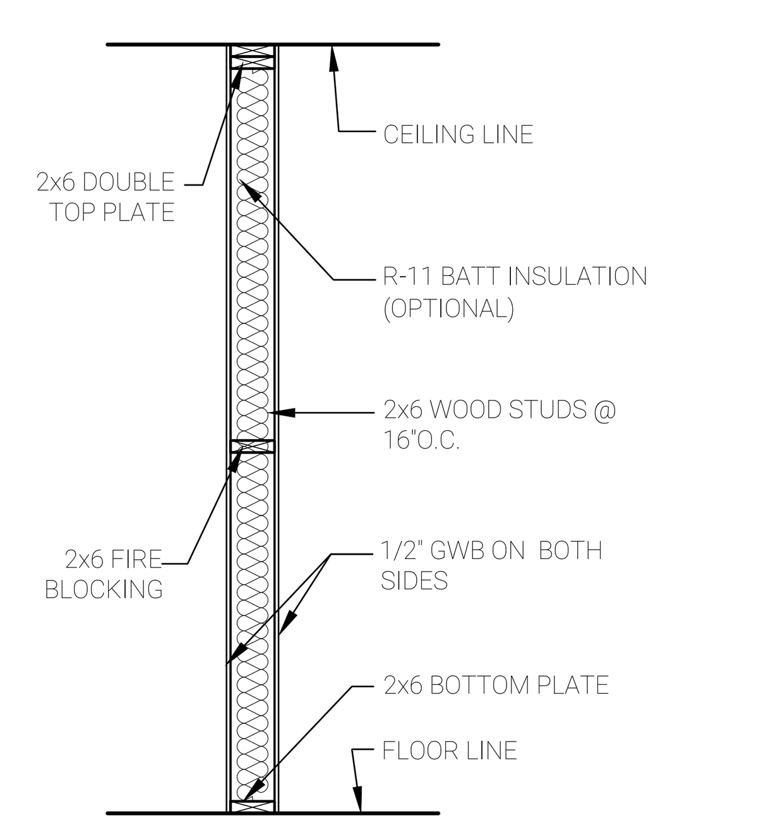
HEADER NOTES:
1. USE HEADER SIZES ABOVE UNLESS OTHERWISE NOTED ON FRAMING PLAN
2. PRIMARY FRAMING (BEAMS,GIRDERS, ETC.) WERE SIZED USING
   1800 "Fb" EXTREME FIBER IN BENDING (SINGLE)
   90 "Fv" HORIZONTAL SHEAR
   1.6E "E" MODULES OF ELASTICITY
3. JOISTS, RAFTERS, LINTELS, ETC. WHERE SIZED USING
   1200 "Fb" EXTREME FIBER IN BENDING (SINGLE)
   90 "Fv" HORIZONTAL SHEAR
   1.6E "E" MODULES OF ELASTICITY

(1) PREPARATION OF WINDOW OPENING
-LINE THE OPENING WITH VAPOR BARRIER
-INSTALL PRESSURE TREATED WOOD BUCK TO PERIMETER OF OPENING USING NEW 3/16" X 3-1/2" OR EQUAL PROVIDING 500LBS, SHEAR STRENGTH 16" ON CENTER (4" AT EDGES)
-APPLY A CONTINUOUS BEAD OF CAULKING TO SEAL WOOD BUCK TO FRAME OPENING-ENSURE THAT A CLEARANCE OF 1/4" PER SIDE IS LEFT FOR SHIMMING

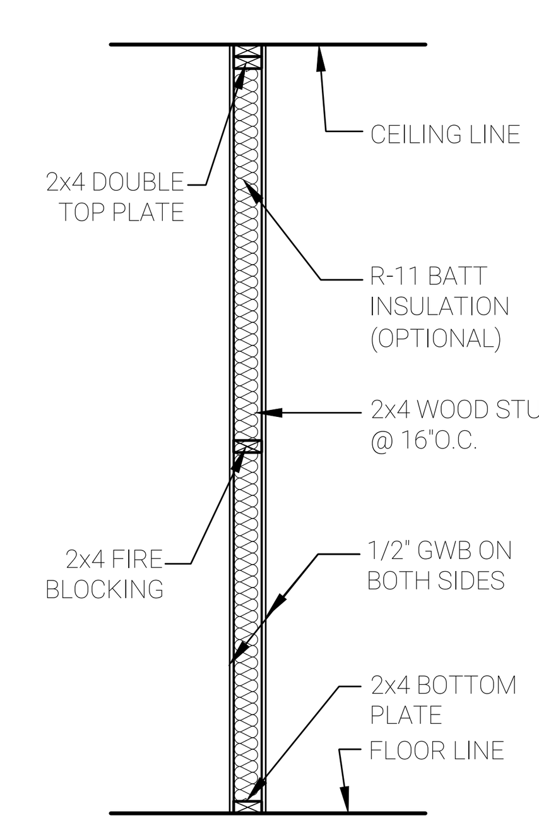
(2) INSTALLATION OF WINDOW
-REFER TO INSTALLATION INSTRUCTIONS FOR THE SPECIFIC PRODUCT BEING INSTALLED
-SET WINDOW IN OPENING, SHIMMING, LEVELING, AND SQUARING TO ENSURE PROPER OPERATION
-INSTALL #9 1-1/4" PAN HEAD WOOD SCREWS THRU ALL PREDRILLED HOLES IN THE INSTALLATION FIN TO SECURE UNIT (8" ON CENTER)
-ENSURE THAT THE INSTALLATION FIN IS SEALED TO THE WOOD BUCK WITH A CONTINUOUS BEAD OF CAULKING
-FILL VOID BETWEEN WINDOW AND WOOD BUCK WITH INSULATION BEING CAREFUL NOT TO BOW WINDOW FRAME

(3) APPLICATION OF CAULKING
-INSERT STYROFOAM BACKER ROD INTO THE OPENING BETWEEN WINDOW FRAME AND "J" MOULD
-APPLY A CONTINUOUS BEAD OF URATHAENE SEALANT, REFER TO SEALANT MANUFACTURERS RECOMMENDATIONS FOR SURFACE PREPARATION AND APPLICATION

(4) INSTALLATION LIMITATIONS
-WINDOW INSTALLATION TO MEET THE REQUIREMENTS OF THE WIND LOADS OF THE FLORIDA BUILDING CODE IN EFFECT AT THE TIME OF CONSTRUCTION



INTERIOR 2x6 PLUMBING WALL DETAIL
SCALE: 1/2"=1'-0"



INTERIOR 2x4 WALL DETAIL
SCALE: 1/2"=1'-0"

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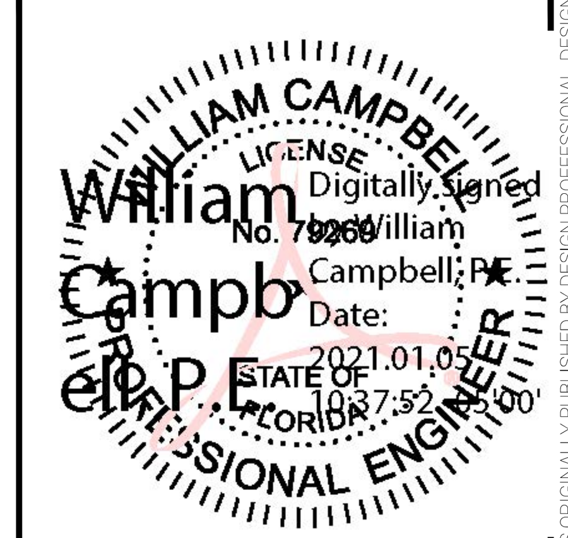

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