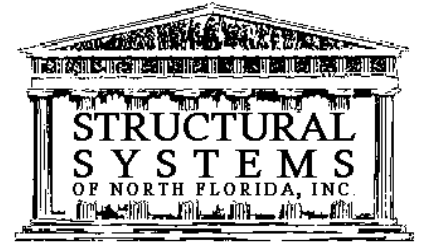
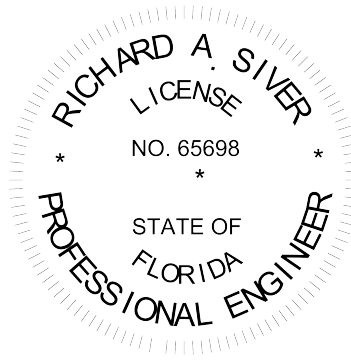


This item has been digitally signed by Richard A. Siver on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



March 28, 2022

City of Cape Coral
Community Development, Building Department
P.O. Box 10027
Cape Coral, FL 33916-0027

RE: Change Engineer of Record (EOR) on Permit plan
2221 M, Stonewater Lot 295
428 Coral Reef Place
Cape Coral, FL 33993
Permit Number: B21-41688

This letter is to confirm that Richard Siver from Structural Systems will be replacing Raul Reyes, formerly from Structural Systems, as the Engineer of Record for the above listed Permit number. Since Mr. Reyes is no longer an employee of Structural Systems, he can not continue as Engineer of Record for this Permit. DR Horton, the permit applicant, will provide the necessary documents to affect the change.

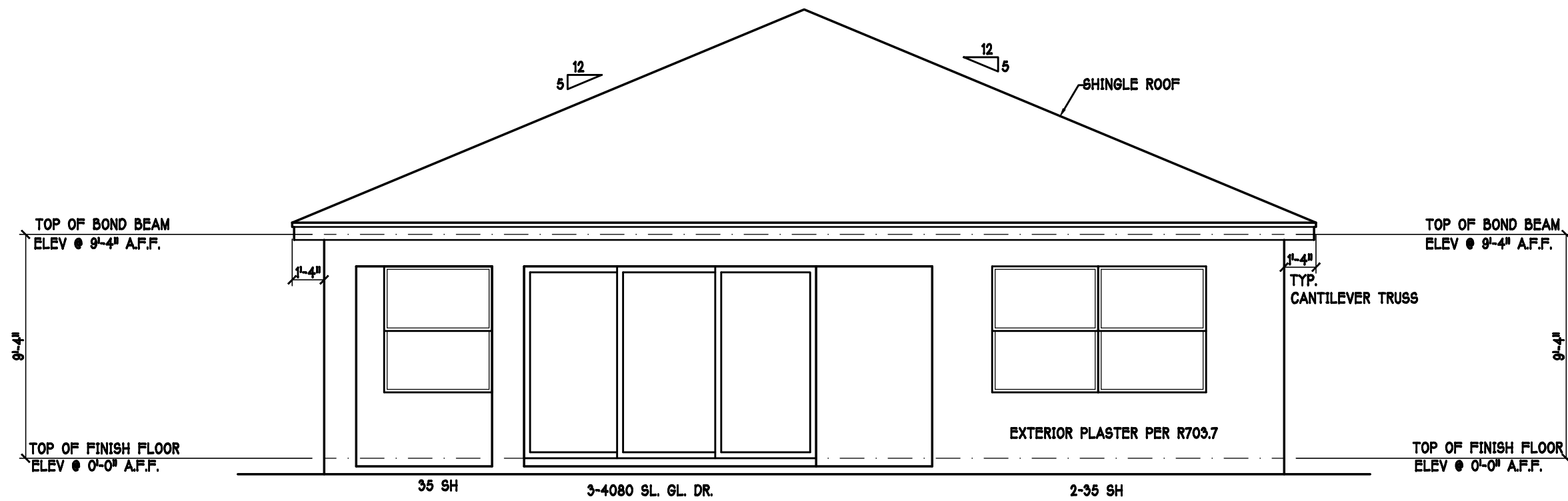
Plans are Identical

I, Richard Siver, attest that the replacement structural engineering plans, signed and sealed by me, are identical to the plans previously submitted and sealed by Mr. Reyes, except as noted below. The plans were created at Structural Systems and are now under my responsible charge. I simply made new prints of the exact same files and incorporated the change of roof truss vendor to BFS, clouded and dated, as needed.

If you need any more information, please call my cell phone 863-235-0239.

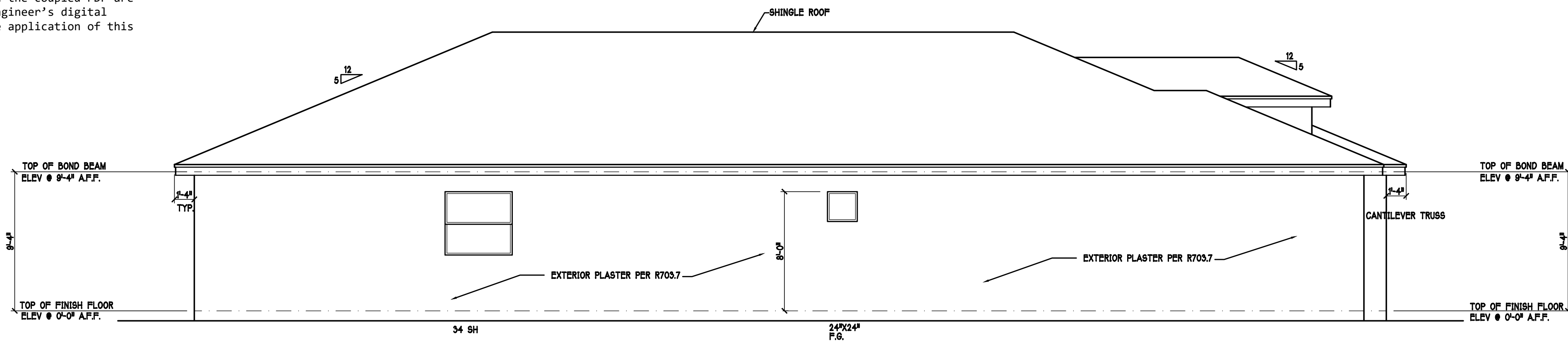
Sincerely,

Structural Engineer of Record
Richard Siver, PE 65698

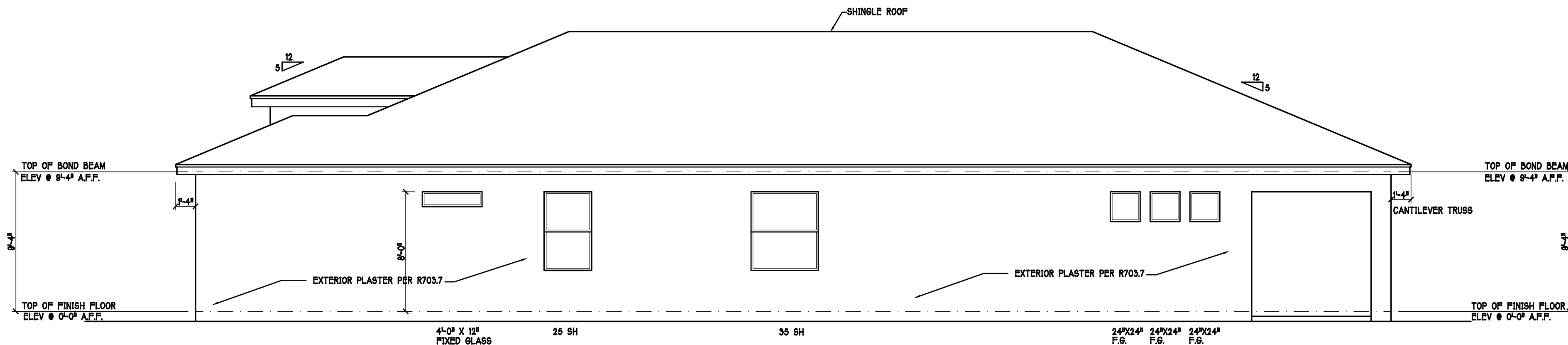


REAR ELEVATION: "M" SCALE: 3/16" = 1'-0"

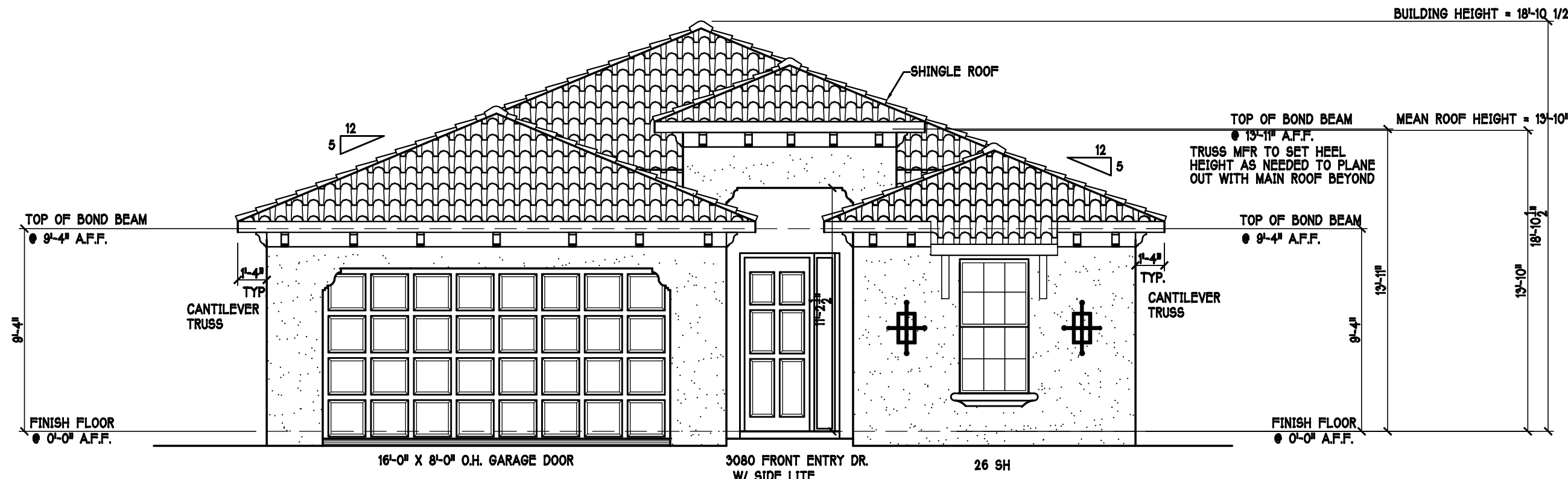
Engineer's Review Statement for Electronic Permit Submittals
The City of Cape Coral Building Department requires the House Plan "A" sheets to be coupled with the Structural Engineering "S" sheets in one PDF document for submission to plan review and permitting, therefore the following shall be known. The House Plan "A" sheets were prepared solely by Gulf Coast Drafting, a house plan design company, per FS 481.229. House plans are allowed to contain "incidental engineering" per FS 481.229(4). An engineer shall not sign and seal works by others, such as these House Plans, per FS 471.033(1)(j). The Structural Engineering "S" sheets were prepared by Structural Systems, a licensed structural engineering firm, to match the intent of the House Plans. The structural engineer has reviewed the House Plan "A" sheets and found no information that appears to be in conflict with the structural engineering plans. The coupling of the "A" sheets with the "S" sheets in one PDF document shall not be construed in any way to mean the structural engineer accepts any liability for the content of the "A" sheets. The coupling is a requirement of the Building Department. Only the "S" sheets in the coupled PDF are digitally signed and sealed by the structural engineer. The engineer's digital signature below (no seal) is only intended to authenticate the application of this statement to the coupled PDF document.



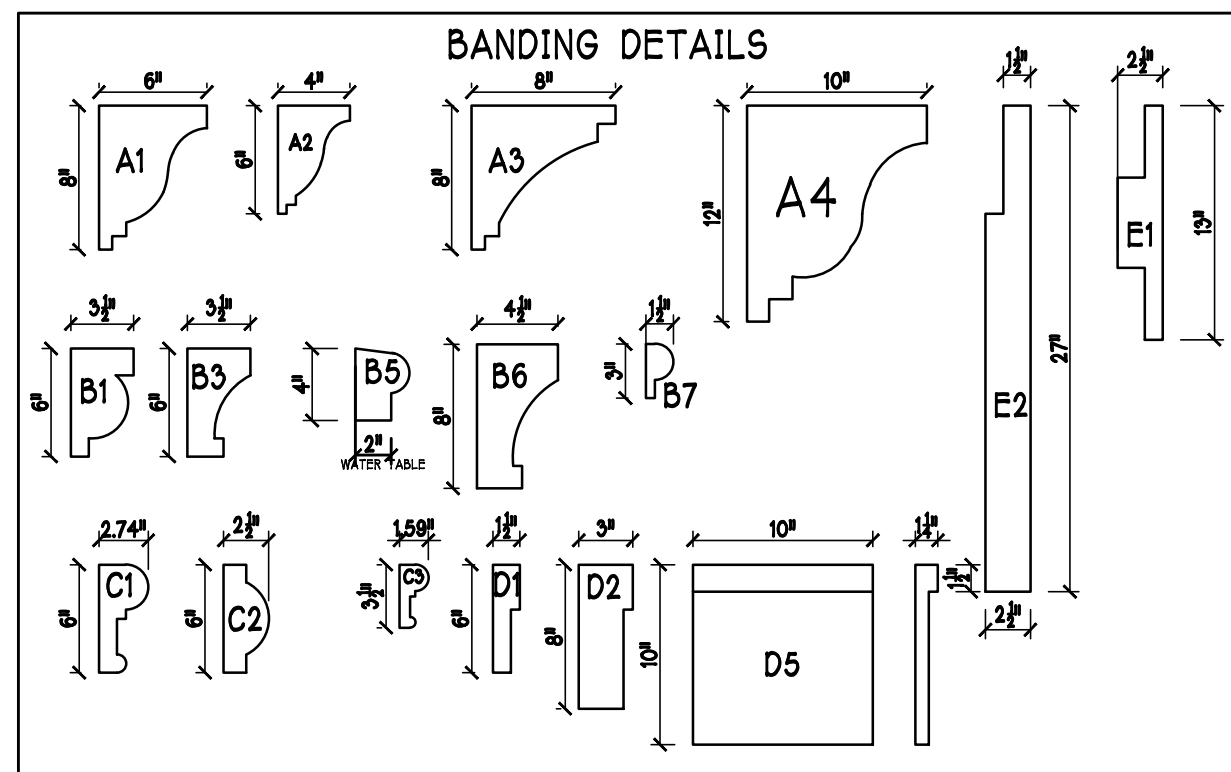
LEFT SIDE ELEVATION: "M" SCALE: 1/4" = 1'-0"



RIGHT SIDE ELEVATION: "M" SCALE: 3/16" = 1'-0"

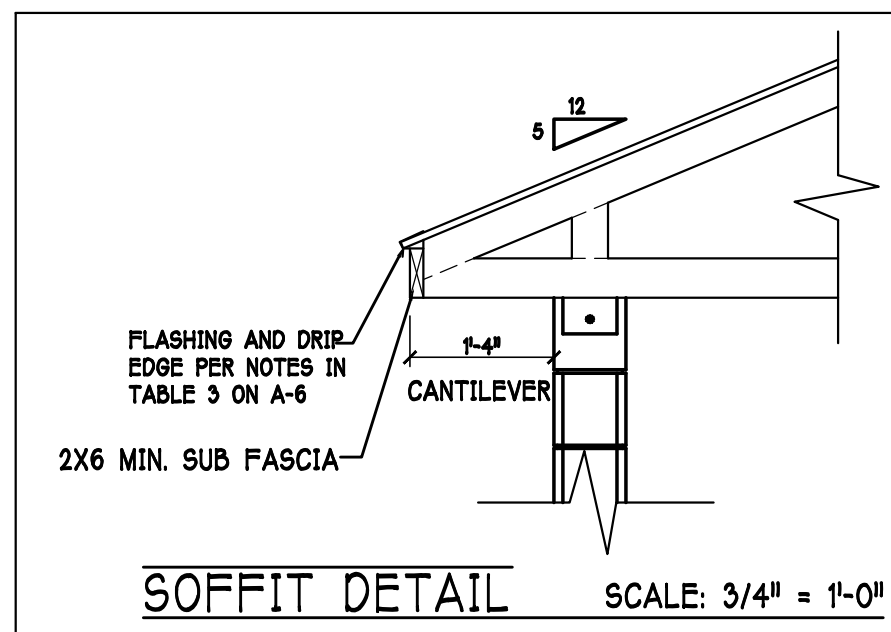
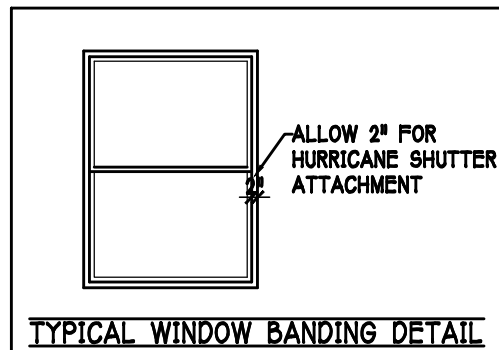


FRONT ELEVATION: "M" SCALE: 3/16" = 1'-0"



FLORIDA BUILDING CODE 7TH EDITION

OCCUPANCY: FBC 303.5 RESIDENTIAL GROUP R-3 CONSTRUCTION TYPE: V-5 (FIRE RESISTANCE RATING 0 HOURS, NOT SPRINKLED CODES TO BE USED BY OTHER DESIGN PROFESSIONALS AND LICENSED CONTRACTORS: 2020 FLORIDA BUILDING CODE, 7TH EDITION: RESIDENTIAL; ACCESSIBILITY; ENERGY CONSERVATION; PLUMBING; MECHANICAL; AND FUEL GAS. ELECTRICAL IS CONTAINED BY REFERENCE WITHIN FBC RESIDENTIAL CHAPTER 34. NFPA 70-17 NATIONAL ELECTRICAL CODE.



DESIGN IN ACCORDANCE W/ THE 2020 RESIDENTIAL FLORIDA BUILDING CODE- 7TH EDITION

D.R. HORTON
America's Builder

Gulf Coast Drafting
& Design
Phone (239) 540-1822
Fax (239) 540-7759

MODEL:

UNIT 2221

RESIDENCE FOR:

SPEC

LOT: 295

BLOCK:

SUBDIV: STONEWATER

ADDRESS: 428 CORAL REEF PLACE

G.C.D.#: 13402

D.R.H.#: 579230295

DATE:

03-23-22

DRAWN BY:

JSL

CHECKED BY:

JWC

REVISED:

03-25-22

PLAN:

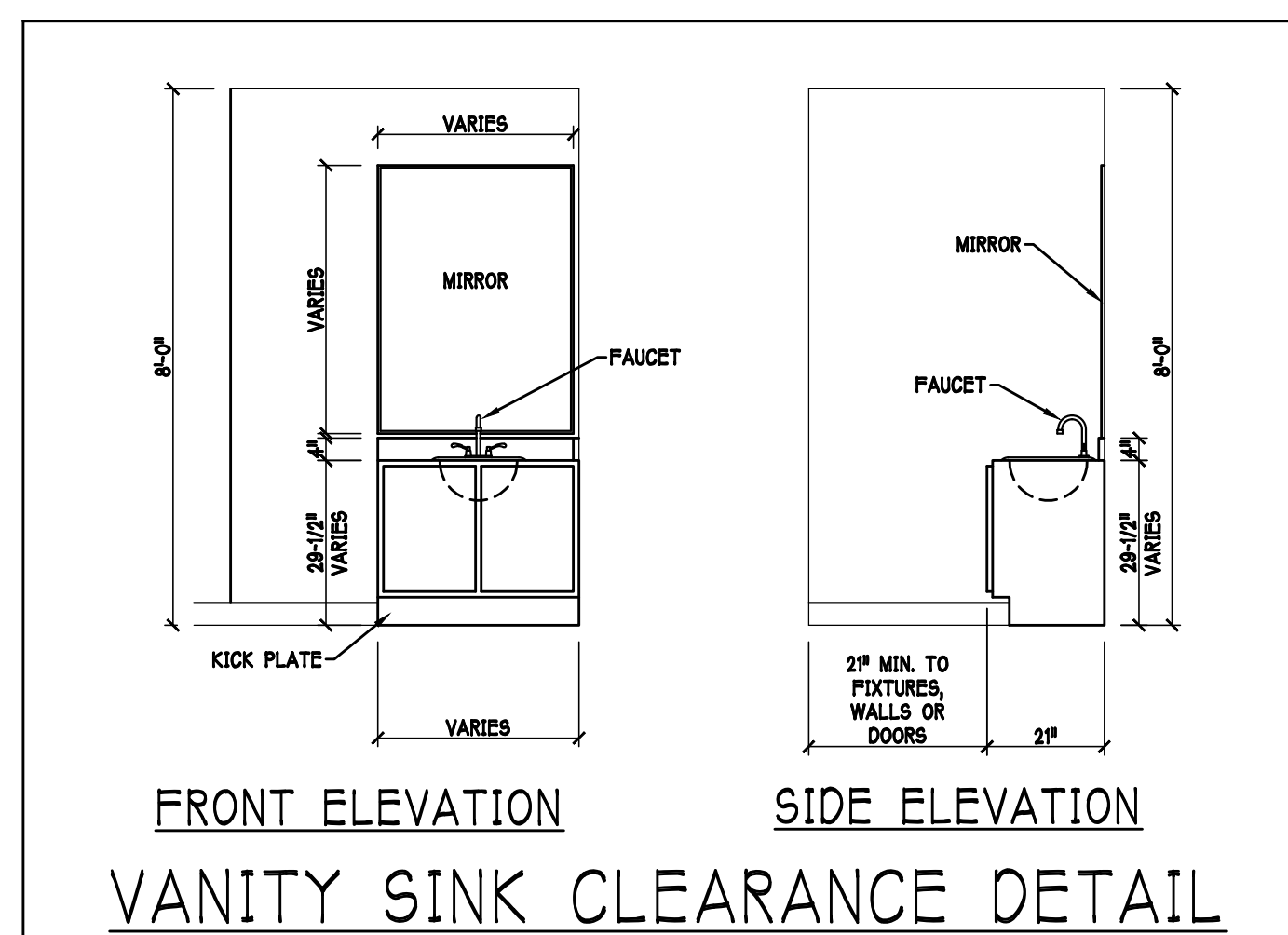
ELEVATIONS

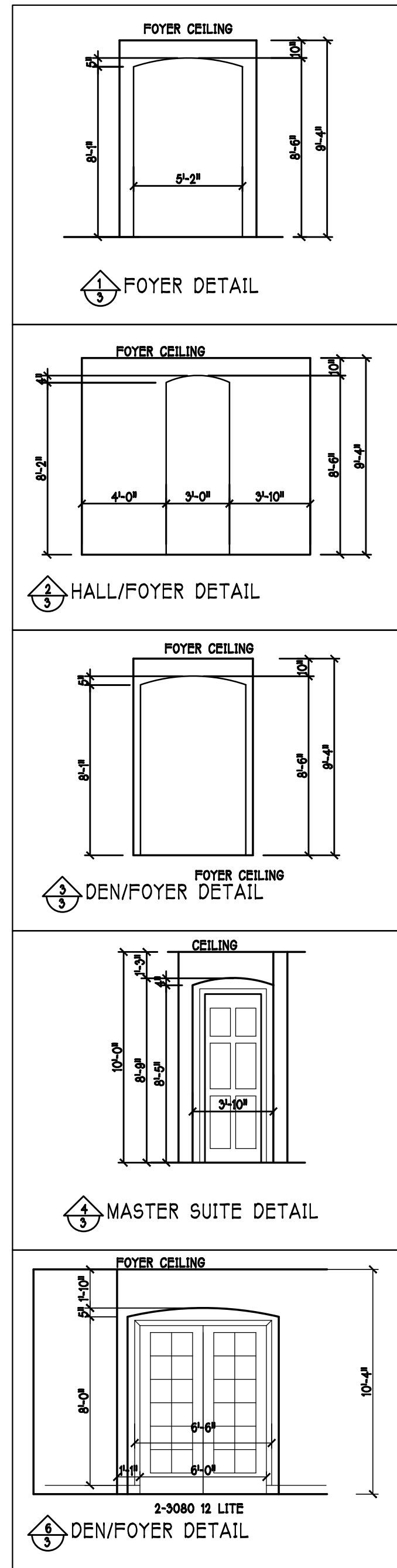
SCALE:

3/16" = 1'-0"

SHEET#

A-1 M

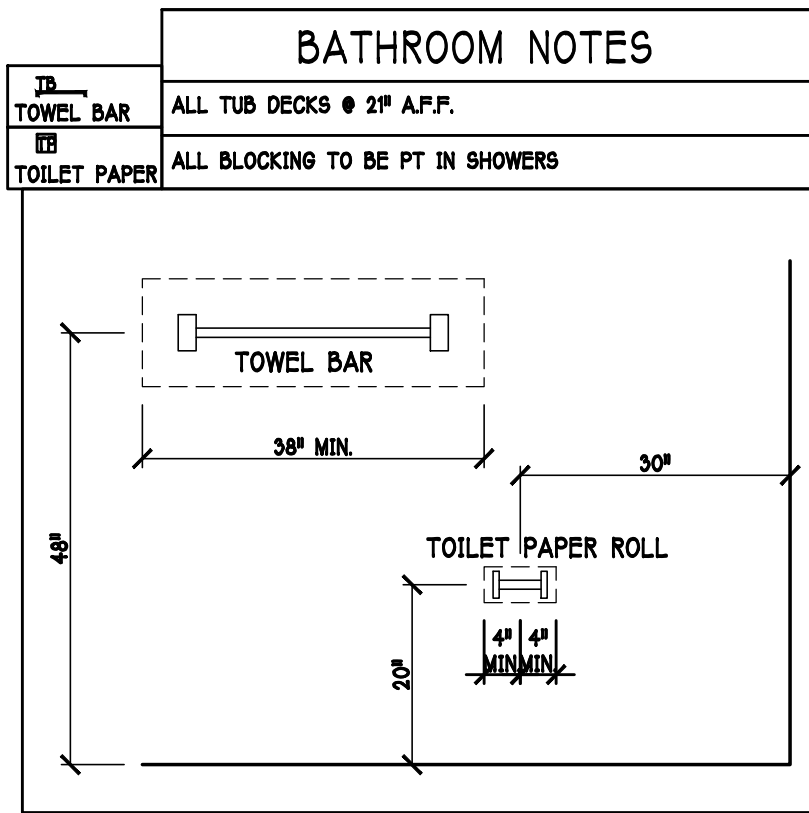




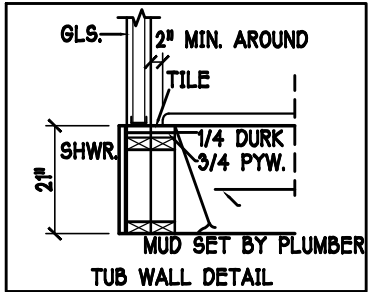
D R HORTON					
MARK	SIZE CODE	PRODUCT DESCRIPTION	WIDTH	HEIGHT	COMMENTS
1	OVERHEAD	GARAGE DOOR	182	96	
2	3080 ENTRY DR.	DISTINCTION	36	96	
					QTY
					2

D R HORTON					
MARK	SIZE CODE	PRODUCT DESCRIPTION	WIDTH	HEIGHT	COMMENTS
A	35	SH	54	63	
B	25	SH	38	63	
C	48" X 12" F.G.	FIXED GLASS	48	12	TEMPERED
D	34	SH	54	51	
E	2-35	SH	108	63	
F	2-4080 SL. GL. DR.	SL. GL. DR.	144	96	
G	12" X 8" SIDE LITE		12	96	
H	2-0" X 2-0"	FIXED GLASS	24	24	
I	26	SH	38	78	
SEE NOTE 1					QTY
					13

OPT IMPACT GLASS MAY BE INSTALLED IN LIEU OF SHUTTERS VERIFY W/ CONTRACT



INTERIOR DOOR SCHEDULE		
MARK	DOOR WIDTH	NOTES
1	3'-0"	PK. = POCKET DOOR
2	2'-8"	B.F. = BI-FOLD DOOR
3	2'-6"	B.P. = BI-PASS DOOR
4	2'-4"	L.V. = LOUVERED DOOR
5	2'-0"	
6	1'-8"	
7	1'-6"	

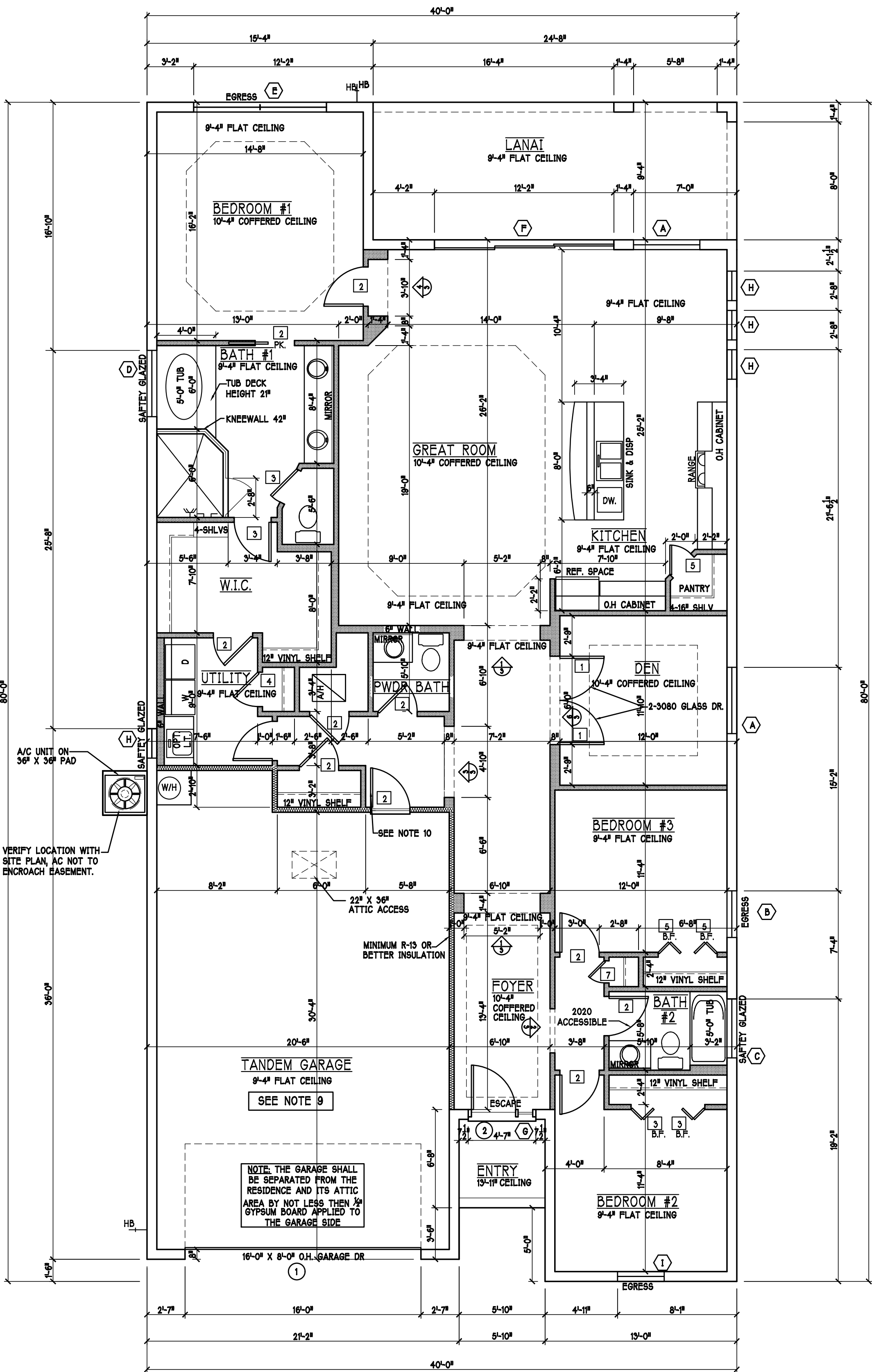


SQUARE FOOTAGE		
LIVING AREA	2221	
GARAGE AREA	662	
LANAI AREA	230	
ENTRY AREA	35	
TOTAL AREA	3138	

DOOR HEADERS		
6'-8" BIFOLD	HEADER HEIGHT	82" A.F.F.
6'-8" SWING	HEADER HEIGHT	82 1/2" A.F.F.
8'-0" SWING	HEADER HEIGHT	98 1/2" A.F.F.

- PLAN NOTES
- VERIFY ALL ROUGH OPENING DIMENSIONS FOR ALL WINDOWS AND DOORS
 - PROVIDE SAFETY GLAZING WITHIN 24" FROM EXIT PER FLORIDA BUILDING CODE R 308.4.2.
 - PROVIDE SAFETY GLAZING AT BATH / SHOWER PER FLORIDA BUILDING CODE R 308.4.5.
 - NON BEARING INTERIOR FRAME WALLS SHALL BE FRAMED W/ WOOD OR METAL STUDS. SPACING SHALL NOT EXCEED 24" O.C. (NON BEARING WALLS ONLY)
 - PROVIDE DEAD WOOD IN ATTIC FOR OVERHEAD GARAGE DOOR HARDWARE
 - KITCHEN KNEE WALL TO BE FRAMED W/ TOP @ 41 1/2" A.F.F. W/ RAISED BAR TOP
 - INSTALL SMOOTH WALLS IN KITCHEN AND ALL BATHROOM AREAS
 - WHERE DRYWALL CEILING IS APPLIED TO TRUSSES AT 24" O.C. USE 5/8" DRYWALL OR 1/2" SAG RESISTANT PER SEC. R702.5.5
 - THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE & ATTIC BY NOT LESS THEN 1/2" GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED WITH NOT LESS THAN 5/8" TYPE IX GYPSUM BOARD OR EQUIVALENT. WHERE THE SEPARATION IS A FLOOR - CEILING ASSEMBLY THE STRUCTURE SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED BY NOT LESS THAN 1/2" GYPSUM BOARD OR EQUIVALENT
 - INSTALL 1 3/8" THICK SOLID WOOD DOOR BETWEEN LIVING AND GARAGE PER FLORIDA BUILDING CODE R302.5.1.
 - ALL WINDOWS INSTALL 72" ABOVE GRADE MUST COMPLY WITH R 312.2.1 MIN 24" SILL HEIGHT OR PROVIDED WITH AN APPROVED WINDOW FALL PREVENTION DEVICE
 - STUB OUT FOR GAS @ OUTDOOR KITCHEN, RANGE, WATER HEATER, AND DRYER. VERIFY WITH CONTRACTOR AND SUBDIV. SPECS. A SEPARATE PERMIT IS REQUIRED FOR GAS PIPING.
 - ALL CLOSET SHELVES TO BE 12". ALL PANTRY & LINEN TO BE 14-16" SHELVES 18" O.F.F. WITH 15" INCREMENT.
 - ALL MECHANICAL AND ELECTRICAL EQUIPMENT TO BE INSTALLED AT OR ABOVE FLOOD PLUS 1'-0" FREEBOARD.

CABINET BACKING			
KITCHEN	UPPER TOP @ 84"	BASE TOP @ 35"	
MASTER BATH	UPPER	BASE TOP @ 35"	
GUEST BATH	UPPER	BASE TOP @ 35"	
LAUNDRY RM.	UPPER TOP @ 84"	BASE	



1st FLOOR PLAN: SCALE: 3/16" = 1'-0"

DESIGN IN ACCORDANCE W/ THE 2020 RESIDENTIAL FLORIDA BUILDING CODE- 7TH EDITION

D R HORTON
America's Builder

Gulf Coast Drafting
& Design
Phone (239) 540-1822
Fax (239) 540-7759

LOT: 295
BLOCK:
SUBDIV: STONEWATER
ADDRESS: 428 CORAL REEF PLACE
G.C.D.#: 13402

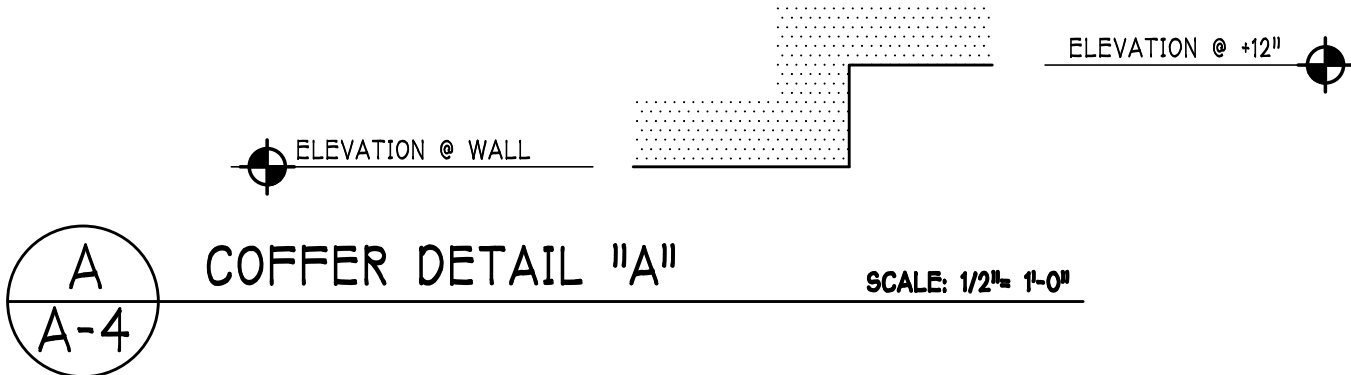
MODEL: UNIT 2221
RESIDENCE FOR: SPEC

D.R.H.#: 579230295

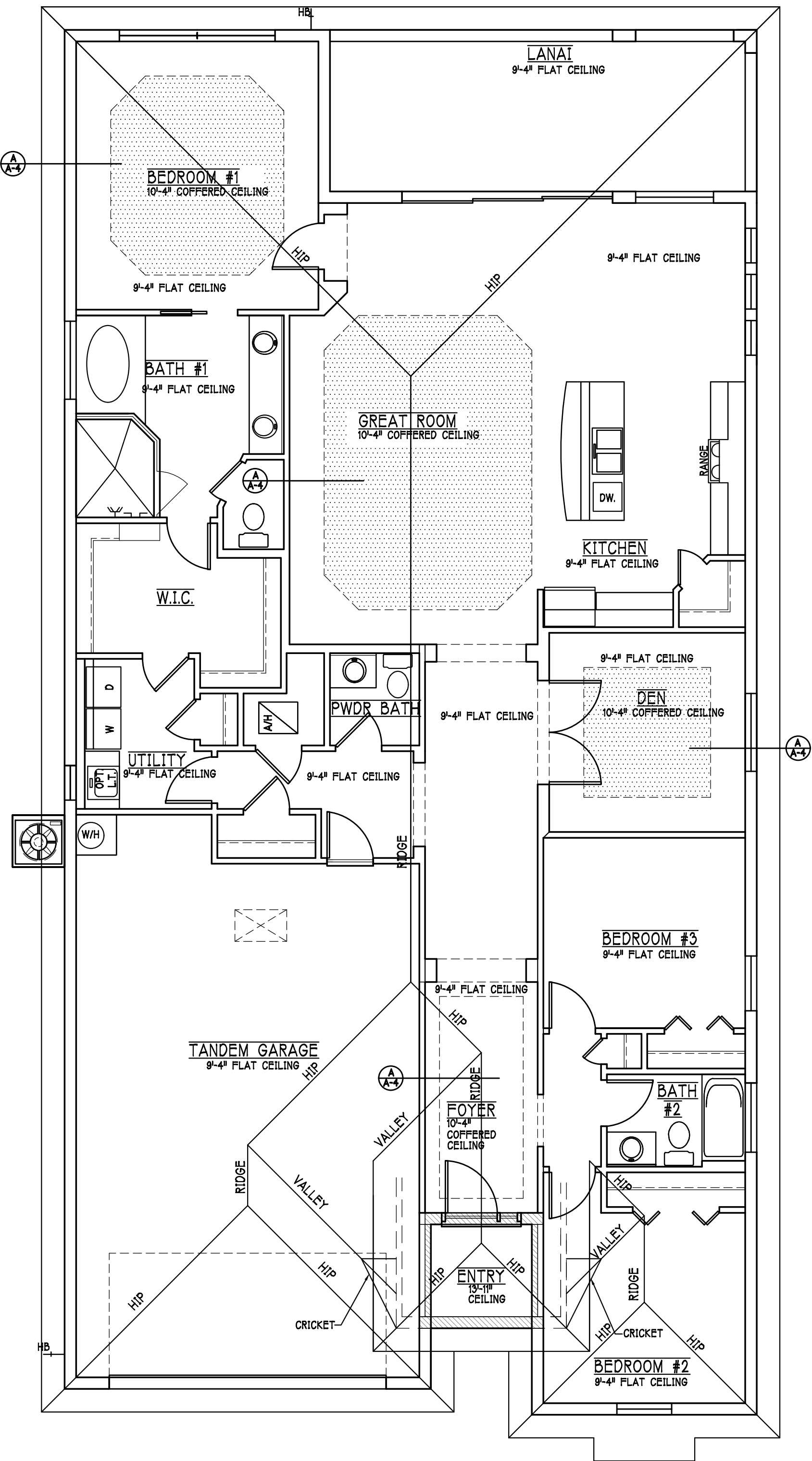
DATE: 03-23-22
DRAWN BY: JSL
CHECKED BY: JWC
REVISED: 03-25-22
PLAN: FLOOR
SCALE: 3/16"=1'-0"
SHEET#

A-3M

MODEL 2221 M: ATTIC VENTILATION FBCR R806								
COORDINATE VENTING REQUIREMENTS WITH ENERGY CALCULATIONS								
AREAS (SQ. FT.)			SOFFIT ONLY (1/150) (NO ROOF VENTS)			WITH ROOF VENTS (1/300) (R.V.)		
ATTIC VENTILATION REQUIRED			ATTIC VENTILATION REQUIRED			ATTIC VENTILATION REQUIRED		
MARK	ATTIC	SOFFIT	ATTIC AREA/150	REQ'D AIR FLOW QUAD 4 OF SOFFIT	SOFFIT HAS	ATTIC AREA/300	QUANTITY OF ROOF VENTS	MIN AIR FLOW OF SOFFIT
1st STORY	3443.4 SQ. FT.	304.3 SQ. FT.	22.96 SQ. FT.	7.55%	8.15%	-- SQ. FT.	-	--%
SOFFIT ONLY* QUALIFIES			ROOF VENTS ARE NOT REQUIRED					
SOFFIT MODEL ACM QUAD 4, FULL VENT, NARROW PATTERN, 8.15% FREE AIR FLOW THE ACM QUAD 4 IS ONLY AN EXAMPLE OF WHAT CAN WORK. CONTRACTOR MAY INSTALL ANY BRAND OF VENTED SOFFIT THAT PROVIDES AT LEAST THE REQ'D AIR FLOW SHOWN ABOVE, AND MEETS WIND PRESSURES PER FBC R704.			ROOF VENT MODEL 22" BASE LOMANCO 770-D 0.87 SQ. FT. FREE AIR					



BEARING HEIGHTS	
	= BEARING @ 9'-4" A.F.F.
	= BEARING @ 13'-11"



CEILING PLAN: "M" SCALE: 3/16" = 1'-0"

DESIGN IN ACCORDANCE W/ THE 2020 RESIDENTIAL
FLORIDA BUILDING CODE- 7TH EDITION

Gulf Coast Drafting & Design
Phone (239) 540-1822
Fax (239) 540-7759

LOT: 295	BLOCK:	MODEL: UNIT 2221	RESIDENCE FOR: SPEC
SUBDIV: STONEWATER			
ADDRESS: 428 CORAL REEF PLACE			
G.C.D.#: 13402	D.R.H.#: 579230295		

DATE: 03-23-22

DRAWN BY: JSL

CHECKED BY: JWC

REVISED: 03-25-22

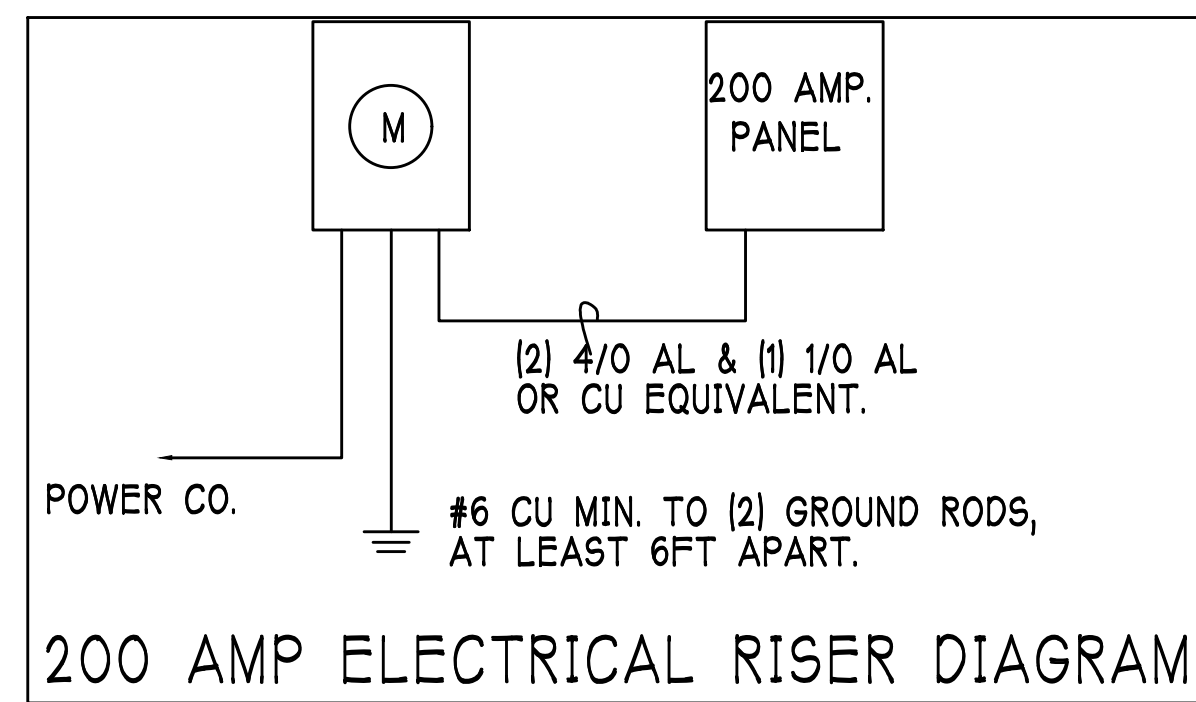
PLAN: ROOF & CEILING

SCALE: 3/16"=1'-0"

SHEET#

A-4M

200 Amp Service		
TAG	QUANTITY	PRODUCT
A	(25)	Flush Mounted Lt
B	(4)	Vapors
C	(1)	Pendant/Nook
D	(X)	10" Mushrooms
E	(3)	24" 3 LT
F	(2)	36" 4 LT
G	(X)	NOT USED
H	(3)	Coach Lights
J	(X)	Coach Lights
K	(X)	J BOX
L	(4)	4' Fluorescent
M	(3)	2' Fluorescent
N	(X)	5ft Chandelier
O	(1)	3 LT
P	(3)	Pendant Light



	ELECTRICAL METER
	ELECTRICAL PANEL
	100 V JUNCTION BOX
	SINGLE RECEPTACLE OUTLET
	250 V RECEPTACLE OUTLET
	4-POLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
	2-WAY SWITCHED DUPLEX OUTLET
	DUPLEX RECEPTACLE @ ELEV. AFF.
	TIMER SWITCH
	GFI SWITCH
	DIMMER SWITCH
	3 WAY SWITCH
	SINGLE POLE SWITCH
	AC/DC SMOKE DETECTOR TO BE INTERCONNECTED ANY RESIDENT HAVING A FOSSIL-BURNING HEATER OR APPLIANCE, A FIREALARM, OR AN ATTACHED GARAGE SHALL HAVE AN INSTALLED WITHIN 10 FEET OF EACH ROOM USED FOR SLEEPING PURPOSES. THIS RULE INCLUDES: SD [SMOKE DETECTOR] SCD [CARBON MONOXIDE/SMOKE DETECTOR]
	TELEPHONE OUTLET
	TELEVISION OUTLET
	SURFACE MOUNTED CEILING LIGHT
	FLUSH MOUNTED LIGHT
	WALL MTD. BRACKET LIGHT
	DUPLEX FLOOD LIGHT
	EXHAUST FAN
	TRACK MTD. LIGHTS
	A/C DISCONNECT
	PUSH BUTTON
	DOOR BELL
	KEYPAD
	# FLUORESCENT LIGHT
	# UNDER COUNTER LIGHT

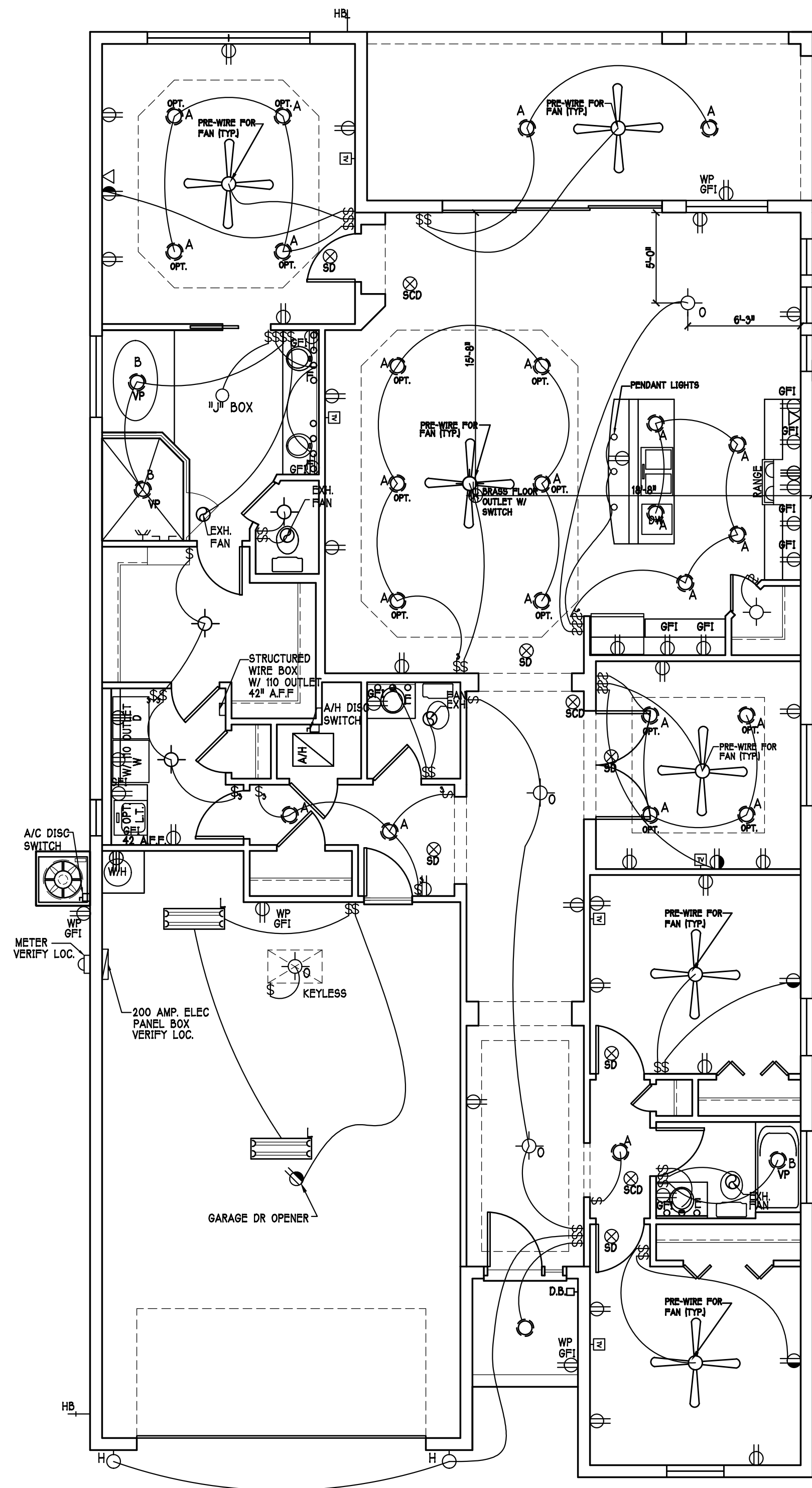
Install Arc-Fault circuit-Interruption & Tamper-Resistant Receptacles shall be installed in dwelling unit. per NEC 210.12 & 406.11

All electric, electrical equipment and appliances to be set at or above base flood elevations plus 1'-0" freeboard.

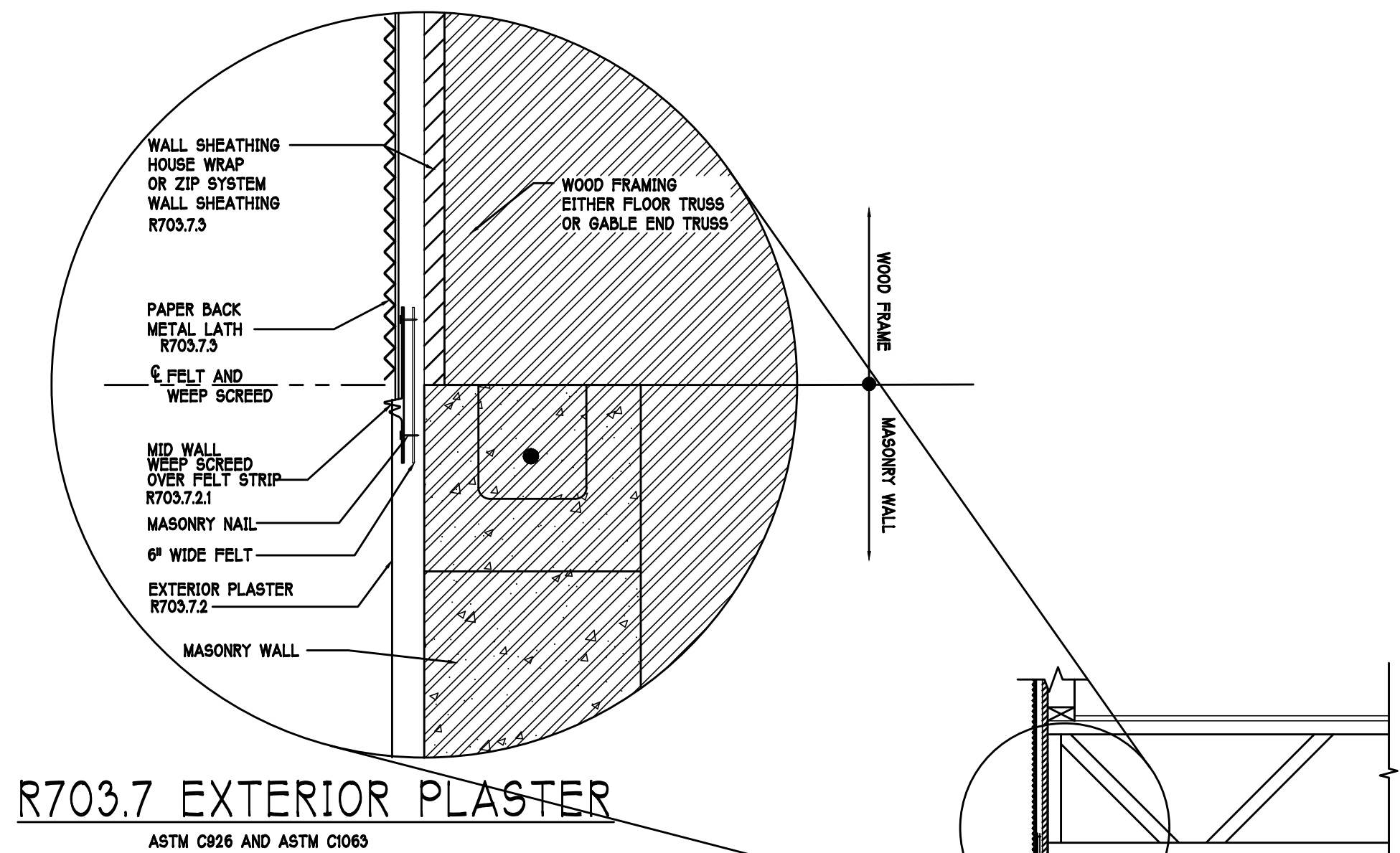
All outlets in wet areas and all exterior outlets to be GFI's

Install Phone & T.V per contract .

INSTALL ALL ELECTRICAL PER NEC 2017

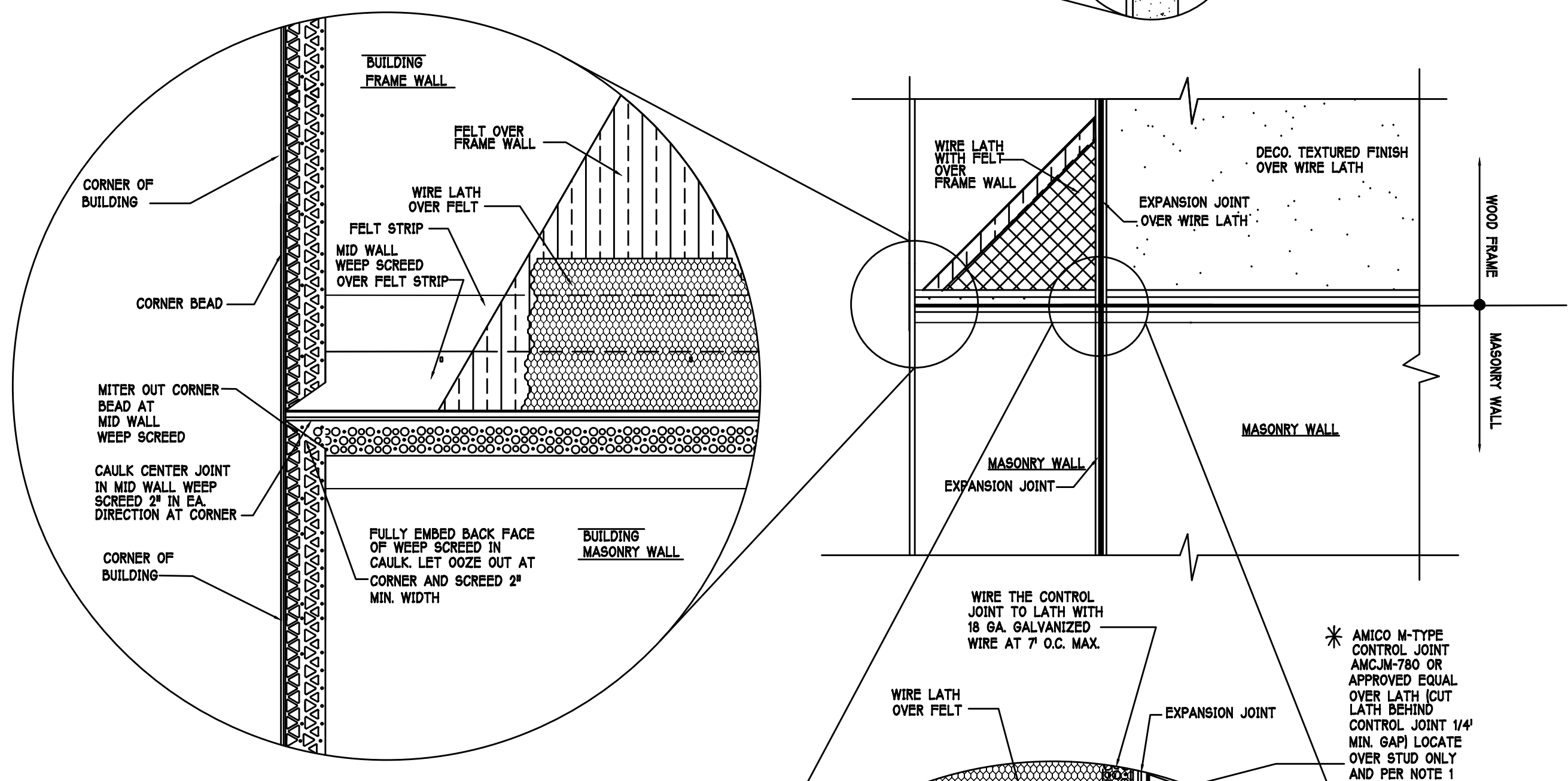


SCALE: 3/16" = 1'-0"



R703.7 EXTERIOR PLASTER

ASTM C926 AND ASTM C1063



MID WALL WEEP SCREED DETAIL

WEEP SCREED DETAIL

INSTALL AT ALL EXTERIOR WALL LOCATIONS WHERE WOOD STUD FRAMING IS ABOVE MASONRY WALLS.

RESIDENTIAL SPECIFICATIONS

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING CONDITIONS TO THE DESIGNER PRIOR TO COMMENCING WORK.
2. THE CONTRACTOR SHALL SUPPLY, LOCATE AND BUILD INTO THE WORK ALL INSERTS, ANCHORS, ANGLES, PLATES, OPENINGS, SLEEVES, HANGERS, SLAB DEPRESSIONS AND PITCHES AS MAY BE REQUIRED TO ATTACH AND ACCOMMODATE OTHER WORK.
3. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUCTED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE IN THE WORK EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
4. SUBSURFACE SOIL CONDITION INFORMATION IS NOT AVAILABLE. FOUNDATIONS ARE DESIGNED FOR A SOIL BEARING CAPACITY OF 2,000 PSF. THE CONTRACTOR SHALL REPORT ANY DIFFERING CONDITIONS TO THE DESIGNER PRIOR TO COMMENCING WORK.
5. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATION AND HOUSE PLANS, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
6. ALL SPECIFIED FASTENERS MAY ONLY BE SUBSTITUTED IF APPROVED BY THE ENGINEER IN WRITING. THE INSTALLATION OF THE FASTENERS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. SIMPSON FASTENERS SPECIFIED MAY BE SUBSTITUTED WITH THE SAME QUANTITY AND EQUIVALENT STRENGTH PRODUCT.
7. TREATED WOOD REQUIREMENTS:- ALL WOOD EXPOSED TO WEATHER SHALL BE PROTECTED, PRESSURE TREATED, OR NATURALLY RESISTANT TO DECAY. ALL WOOD TOUCHING MASONRY OR CONCRETE SHALL BE ISOLATED, OR PRESSURE TREATED.
8. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES TO ENSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUTS, OR TIE DOWNS.
9. CEILING DRYWALL INSTALLED WITHIN THE HOUSE TO TRUSSES SPACED 24\"/>

2 GENERAL ROOF ASSEMBLY

ROOF SHEATHING PER TABLE R803.2.2 SHALL BE 19/32 APA RATED SHEATHING, EXPOSURE 1, SPAN RATING 40/20 OR BETTER. INSTALL PANELS WITH LONG DIMENSION PLACED PERPENDICULAR TO TRUSSES. A 1/8\"/>

FLASHING SHALL BE ALUMINUM, ALUMINUM ZINC COATED STEEL .079 INCHES THICK, 26 GAGE AZ50 ALUM. ZINC, OR GALVANIZED STEEL .079 INCHES THICK, 26 GAGE ZINC COATED. GRC FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH THE ZIP SYSTEM ROOF SHEATHING MANUFACTURER'S PUBLISHED REQUIREMENTS. ALL FLASHING AND INSTALLATION SHALL CONFORM TO SECTION R905.2.8 (I) TO (J).

D RIP EDGE SHALL BE PROVIDED AT ALL EAVES AND GABLES OF SHINGLE ROOFS. LAPPED A MINIMUM OF 3\"/>

3 ASPHALT SHINGLE ROOF SPECS

SHINGLES 30# felt shall be installed under asphalt shingles. All asphalt shingles shall have self-sealing strips or be interlocking and comply with ASTM D 225 or D3460, and shall be secured to the roof with no less than 6 fasteners per shingle strip, or a minimum of 2 fasteners per shingle tab. And shall in no case be fastened with less fasteners than that required by the manufacturer. Installation shall comply with the manufacturer's requirements for installation in the given Florida wind zone, as determined by ASTM D 3161.

FASTENERS Fasteners for asphalt shingles shall comply with ASTM F 1667, and shall be made of galvanized steel, stainless steel or aluminum with a minimum shank size of 12 gage (0.080 inches) with a minimum 3/8 inch diameter head and shall be of 5\"/>

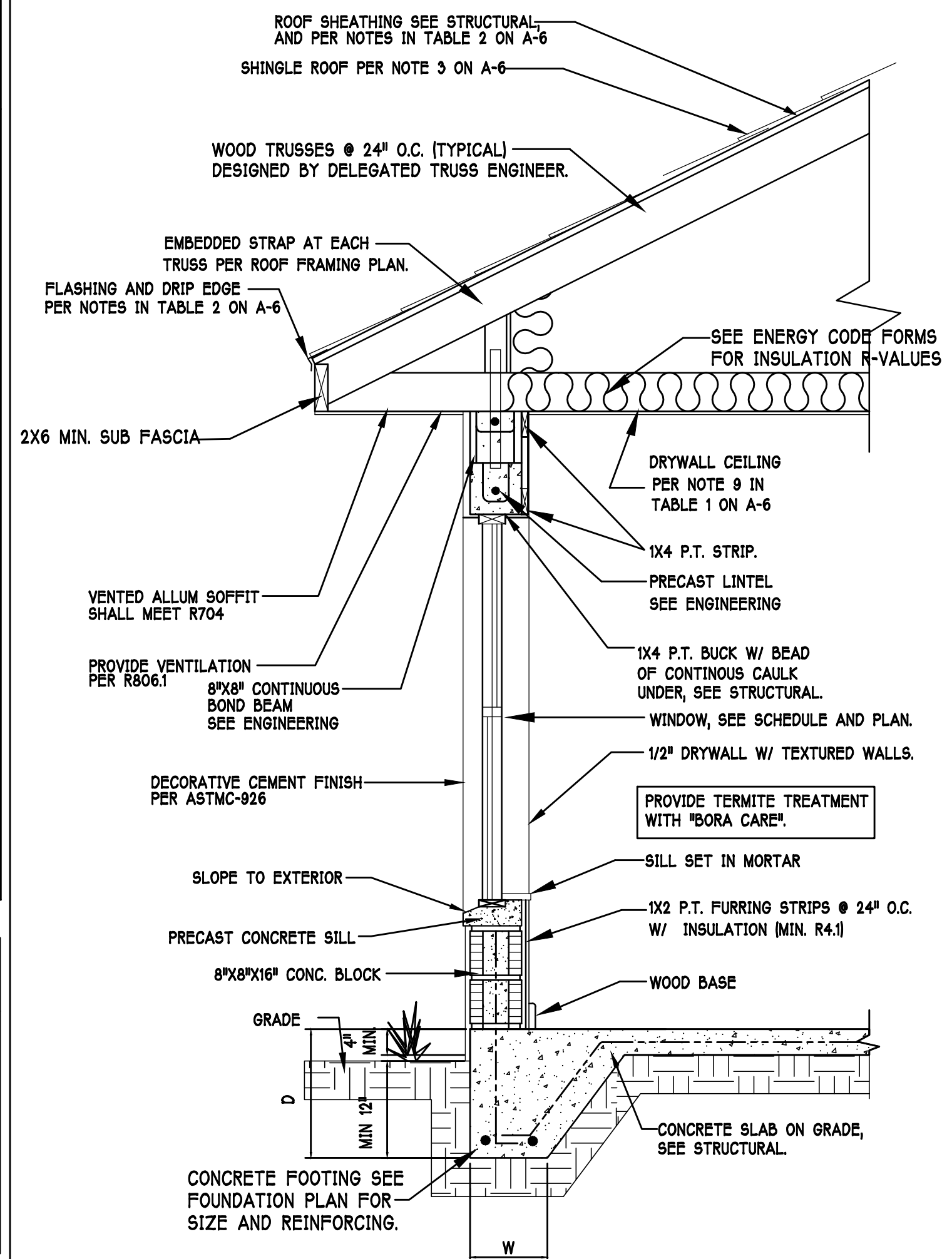
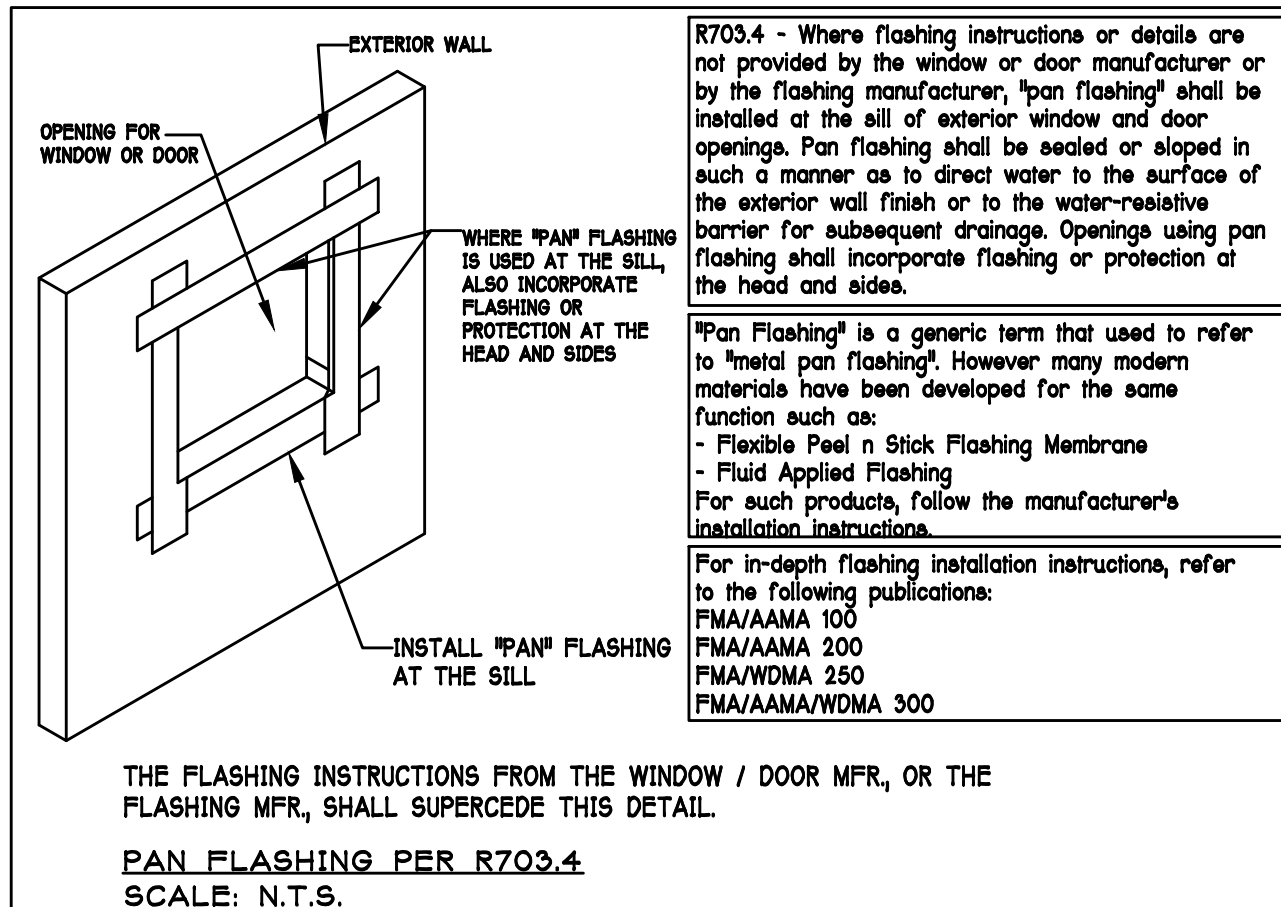
The nail component of plastic cap nails shall meet or exceed the requirements of ASTM A 641, Class 1, or equal, and shall be corrosion resistant by coating electro galvanization, mechanical galvanization, hot dipped galvanization or shall be made of stainless steel, non ferrous metal.

4 CLAY AND CONCRETE TILE ROOF SPECS

INSTALL PEEL AND STICK UNDERLAYMENT APPROVED FOR SINGLE LAYER APPLICATION UNDER TILE ROOF. THE INSTALLATION OF CLAY AND CONCRETE TILE SHALL COMPLY WITH THE PROVISIONS OF R905.3 P.B.C.

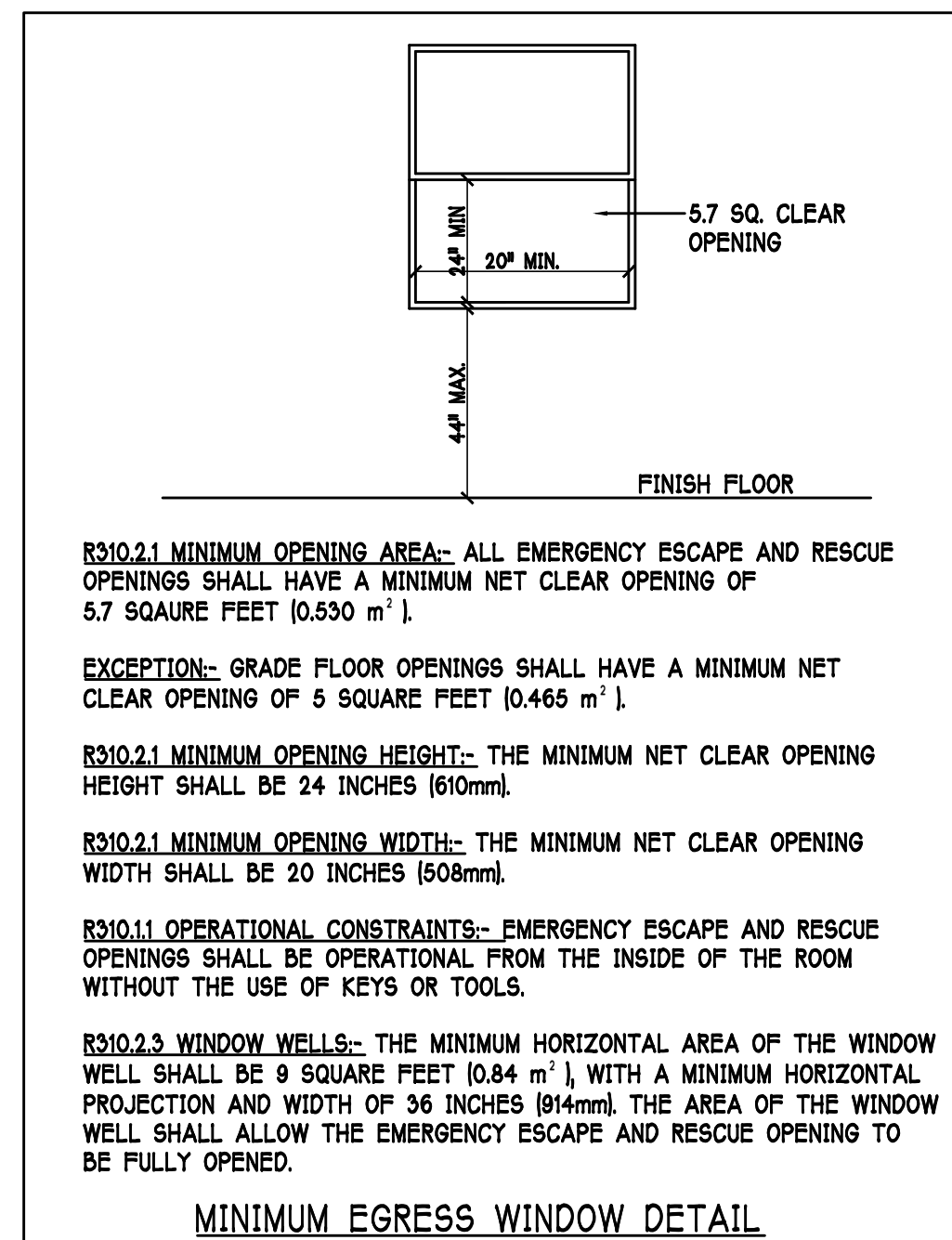
MARKING: EACH ROOF TILE SHALL HAVE A PERMANENT MANUFACTURER'S IDENTIFICATION MARK. APPLICATION SPECIFICATIONS: THE TILE MANUFACTURER'S WRITTEN APPLICATION SPECIFICATIONS SHALL BE AVAILABLE AND SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

1. TILE PLACEMENT AND SPACING.
2. ATTACHMENT SYSTEM NECESSARY TO COMPLY WITH CURRENT WIND CODE.
3. UNDERLAYMENT.
4. SLOPE REQUIREMENT.



TYPICAL WALL SECTION

SCALE: N.T.S.



R310.2.1 MINIMUM OPENING AREA:- ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET (0.530 m²).

EXCEPTION:- GRADE FLOOR OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5 SQUARE FEET (0.465 m²).

R310.2.1 MINIMUM OPENING HEIGHT:- THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24 INCHES (610mm).

R310.2.1 MINIMUM OPENING WIDTH:- THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES (508mm).

R310.1.1 OPERATIONAL CONSTRAINTS:- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS OR TOOLS.

R310.2.3 WINDOW WELLS:- THE MINIMUM HORIZONTAL AREA OF THE WINDOW WELL SHALL BE 9 SQUARE FEET (0.84 m²), WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES (914mm). THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.

MINIMUM EGRESS WINDOW DETAIL

DESIGN IN ACCORDANCE W/ THE 2020 RESIDENTIAL FLORIDA BUILDING CODE- 7TH EDITION

D.R. HOHON
America's Builder

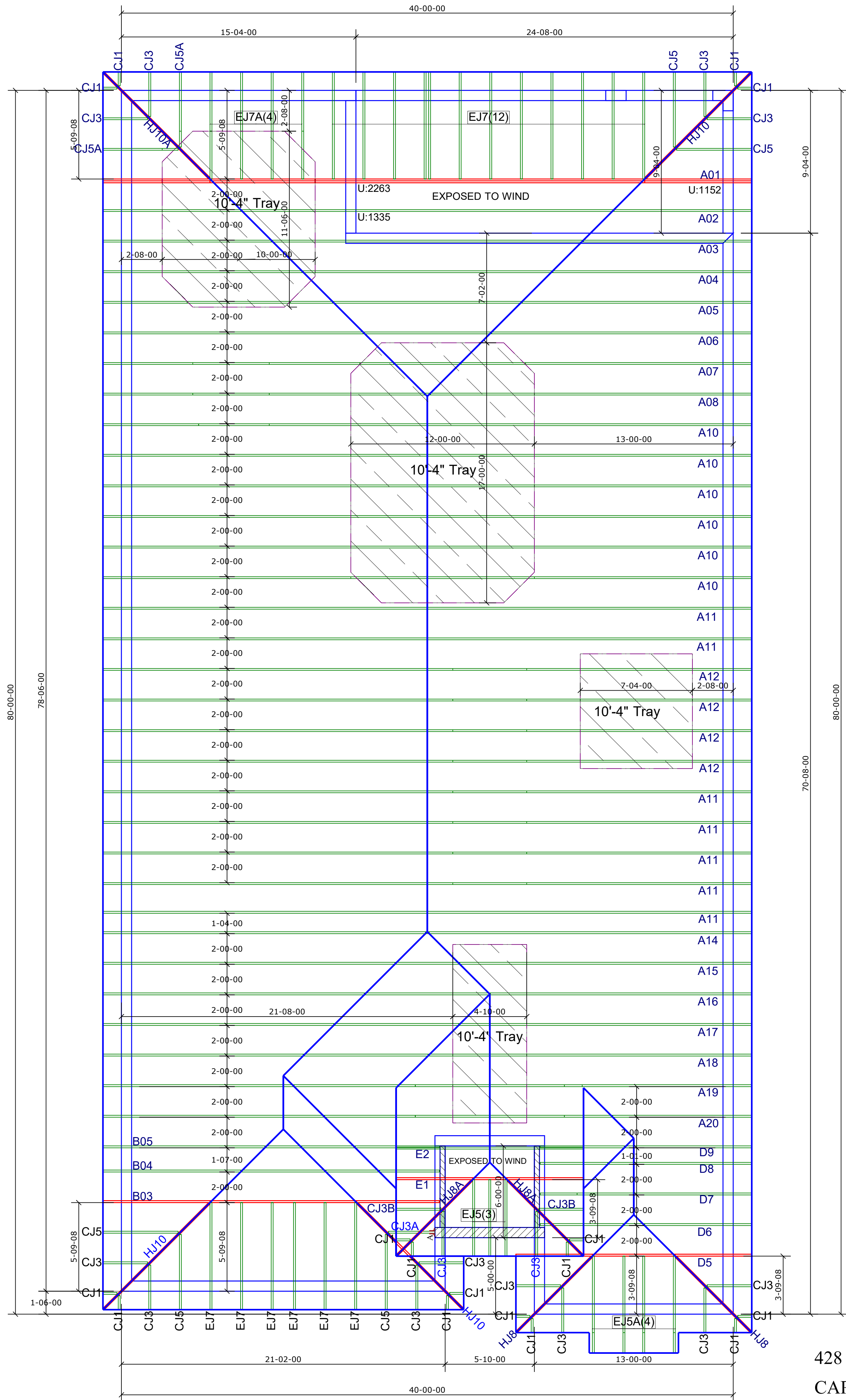
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REVISED: 03-25-22
PLAN: SECTION
SCALE: 3/16"=1'-0"
SHEET#

A-6M

JOB No.	MASTER
DATE DRAWN	8/10/2020
DATE PRINTED	1/21/2021



Engineer of Record for the Structure
Structural Systems of N. Fl, Inc.
Richard Siver, PE 65698
1634 SE 47th Street #3
Cape Coral, FL 33904

This document has been reviewed for conformance with the design intent of the structure and specified design criteria.

☒ Accepted As-Is ☐ Accepted As Noted ☐ Revise and Resubmit

GENERAL TRUSS ENGINEERING CRITERIA & DESIGN LOADS	
DESIGN CODE	FBC2020/TP12014
WIND CODE	MWFRS (Directional)/C-C HYBRID WIND ASCE 7-16
WIND LOAD	160 MPH
EXPOSURE CATEGORY	C
OCCUPANCY CATEGORY	II
IMPORTANCE FACTOR	1.0
WIND DURATION FACTOR	1.60
OPENING CONDITIONS	ENCLOSED
TRUSSES HAVE BEEN DESIGNED FOR A 10.0 PSF BOTTOM CHORD LIVE LOAD NONCONCURRENT WITH ANY OTHER LIVE LOADS	
TRUSS LOADING	ROOF
TCLL	20 PSF
TCDL	20 PSF
BCLL	0 PSF
BCDL	10 PSF
TOTAL	50 PSF
DURATION	1.25
TCDL / TO RESIST UPLIFT	5 PSF
BCDL / TO RESIST UPLIFT	5 PSF

CAUTION!!

DO NOT ATTEMPT TO ERECT TRUSSES WITHOUT REFERRING TO THE ENGINEERING DRAWINGS AND BSCI-B1 SUMMARY SHEETS.

ALL PERMANENT BRACING MUST BE IN PLACE PRIOR TO LOADING TRUSSES. (ie. SHEATHING, SHINGLES, ETC.)

ALL INTERIOR BEARING WALLS MUST BE IN PLACE PRIOR TO INSTALLING TRUSSES.

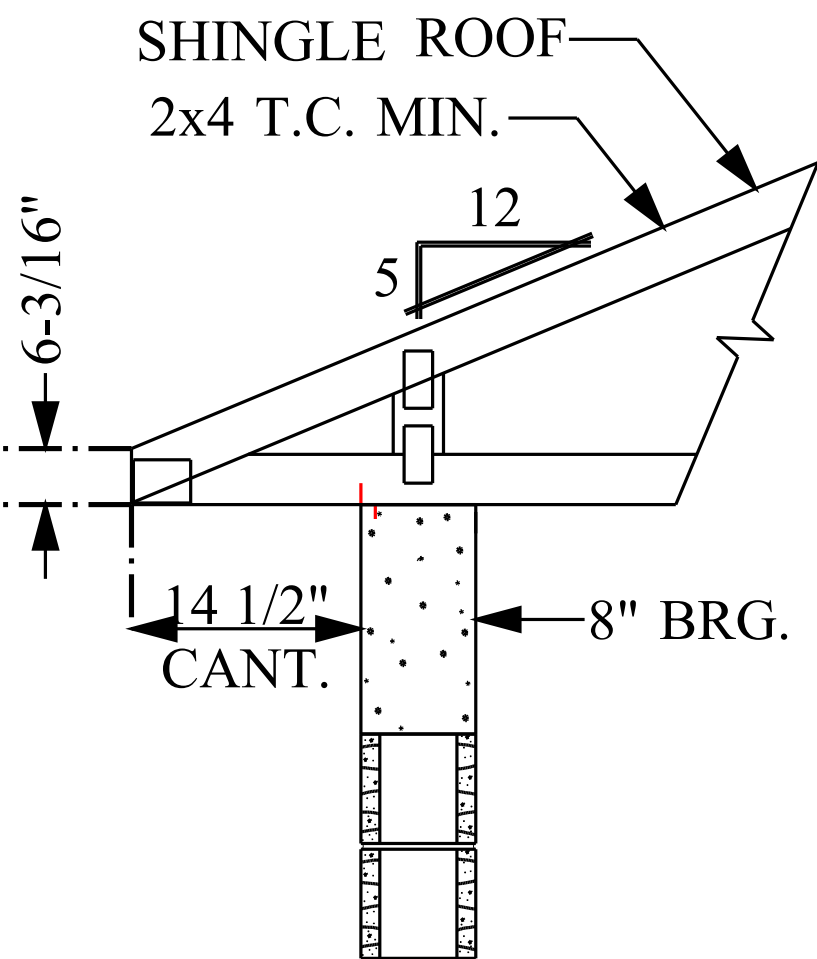
REFER TO FINAL ENGINEERING SHEETS FOR THE FOLLOWING.

- 1) NUMBER OF GIRDER PLIES AND NAILING SCHEDULE.**
- 2) BEARING BLOCK REQUIREMENTS.**
- 3) SCAB DETAILS (IF REQUIRED)**
- 4) UPLIFT AND GRAVITY REACTIONS.**

WARNING
BACK CHARGES WILL NOT BE
ACCEPTED REGARDLESS OF FAULT
WITHOUT PRIOR NOTIFICATION BY
CUSTOMER WITHIN 48 HOURS AND
INVESTIGATION BY Builders FirstSource.
NO EXCEPTIONS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CONNECTIONS OTHER THAN TRUSS TO TRUSS, GABLE SHEAR WALL, AND CONNECTIONS. TEMPORARY AND PERMANENT BRACING, AND CEILING AND ROOF DIAPHRAM CONNECTIONS.

Hatch Legend	
	13'-11" Bearing



TYP. ROOF TRUSS END DETAIL

ROOF PITCH	5/12
CEILING PITCH	FLAT
TOP CHORD SIZE	2 x 4 MIN.
BOTTOM CHORD SIZE	2 x 4 MIN.
OVERHANG LENGTH	N/A
CANTILEVER	14 1/2"
END CUT	PLUMB
FLOOR TRUSS SPACING	N/A
ROOF TRUSS SPACING	24"

BUILDER	DR Horton
PROJECT	2221 M 160 C LH
MODEL	2221
ADDRESS	--
CITY, STATE	--, FL.
LOT	--
COUNTY	--
DRAWN BY	D.W.
ENG. BY	D.W.

REVISIONS			
No.	DATE	NOTES	BY
1	1/21/2021	Updated code to FBC2020/TPI2014	D.W

IMPORTANT

This Drawing Must Be Approved And Returned
Before Fabrication Will Begin. For Your Protection
Check All Dimensions And Conditions Prior To
Approval Of Plan.

**SIGNATURE BELOW INDICATES ALL NOTES
AND DIMENSIONS HAVE BEEN ACCEPTED.**

By _____ Date _____

6850 Taylor Road Punta Gorda, Fl. 33950
Phone: 941-575-2250 / Fax:941-575-0319



SIMPSON CONNECTOR SCHEDULE

ROOF TRUSS

FLOOR TRUSS

QTY	ID	MODEL	ROOF	UPLIFT	SYMBOL	QTY	ID	MODEL	FLOOR	UPLIFT	SYMBOL
1	A	HU26	895	490	1" A"	0	A	LU24	895	490	1" A"
0	A	HTU26	3200 / 3600	1250 / 1555	1" A"	0	A	HTU26	3200 / 3600	1250 / 1555	1" A"
0	B	HTU28	3895 / 4680	1235 / 2140	1" A"	0	B	HTU28	3895 / 4680	1235 / 2140	1" A"
0	C	HTU28-2	3600	1515 / 2175	1" A"	0	C	HTU28-2	3600	1515 / 2175	1" A"
0	D	HTU28-2	4310 / 4680	1530 / 3485	1" A"	0	D	HTU28-2	4310 / 4680	1530 / 3485	1" A"
0	E	HGUS28-2	5320	2155	1" A"	0	E	HGUS28-2	5320	2155	1" A"
0	F	HGUS28-2	5320	2155	1" A"	0	F	HGUS28-2	7460	3235	1" A"
0	G	HGUS28-2	7460	3235	1" A"	0	G	HGUS28-3	5230	2155	1" A"
0	G	HGUS28-3	5230	2155	1" A"	0	H	HGUS28-3	7460	3235	1" A"
0	H	HGUS28-3	7460	3235	1" A"	0	J	HGUS210-4	9100	4095	1" A"
0	J	HGUS210-4	9100	4095	1" A"	0	K	SPECIAL			

ACCESSORIES

3x8 NAIL ON PLATES

SEAT PLATES

ACCESSORIES

3x8 NAIL ON PLATES

SEAT PLATES

SCREWS			BOLTS		
QTY	MODEL		QTY	MODEL	
	SDS 1/4" x 3"			1/2" x 8" CARR BOLTS	
	SDS 1/4" x 4-1/2"			1/2" WASHERS	
	SDS 1/4" x 6"			1/2" NUTS	
A 3	HTU26	1 PLY TYP.	A 3	HTU28-2	2 PLY TYP.
			A 3	HU24	1 PLY TYP.

MISCELLANEOUS

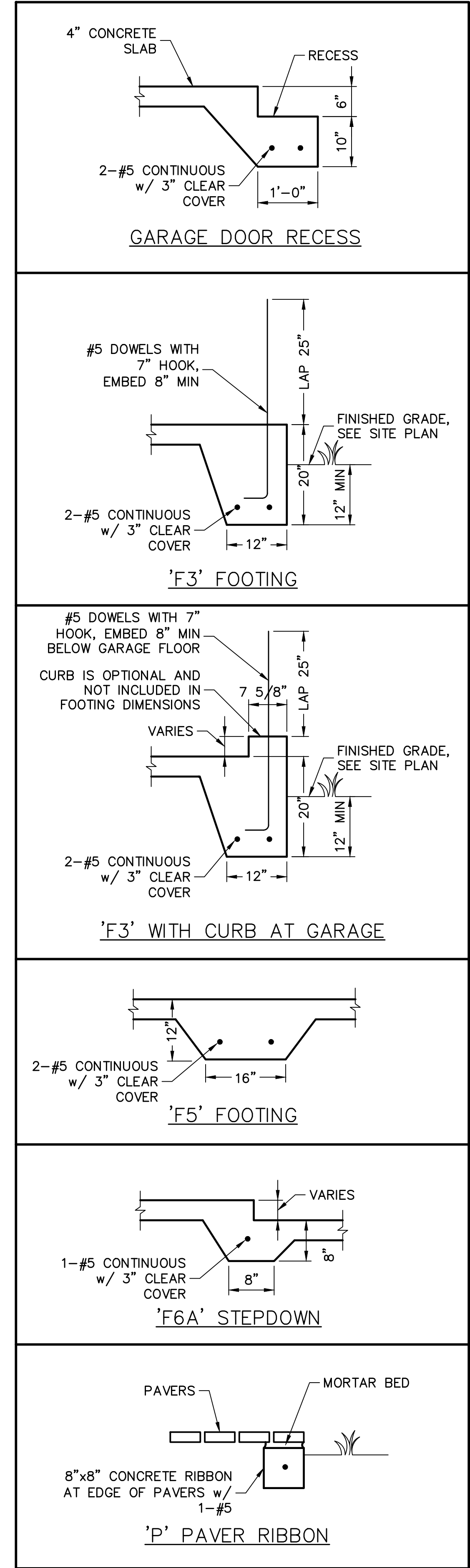
ROOF TRUSS

FLOOR TRUSS

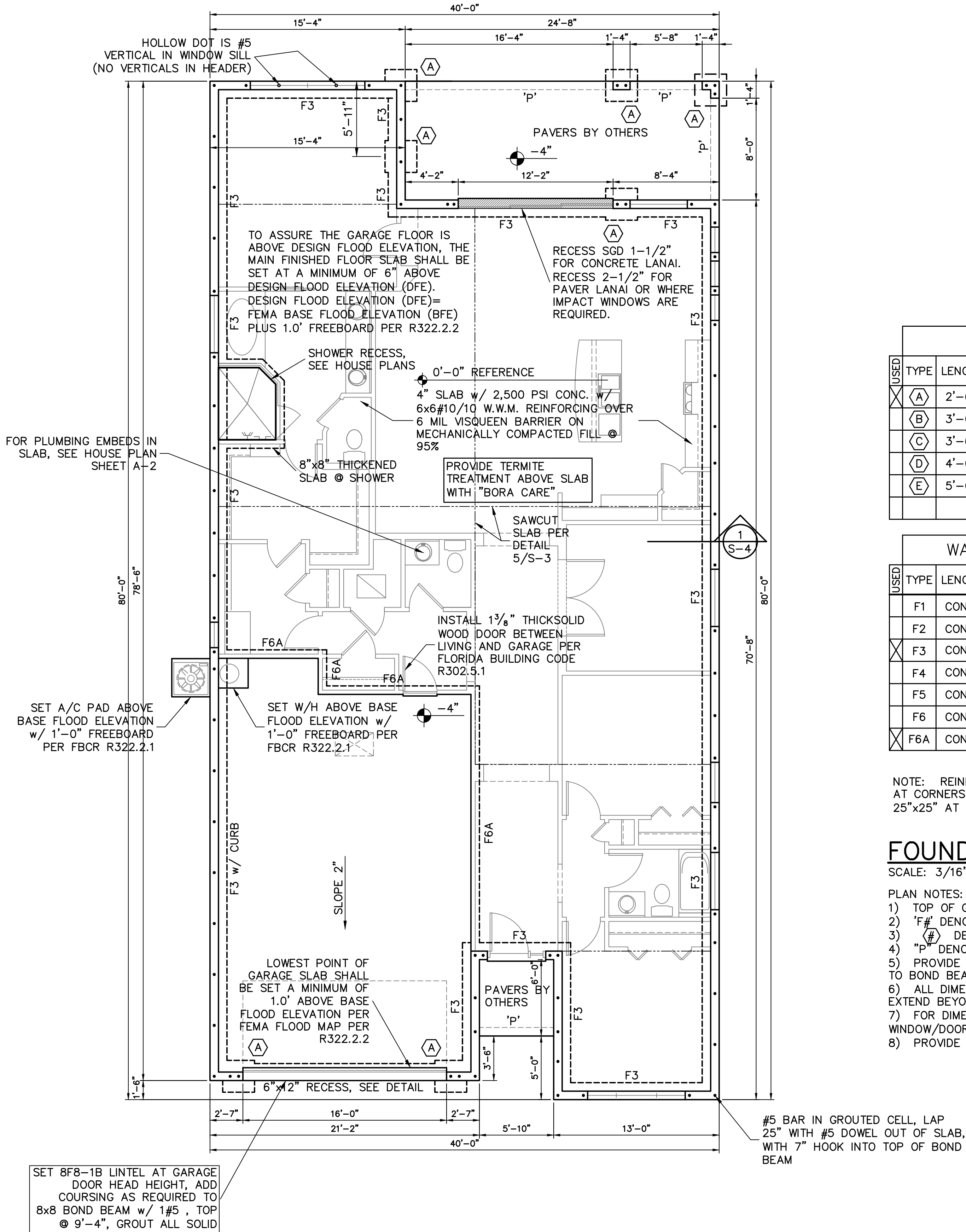
QTY	MODEL	QTY	MODEL
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NOTES:

- 1) ALL DIMENSIONS ARE FEET-INCHES-SIXTEENTHS.
- 2) DO NOT CUT OR ALTER TRUSSES IN ANY WAY.
- 3) ALL REACTIONS ARE UNDER 5000 LBS. UNLESS NOTE OTHERWISE.
- 4) ALL UPLIFTS ARE UNDER 1000 LBS. UNLESS NOTED OTHERWISE.
- 5) FRAMING REQUIRED BELOW TRUSSES TO GET DESIRED CEILING CONDITIONS.
- 6) ONLY TRUSS TO TRUSS CONNECTIONS SUPPLIED W/ TRUSS PACKAGE.



FOOTING DETAILS
SCALE: 3/4" = 1'-0"



PAD FOOTING SCHEDULE							
USED	TYPE	LENGTH	WIDTH	DEPTH	BOTTOM REINF.		REMARKS
					LONG WAY	SHORT WAY	
X	(A)	2'-6"	2'-6"	1'-0"	3-#5	3-#5	-
	(B)	3'-0"	3'-0"	1'-0"	4-#5	4-#5	-
	(C)	3'-6"	3'-6"	1'-0"	4-#5	4-#5	-
	(D)	4'-0"	4'-0"	1'-2"	5-#5	5-#5	-
	(E)	5'-0"	5'-0"	1'-2"	6-#5	6-#5	-

WALL FOOTING SCHEDULE						
USED	TYPE	LENGTH	WIDTH	DEPTH	BOTTOM REINFORCING	SHAPE
	F1	CONT.	1'-4"	0'-8"	2-#5	
	F2	CONT.	1'-8"	0'-10"	2-#5	
X	F3	CONT.	1'-0"	1'-8"	2-#5	
	F4	CONT.	1'-4"	1'-8"	2-#5	
	F5	CONT.	1'-4"	1'-0"	2-#5	
	F6	CONT.	1'-4"	1'-0"	2-#5	
X	F6A	CONT.	0'-8"	0'-8"	1-#5	

NOTE: REINFORCING IN FOOTINGS SHALL BE CONTINUOUS AT CORNERS AND INTERSECTIONS. ADD CORNER BAR 25"x25" AT EACH LONGITUDINAL BAR PER DETAIL 6/S-3.

FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

- PLAN NOTES:
- 1) TOP OF GROUND FLOOR SLAB DATUM ELEVATION 0'-0".
 - 2) 'F#' DENOTES CONTINUOUS WALL FOOTING TYPE PER SCHEDULE THIS SHEET.
 - 3) (A) DENOTES PAD FOOTING AT CONCENTRATED LOADS PER SCHEDULE THIS SHEET.
 - 4) "P" DENOTES 8"x8" CONCRETE RIBBON w/ 1-#5 BAR AT EDGE OF PAVERS.
 - 5) PROVIDE #5 VERTICAL REINFORCING AT DOT LOCATIONS SHOWN ON PLAN FROM FOOTING TO BOND BEAM.
 - 6) ALL DIMENSIONS ARE TO OUTSIDE FACE OF MASONRY WALLS. SOME SLAB EDGES MAY EXTEND BEYOND FACE OF WALL.
 - 7) FOR DIMENSIONS OF ROUGH OPENINGS IN MASONRY WALLS, COORDINATE WITH WINDOW/DOOR SUPPLIER.
 - 8) PROVIDE PRESSURE TREATED BUCKS AT WINDOWS / DOORS PER DETAIL 7/S-3.

CHANGE TRUSS SUPPLIER FROM ABS TO BFS. THE TRUSSES ARE AN EQUIVALENT SUBSTITUTION. NO CHANGES REQUIRED TO THE STRUCTURE.

REVISIONS	BY
3/28/22	RS

STRUCTURAL ENGINEERING:
STRUCTURAL SYSTEMS OF NORTH FLORIDA
1634 S.E. 47th STREET, SUITE #3
CAPE CORAL, FL 33904
(239) 549-4554
CA# 8829

This is a multi-page document.
I performed structural engineering only on those pages indicated by the name Richard Siver, and company name Structural Systems.

DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE 7th EDITION (2020) RESIDENTIAL

NO. 66988
STATE OF FLORIDA
REGISTERED PROFESSIONAL ENGINEER
RICHARD A. SIVER

This item has been digitally signed by Richard Siver on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

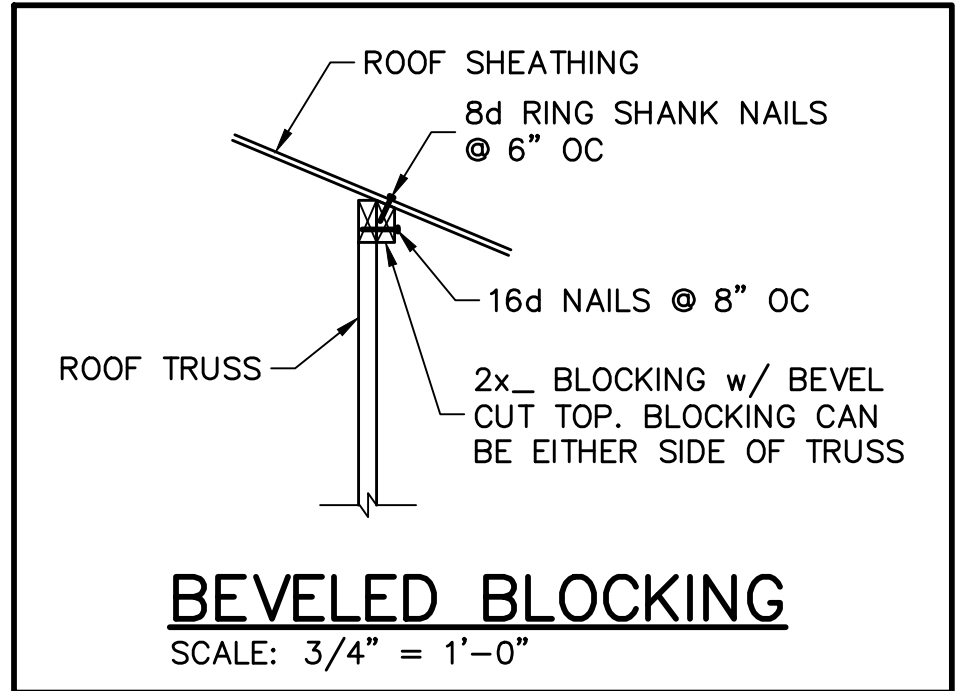
BUILDER:
D-R HOUGHTON
America's Builder

MODEL 2221 M
2-CAR
428 CORAL REEF PLACE
CAPE CORAL, FLORIDA 33993
LOT: 295 SUBDIVISION: STONEWATER

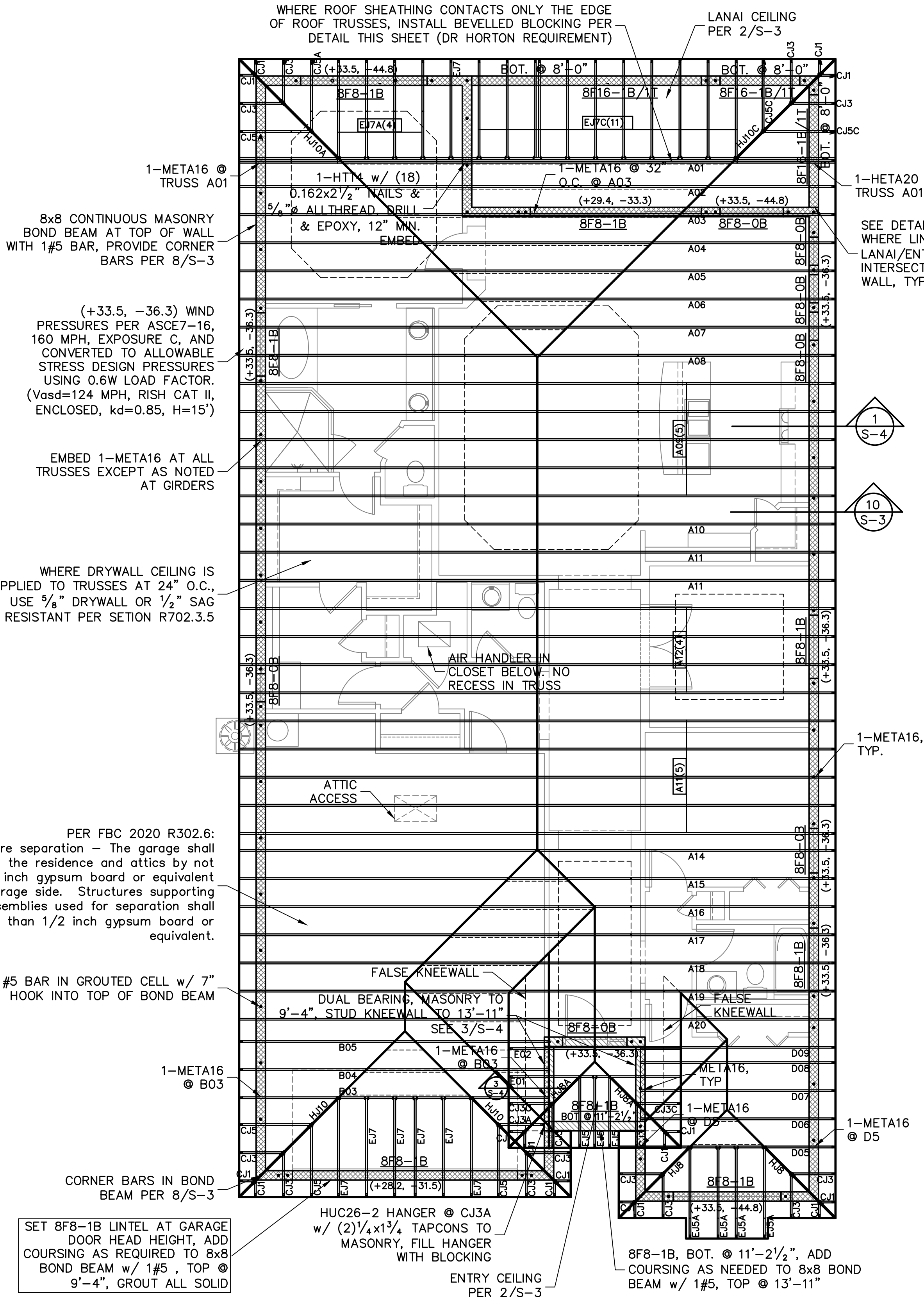
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09/24/21
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VARIES
DR 13402
SHEET

S-1
SHEET 1 OF 4

At Exterior Stud Walls and Gable Ends with Wall Sheathing, apply plaster over metal lath over water resistive barrier as follows:
Plaster R703.6.2: 3-coat 7/8" thick portland cement based plaster per ASTM C926.
Metal Lath R703.6.1: Self furring paper backed 2.5lb diamond mesh metal lath per ASTM C847, G60 galvanized, fastened per ASTM C1063 with 1-1/2" long, 11 gage nails with 7/16" head (roofing nails) at 7" oc, or 1-1/2" long, 16 gage staples at 6" oc, into the framing members (ie, the nails or staples must align with and penetrate 3/4" into the framing studs).
Water Resistive Barrier (WRB) R703.6.3: Water-resistive vapor-permeable barrier with a performance at least equivalent to 2 layers of Grade D paper. The individual layers shall be installed independently. An approved house wrap may be used for the 1st layer and metal lath with approved paper backing may be the 2nd layer (Note: ZIP wall sheathing with seam tape qualifies as the first layer).

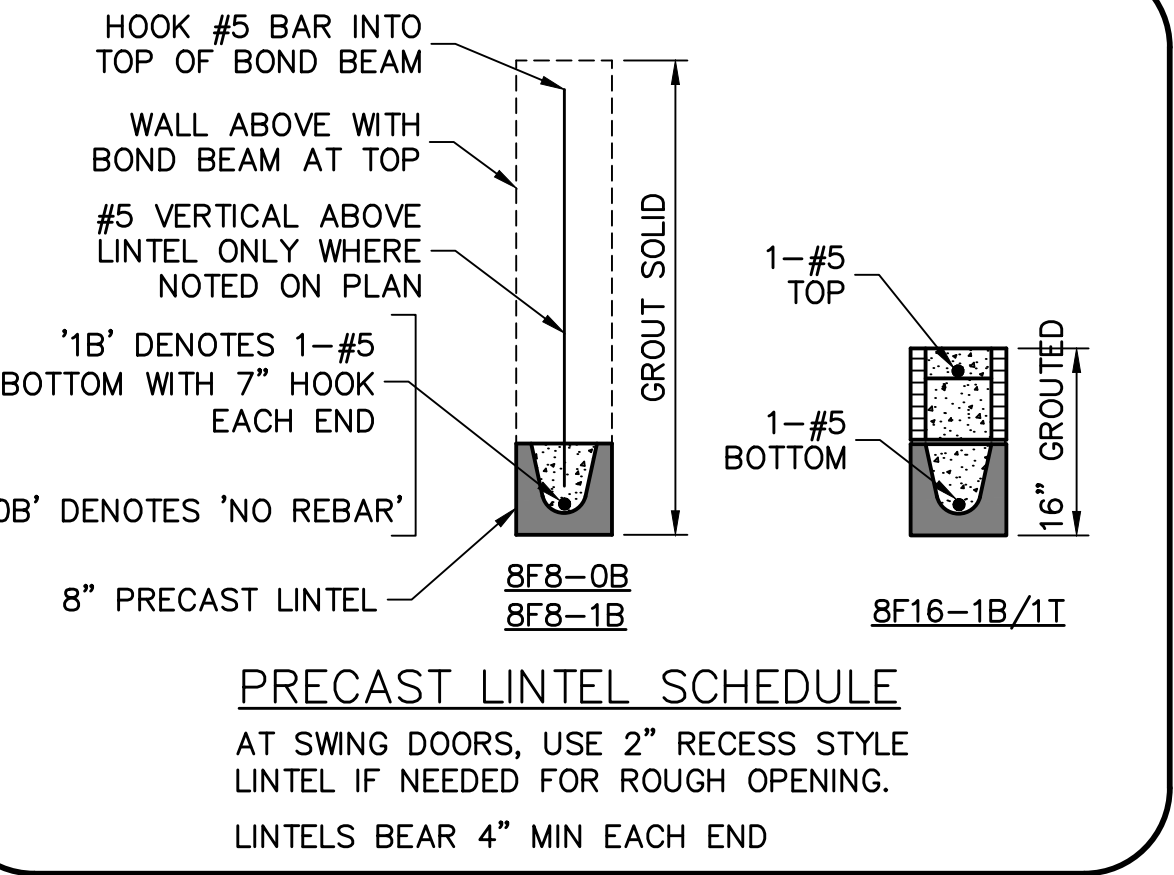


BEVELED BLOCKING
SCALE: 3/4" = 1'-0"



TRUSS STRAPPING TO MASONRY		
MAX TRUSS UPLIFT (LBS)	STRAP/ANCHOR Valid lengths x/x/x	FASTENERS
INSTALL META16 AT ALL TRUSSES TO 1450 lb UPLIFT. FOR HIGHER UPLIFTS, SEE NOTES ON PLAN.	(1)META16/18/20 (1)META16/20 (2)META16/18/20 (2)META16/20 (1)META16/20 (2)META16/18/20 (2)META16/20 3965/DF/SP (2 PLY 2x4) 3000/DF/SP (1 PLY 2x4) 4455/DF/SP (1 PLY 2x6) 4235/DF/SP (2 PLY 2x4) 4555/DF/SP (1 PLY 2x6) 4670/DF/SP (2 PLY 2x4) 5445/DF/SP (2 PLY 2x4) 10690/DF/SP (2 PLY) 10790/STP (3 PLY)	(8) 0.148x1-1/2", EMBED 4" (9) 0.148x1-1/2", EMBED 4" (10) 0.148x1-1/2", EMBED 4" (10) 0.148x1-1/2", EMBED 4" (10) 0.148x1-1/2", EMBED 4" (14) 0.162x3-1/2", EMBED 4" (12) 0.162x3-1/2", EMBED 4" (22) 0.148x3" ATR, EPOXY 12" (18) 0.148x1-1/2", 5/8" ATR, EPOXY 12" (18) SD#10x1-1/2", 5/8" ATR, EPOXY 12" (18) 0.162x2-1/2", 5/8" ATR, EPOXY 12" (26) SD#10x1-1/2", 5/8" ATR, EPOXY 12" (26) 0.148x3", 5/8" ATR, EPOXY 12" (26) SD#10x2-1/2, 5/8" ATR, EPOXY 18" (16) 0.148x3", (2) 3/4" ATR, EPOXY 12" (16) 0.148x3", (2) 3/4" ATR, EPOXY 12"

TRUSS STRAPPING TO STUD WALL/WOOD BEAM		
MAX TRUSS UPLIFT (LBS)	STRAP(S) Valid lengths x/x/x	FASTENERS
INSTALL AT ALL TRUSSES TO 850 lb UPLIFT. FOR HIGHER UPLIFTS, SEE NOTES ON PLAN.	(1)MTS16/20/30 (2)MTS16/20/30 (2)MTS16/20/30 (1)HTS20/24/30 (2)HTS20/24/30 (3)HTS20/24/30 (4)HTS20/24/30	(14) 0.148x1-1/2" or 3" EACH STRAP (24) 0.148x1-1/2" OR (20) 0.148x3" EACH STRAP



BEARING LEGEND	
[Pattern]	BEARING @ 9'-4"
[Pattern]	BEARING @ 13'-11"

ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

- PLAN NOTES:
- 1) ROOF TRUSS BEARING ELEVATION VARIES, SEE LEGEND.
 - 2) ROOF FRAMING SHALL BE WOOD TRUSSES DESIGNED BY A DELEGATED TRUSS ENGINEER PER DESIGN CRITERIA ON SHEE S-3.
 - 3) PROVIDE STRAPPING AT TRUSSES PER NOTES ON THIS SHEET.
 - 4) FOR NAILING OF ROOF DECK, SEE 1 AND 2 ON S-3.
 - 5) [8F8-1B] etc, DENOTES PRECAST LINTEL ABOVE DOOR/WINDOW OPENING PER SCHEDULE THIS SHEET.
 - 6) AT TRUSS BEARING, PROVIDE 8x8 MASONRY BOND BEAM w/ 1-#5 CONTINUOUS, SEE DETAIL 10/S-3.
 - 7) FOR DIMENSIONS OF ROUGH OPENINGS IN MASONRY WALLS, COORDINATE WITH WINDOW/DOOR SUPPLIER.
 - 8) PROVIDE PRESSURE TREATED BUCKS AT WINDOWS / DOORS PER DETAIL 7/S-3.

CHANGE TRUSS SUPPLIER FROM ABS TO BFS. THE TRUSSES ARE AN EQUIVALENT SUBSTITUTION. NO CHANGES REQUIRED TO THE STRUCTURE.

REVISIONS	BY
3/28/22	RS

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RICHARD A. SIVIER
LICENSE NO. 16688
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BUILDER:
D.R. HORTON, INC.
America's Builder

MODEL 2221 M
2-CAR
428 CORAL REEF PLACE
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LOT: 295 SUBDIVISION: STONEWATER

DESIGN/DRAWN
DWB/GH
CHECKED
DWB
DATE
09/24/21
SCALE
VARIES
DR 13402
SHEET

S-2
SHEET 2 OF 4

TABLE R803.2.3.1 – NAIL SPACING BASED ON SPECIFIC GRAVITY OF RAFTER/TRUSS: ALL TRUSS TOP CHORDS AND FIELD ROOF FRAMING SHALL BE SOUTHERN PINE, SPECIFIC GRAVITY=0.55 (EXCEEDS SG=0.42 AND 0.49 OF TABLE R803.2.3.1).

ENSURE THAT ALL NAILS PENETRATE THE TOP CHORD OF THE TRUSS WITHOUT SPLITTING.

TYPICAL HOUSE PLAN

EDGE NAIL TO BLOCKING AT RIDGE VALLEY/HIP

STAGGER JOINTS AT SHEATHING PANELS

EDGE NAIL TO FACIA BOARD

NAIL SPACING (TABLE R803.2.3.1) WIND SPEED / EXPOSURE

160/B, 160/C, 170/B	170/C
NAIL SPACING: 6" O.C. EDGE 6" O.C. FIELD	NAIL SPACING: 4" O.C. EDGE 4" O.C. FIELD

NAIL TYPE (SECTION R803.2.3.1) 19/32 SHEATHING

2 1/2" x 0.131" RING SHANK OR 3" x 0.120" RING SHANK (PER ASTM F1667 RSRs-03 & 04)
--

1

NAILING OF ROOF SHEATHING

SCALE: NTS

RETROFIT STRAPS TO CONCRETE/MASONRY

TRUSS UPLIFT (LBS) @ 24" OC	CONNECTOR
TO 840	1-MTSM16 or 20
TO 1045	1-HTSM16 or 20
TO 2090	2-HTSM16 or 20
TO 4300	2-LGT2
TO 3480	HTT16
TO 10530	HGT-2/3

NOTES:

1) WHERE EMBEDDED STRAP IS MISSING OR MIS-LOCATED, PROVIDE A STRAP FROM THE ABOVE LIST AT EACH ROOF TRUSS BEARING POINT, BASED ON THE TRUSS UPLIFT VALUES IN THE SIGNED AND SEALED TRUSS DESIGN PACKAGE.

2) CONNECTORS ARE SIMPSON STRONG TIE. ALL CONNECTORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH SIMPSON PRINTED INSTRUCTIONS.

4

RETROFIT UPLIFT CONNECTOR SCHEDULE

8" CMU WALLS

2x4 or 2x6 P.T. BUCK @ FLANGED WINDOWS (SEE NOTE)

1/4"x3/4" TAPCON @ 24" OC, 3 SCREWS MIN. (SEE NOTE)

WINDOW/DOOR ROUGH OPENING

2x8 OR 2x6 P.T. SYP#2

2x2x1/8" WASHER

1/2"Ø EXPANSION BOLT, 4" MIN. EMBEDMENT, SPACE 24" OC AND 12" FROM TOP & BOT.

DOOR

BUCK FASTENING

GARAGE DOOR

NOTE: THIS BUCK FASTENING DETAIL IS INTENDED FOR FLANGED WINDOW/DOOR PRODUCTS THAT FASTEN THRU THE FLANGE WITH WOOD SCREWS TO THE BUCK. FOR WINDOW/DOOR PRODUCTS THAT DO NOT HAVE A FLANGE AND FASTEN INSTEAD OUTWARD THRU THE FRAME, USE MASONRY SCREWS PER MFR. THAT ARE LONG ENOUGH TO PENETRATE 2-1/4" INTO THE MASONRY. IN THIS CASE, THE BUCK MATERIAL IS SIMPLY A SPACER AND MAY BE 1x4 OR 1x6 OR OMITTED ENTIRELY AND THE SPACER MAY BE TACKED IN PLACE WITH MASONRY NAILS OR PINS.

ROOF SHEATHING, SEE SCHEDULE 2/S-3

WOOD TRUSSES @ 24" OC, DESIGNED BY DELEGATED TRUSS ENGINEER

EMBEDDED STRAP AT EACH ROOF TRUSS, SEE ROOF PLAN. BREAK OUT WEB OF BLOCK AS NEEDED TO PROPERLY LOCATE EACH STRAP.

2x_ SUBFASCIA w/ 2-16d TO EACH TRUSS

TRUSS BEARING SEE PLAN

APPROVED ISOLATION PLATE

8"x8" CONTINUOUS MASONRY BOND BEAM w/ 1-#5, GROUT SOLID. PROVIDE CORNER BARS PER DETAIL 8/S-3.

#5 VERT. IN GROUTED CELL AT DOT LOCATIONS ON PLAN (48" OC MAX EXTERIOR)

2x_ TRUSS BEARING

ALUMINUM SOFFITS SHALL MEET WIND DESIGN PRESSURES PER R704 INSTALLED PER MFR. SPECS.

#5 VERTICAL SHALL HAVE 7" STANDARD HOOK INTO TOP OF BOND BEAM

8" MASONRY

10

TRUSS STRAP TO BOND BEAM

SCALE: 3/4" = 1'-0"

SHEATHING SCHEDULE

EXTERIOR STUD WALL	FLOOR
7/16" ZIP SYSTEM WALL SHEATHING BY HUBER ENGINEERED WOODS LLC, NAILED W/ 8d COMMON WIRE @ 6" O.C. EDGE AND 6" O.C. FIELD. PROVIDE 2x4 BLOCKING AT ALL JOINTS. INSTALL SHEATHING AND SEAM TAPE IN STRICT ACCORDANCE WITH MFR. WRITTEN INSTRUCTIONS.	N/A
ROOF – PER FBCR TABLE 803.2.2	1) 1x4 STRIPPING @ 16"OC w/ 2-8d NAILS TO EACH TRUSS, 5/8" EXTERIOR GYPBOARD CEILING, FASTEN w/ 8d NAILS OR 1 5/8" DRYWALL SCREWS @ 6"OC EDGE & FIELD. 2) 3/8" BC PLYWOOD NAILED w/ 6d COMMON @ 6" OC EDGE & FIELD.
19/32 CLASS A.P.A. RATED SHEATHING, EXPOSURE 1, SPAN RATING 40/20. FASTEN WITH RING SHANK NAILS PER DETAIL 1/S-3	
(WHEN ZIP BRAND ROOF SHEATHING IS USED, H-CLIPS ARE NOT REQUIRED)	ALUMINUM PERFORATED SOFFIT INSTALLED PER MANUFACTURER INSTRUCTIONS TO MEET WIND PRESSURES PER R704.

NOTE: EXTERIOR CEILINGS SPECIFIED ABOVE MEET THE DESIGN WIND PRESSURES PER R703.1.2

2

3/4" DEEP SAWCUT w/ ELASTOMERIC SEALANT

SLAB ON GRADE, SEE PLAN

MAINTAIN RUN TO RISE OF 2:1 OR MORE

3" COVER

MAINTAIN FOOTING WIDTH & DEPTH AT ALL VERT. AND HORIZ. SEGMENTS

FOOTING REINF., SEE PLAN. LAP 40 BAR DIAMETERS

PLAN VIEW

FOOTING CORNER BARS

SCALE: NTS

NOTES:

1) PROVIDE SAWCUTS TO CREATE APPROXIMATE 20' X 20' MAXIMUM SQUARES.

2) SAWCUT CONCRETE SLAB WITHIN 4 TO 12 HOURS OF CONCRETE PLACEMENT.

5

SLAB SAWCUT DETAIL

SCALE: NTS

INTERSECTION

CORNER

#5 CORNER BAR, 25"x25"

MASONRY BOND BEAM, TYPICAL

8

CORNER BAR DETAIL IN BOND BEAMS

SCALE: 3/4" = 1'-0"

2x4 BLOCK AT SHEATHING JOINT

ROOF SHEATHING, SEE SCHEDULE

2x4 OUTLOOKER

H2.5A CLIP @ EA. OUTLOOKER TO TRUSS

TRUSS TOP CHORD, DROP 3 1/2"

BRACE VERTICAL MEMBERS

MID WALL WEEP SCREED

12d NAILS AT TRUSS BOTTOM CHORD TO SILL @ 8" O.C.

MASONRY WALL, SEE PLAN

2x6 PT SILL w/ 1/2"x6" ANCHOR BOLTS @ 32" O.C. w/ 2" WASHER

3-12d TOE NAILS

2x4 BLOCKING

NO GABLE END BRACING REQUIRED

USED ONLY ON 'L'

11

OUTLOOKER DETAIL AT DROP GABLE

SCALE: N.T.S.

WINDOW/DOOR/SOFFIT DESIGN WIND PRESSURES

TYPE	INTERIOR ZONE 4	END ZONE 5
SOFFIT (10 SQ. FT.)	+33.5 -36.3	+33.5 -44.8
WINDOWS & DOORS (10 SQ. FT.)	+33.5 -36.3	+33.5 -44.8
8' OR 9' GARAGE DOORS	+29.4 -33.3	
16' OR 18' GARAGE DOORS	+28.2 -31.5	

(SEE PLAN FOR OTHER SPECIFIC PRESSURES)

1) TABLE MAY BE USED FOR ANY SIZE WINDOW OR DOOR IN EACH TYPE.

2) USE "INTERIOR ZONE 4" PRESSURES UNLESS WINDOW OR DOOR IS LOCATED WITHIN THE "END ZONE 5" (SEE DIAGRAM BELOW), THEN USE THE HIGHER PRESSURES UNDER THE "END ZONE 5" COLUMN.

3) ALL GLASS / GLAZING SHALL BE IMPACT RATED OR USE IMPACT RATED SHUTTERS.

4) SUBMIT PRODUCT APPROVALS TO THE BUILDING DEPARTMENT AS REQUIRED BY THE LOCAL JURISDICTION.

5) MANUFACTURED SOFFIT PRODUCTS SHALL BE INSTALLED PER MFR ENGINEERING SPEC SHEETS.

* ON IRREGULAR SHAPED BUILDINGS, THERE IS NO GUIDANCE IN THE CODE FOR HOW FAR A CORNER MUST PROTRUDE FROM THE MAIN BUILDING TO BE CONSIDERED 'ZONE 5'. WE HAVE CHOSEN >15'. THIS IS SUBJECT TO JUDGEMENT CALL BY THE AUTHORITY HAVING JURISDICTION.

IN ZONE 5, MANUFACTURED SOFFIT PRODUCTS MAY REQUIRE ADDITIONAL BATTENS OR FASTENING PER MFR ENGINEERING SPEC SHEETS TO MEET THE PRESSURE REQUIREMENTS.

END ZONE 5 PRESSURES OCCUR AT "PRIMARY" OUTSIDE CORNERS OF BUILDING (BOLD LINES)

INTERIOR ZONE 4 PRESSURES

4'-0" MEASURED FROM FACE OF WALL (FIG R301.2(7))

3

3" COVER

MAINTAIN RUN TO RISE OF 2:1 OR MORE

FOOTING REINF., SEE PLAN. LAP 40 BAR DIAMETERS

FOOTING REINF., SEE PLAN

LAP CORNER BARS 40 BAR DIAMETERS

CONCRETE FOOTING, SEE PLAN

PLAN VIEW

6

STEP FOOTING

SCALE: NTS

UPPER BOND BEAM, SEE PLAN

HOOK BAR INTO TOP OF UPPER BOND BEAM

VERTICAL BOND BEAM, 8"x8" CMU w/ #5 VERTICAL

8"x8" BOND BEAM w/ 1-#5

7" STANDARD HOOK INTO TOP OF BOND BEAM (MAY USE 7"x25" BENT BAR)

BEARING

#5 VERTICAL IN GROUTED CELL AT DOT LOCATIONS ON PLAN

#5 VERT. AT INTERSECTION OF BOND BEAM w/ 7" HOOK AT TOP

VERTICAL BAR IN GROUTED CELL, SEE PLAN

HOOK OR CORNER BAR

MASONRY WALL

9

STEPPED BOND BEAM & REINFORCING

SCALE: 3/4" = 1'-0"

DESIGN CRITERIA:

STRUCTURAL ENGINEERING PER: FLORIDA BUILDING CODE 7th Edition (2020) RESIDENTIAL. Occupancy, FBC 310.5 Residential Group R-3 Construction Type: V-B (fire resistance rating 0 hours, not sprinkled)

Codes to be used by other design professionals and licensed contractors: 2020 Florida Building Code, 7th Edition: Residential; Accessibility; Energy Conservation; Plumbing; Mechanical; and Fuel Gas. Electrical is contained by reference within FBC Residential Chapter 34: NFPA 70-17 National Electrical Code.

1. FLOOR & ROOF UNIFORM LOADS: ELEVATED FLOORS: LIVE LOAD 40 PSF, DEAD LOAD 20 PSF ROOF: LIVE TOP CHORD 20 PSF LIVE BOTTOM CHORD 10 PSF (NON-CONCURRENT w/ TOLL) SHINGLE/METAL ROOFING DEAD LOAD 15 PSF TOTAL MINIMUM DEAD LOAD FOR WIND: TC 5 PSF, BC 5 PSF

DEFLECTION CRITERIA: FLOOR L/480 LIVE, L/360 TOTAL ROOF L/240 LIVE, L/180 TOTAL

2. WIND DESIGN PER ASCE7-16: BASIC WIND SPEED (ASCE7-16) 160 MPH NOMINAL WIND SPEED (Vasd TABLE R301.2.1.3) 124 MPH BUILDING CATEGORY II IMPORTANCE FACTOR 1.00 EXPOSURE C MEAN ROOF HEIGHT = 15 FT HEIGHT & EXPOSURE COEFFICIENT A TABLE R301.2(3) = 1.21 ROOF PITCH 5/12 ENCLOSURE CLASS. +/- 0.18 INTERNAL PRES. COEFF. WINDOW/DOOR DESIGN WIND PRESSURE PER TABLE R301.2(2), R301.2(3) AND R301.2(4). SEE DETAIL 3/S-3. SOFFITS – PER R704, ALL SOFFITS & THEIR ATTACHMENTS SHALL BE CAPABLE OF RESISTING THE DESIGN PRESSURES SPECIFIED IN TABLE R301.2(2) FOR WALLS USING 10 SQ. FT

3. REINFORCED CONCRETE: DESIGN PER ACI 318-14. REQUIRED COMPRESSIVE STRENGTH AT 28 DAYS: SLAB ON GRADE f'c = 2500 PSI 3/4" MINIMUM THICKNESS REINFORCED WITH 6x6 w1.4xw1.4 WWF OR FIBERMESH. CONVENTIONAL SHALLOW FOOTINGS f'c = 2500 PSI BEAMS AND COLUMNS f'c = 3000 PSI ALL OTHER CONCRETE (U.N.O.) f'c = 3000 PSI UNLESS OTHERWISE SHOWN ON DRAWINGS, MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE AS FOLLOWS: FOOTINGS 3" SLAB ON GRADE CENTERED BEAMS 1 1/2" COLUMNS 1 1/2" ALL REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAMS AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS. ALL REINFORCING STEEL SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES DURING PLACING OF CONCRETE. REINFORCING STEEL – ASTM A615 GRADE 60 FOR #3 GRADE 60 FOR #4 TO #11

WELDED WIRE FABRIC – ASTM A185

SPICES IN REINFORCING, SHALL BE 40 BAR DIAMETERS. NON-CONTACT LAP SPICES MAY BE USED PROVIDED REINFORCING IS NOT SPACED MORE THAN 5" APART FOR #5 BARS.

FORMWORK AND SHORING SHALL REMAIN IN PLACE UNTIL CONCRETE HAS REACHED AT LEAST 2/3 OF THE REQUIRED 28 DAY STRENGTH.

4. REINFORCED MASONRY: DESIGN PER TMS 402/602-16. REQUIRED COMPRESSIVE STRENGTHS: MASONRY WALLS f'm = 1500 PSI

REINFORCING STEEL – ASTM A615 GRADE 60. SPICES IN REINFORCING, SHALL BE 48 BAR DIAMETERS. ALL CONCRETE MASONRY UNITS SHALL BE COMPOSED OF ASTM C90, GRADE N-1 HOLLOW CONCRETE MASONRY UNITS WITH TYPE 'S' MORTAR. GROUT ALL CELLS CONTAINING VERTICAL REINFORCEMENT WITH 3000 PSI PEA ROCK CONCRETE GROUT. ALL CELLS BELOW FINISHED GRADE SHALL BE GROUTED SOLID. ALL EXTERIOR WALLS SHALL BE REINFORCED FULL HEIGHT AT DOT LOCATIONS ON PLAN.

5. DELEGATED-ENGINEERED WOOD ROOF & FLOOR TRUSSES: ALL WOOD ROOF AND FLOOR TRUSSES SHALL BE DESIGNED BY A DELEGATED TRUSS ENGINEER PER RULE 61015-31.003 OF THE FLORIDA ADMINISTRATIVE CODE. ALL TRUSSES SHALL HAVE TEMPORARY BRACING PER "COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES, HB-91." FOR OTHER BRACING REQUIREMENTS, NOTIFY ENGINEER. PROVIDE PERMANENT BRACING PER TRUSS MFR. SHOP DRAWINGS. IF PERMANENT BRACING IS NOT SPECIFIED, CONTACT ENGINEER.

6. FOUNDATION: CONVENTIONAL SHALLOW CONCRETE FOOTINGS SOIL BEARING CAPACITY 2000 PSF THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL CONDITIONS FOR THE INTENDED STRUCTURE AND ASSUMED SOIL BEARING CAPACITY. IT IS RECOMMENDED THAT A GEOTECHNICAL FIRM BE HIRED TO PERFORM A SITE EVALUATION.

7. DIMENSIONS: VERIFY ALL DIMENSIONS WITH HOUSE PLANS. SEE HOUSE PLANS, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR EMBEDS, OPENINGS, SLEEVES, ETC. WHICH ARE NOT SHOWN ON STRUCTURAL DRAWINGS.

8. MEANS AND METHODS: THE STRUCTURAL ENGINEER SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, OR SEQUENCES TEMPORARY BRACING, SHORING, GUYING OR OTHER MEANS TO SUPPORT STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION. FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, OR ANY OTHER PERSONS PERFORMING THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CONSTRUCT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

9. SHOP DRAWINGS: SHOP DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ENGINEER FOR REVIEW FOR ALL STRUCTURAL ELEMENTS UTILIZING PREFABRICATED COMPONENTS. ONE SET OF SIGNED & SEALED TRUSS ENGINEERING SHALL BE DELIVERED TO THE ENGINEER OF RECORD FOR THE STRUCTURE PER FLORIDA ADMINISTRATIVE CODE 61G15-30.005 AND 61G15-31.003.

FBC R703.7 EXTERIOR PLASTER

ASTM C926 AND ASTM C1063

THE CODE SECTIONS REFERENCED BELOW ARE FOR SUMMARY PURPOSES. SEE THE FLORIDA BUILDING CODE AND THE ASTM STANDARDS FOR FULL DESCRIPTIONS AND REQUIREMENTS.

R703.7.1 Lath: Where required by the wall framing type, install metal lath per ASTM C1063 or non metallic lath per ASTM C1787. Use self furring lath as required by the ASTM spec. Use paper backed lath as required per Water Resistive Barrier specs.

R703.7.2 Plaster: Install portland cement based plaster and number of coats per ASTM C926 and thickness per Table R702.1(1).

R703.7.3 Water Resistive Barriers: Install water resistive barriers per R703.2 and water resistive vapor-permeable barrier over stud walls. (Note: ZIP wall sheathing with seam tape qualifies as the first layer)

R703.7.2.1 Weep Screed: Weep screed shall be installed at the bottom edge of all exterior wood stud framed walls (including gable end trusses) receiving lath and plaster.

Note: Exterior Stud Walls includes Gable End Trusses or Floor Trusses with Wall Sheathing.

STUD FRAMING OR FLOOR TRUSS OR GABLE END WITH WALL SHEATHING

MASONRY WALL

EXTERIOR WALL WITH PLASTER

THICKNESSES ARE EXAGGERATED FOR DRAWING PURPOSES

REVISIONS	BY
Δ 3/28/22	RS

STRUCTURAL ENGINEERING:

STRUCTURAL SYSTEMS OF NORTH FLORIDA

1634 S.E. 47th STREET, SUITE #3 CAPE CORAL, FL 33904 (239) 549-4554 CA# 8829

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FLORIDA PROFESSIONAL ENGINEER

NO. 05988

STATE OF FLORIDA

LEAVE A SIVER

BUILDER:

D-R-HORTON • BUILD America's Builder

MODEL 2221 M

2-CAR

428 CORAL REEF PLACE CAPE CORAL, FLORIDA 33993 LOT: 295 SUBDIVISION: STONEWATER

DESIGN/DRAWN DWB/GH

CHECKED DWB

DATE 09/24/21

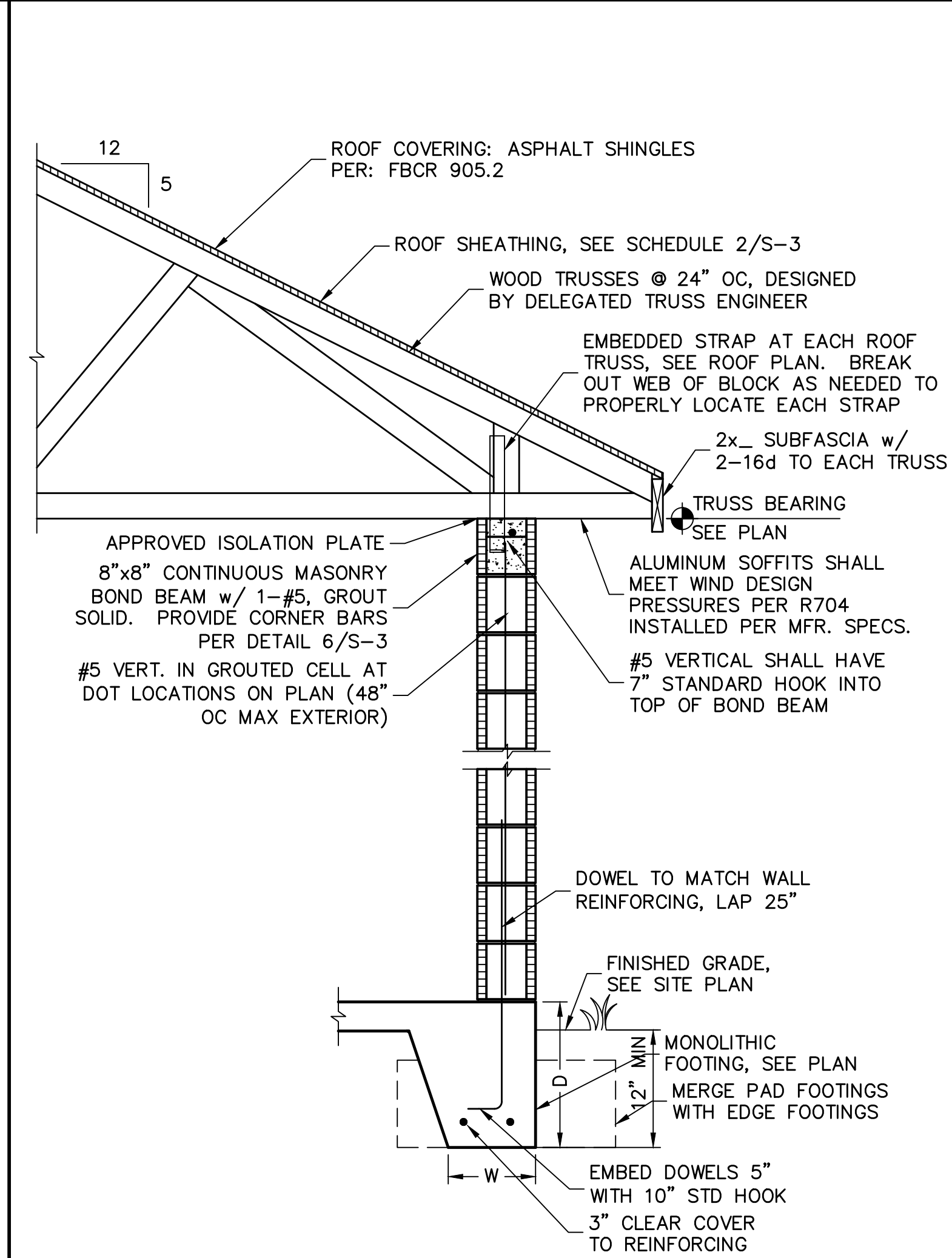
SCALE VARIES

DR 13402

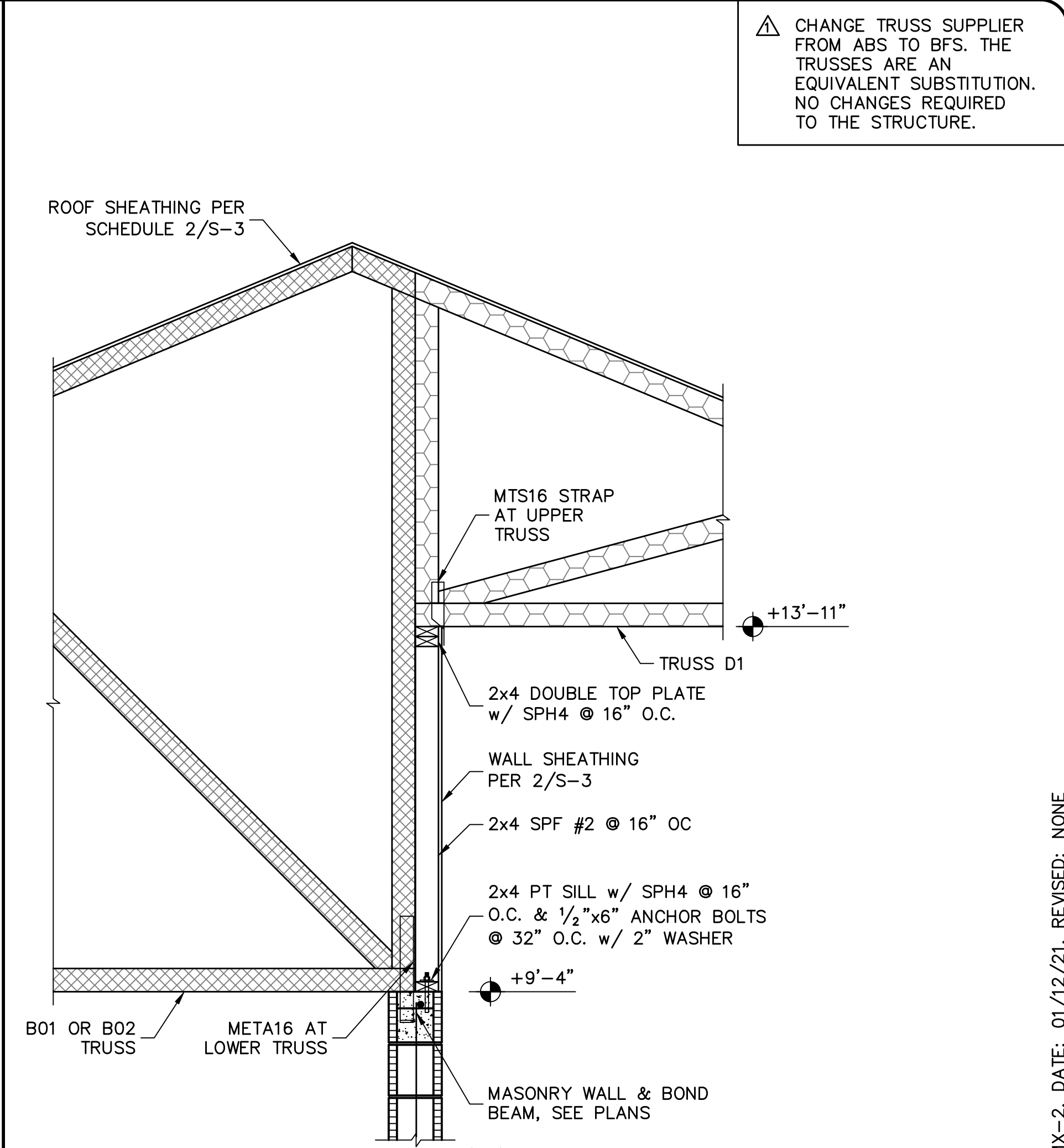
SHEET

S-3

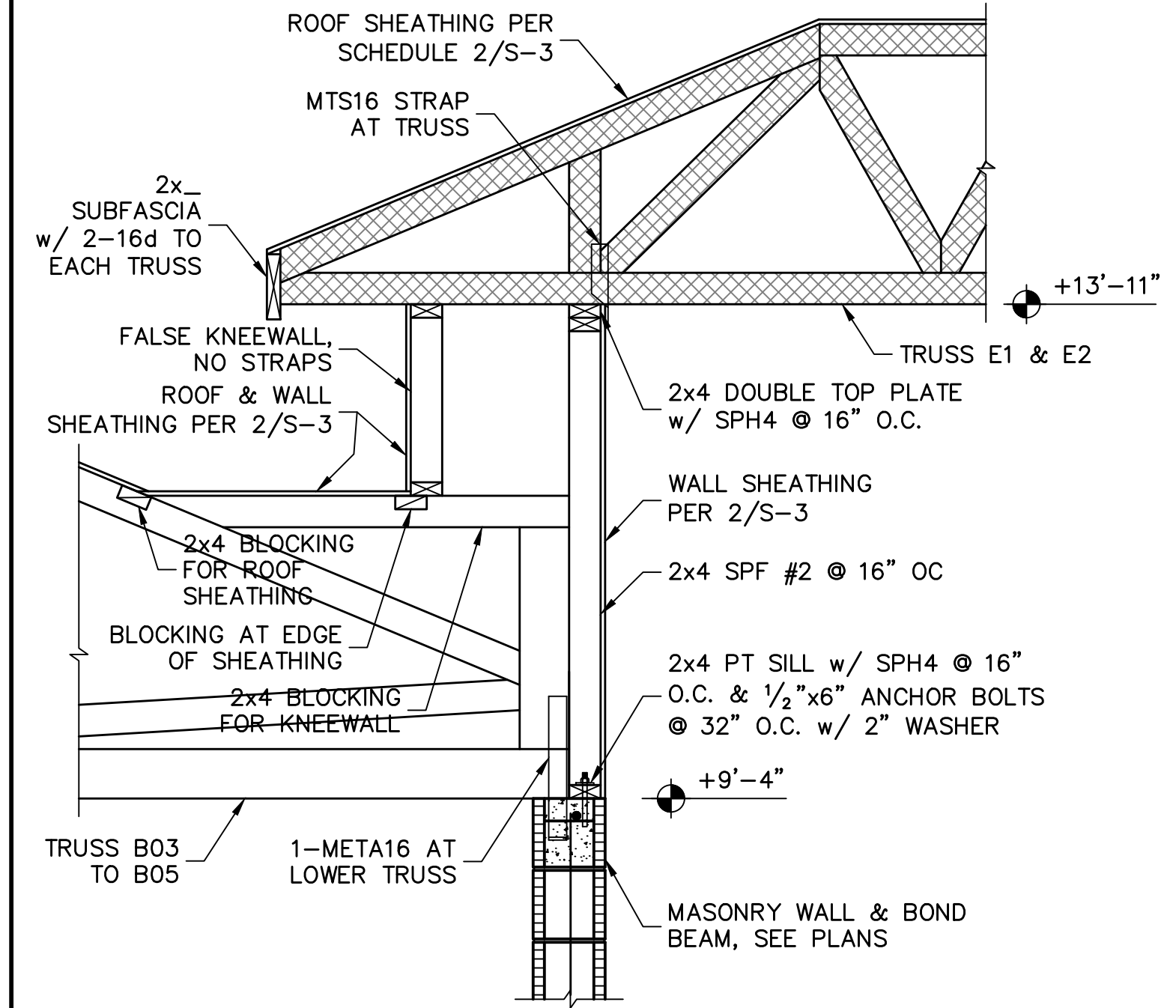
SHEET 3 OF 4



1 FULL HEIGHT WALL SECTION
SCALE: 3/4" = 1'-0"



2 KNEEWALL @ ENTRY 'L'
SCALE: 3/4" = 1'-0"



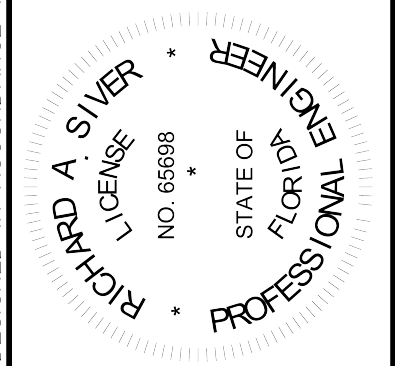
3 KNEEWALL @ ENTRY 'M'
SCALE: 3/4" = 1'-0"

△ CHANGE TRUSS SUPPLIER
FROM ABS TO BFS. THE
TRUSSES ARE AN
EQUIVALENT SUBSTITUTION.
NO CHANGES REQUIRED
TO THE STRUCTURE.

REVISIONS	BY
△ 3/28/22	RS

STRUCTURAL ENGINEERING:
**STRUCTURAL
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OF NORTH FLORIDA**
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BUILDER:
D.R. HOUGHTON • PH
America's Builder

MODEL 2221 M
2-CAR
428 CORAL REEF PLACE
CAPE CORAL, FLORIDA 33993
LOT: 295 SUBDIVISION: STONEWATER

DESIGN/DRAWN
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SCALE
VARIES
DR 13402
SHEET

S-4
SHEET 4 OF 4

FOR AMERICAN BUILDING SUPPLY TRUSS: 160 MPH, MODEL 2221 M, EXPOSURE C, M, ELEVATION, JOB # M2000809-20MX-2, DATE: 01/12/21, REVISED: NONE
DESIGNED IN ACCORDANCE WITH FLORIDA BUILDING CODE 7th EDITION (2020) RESIDENTIAL