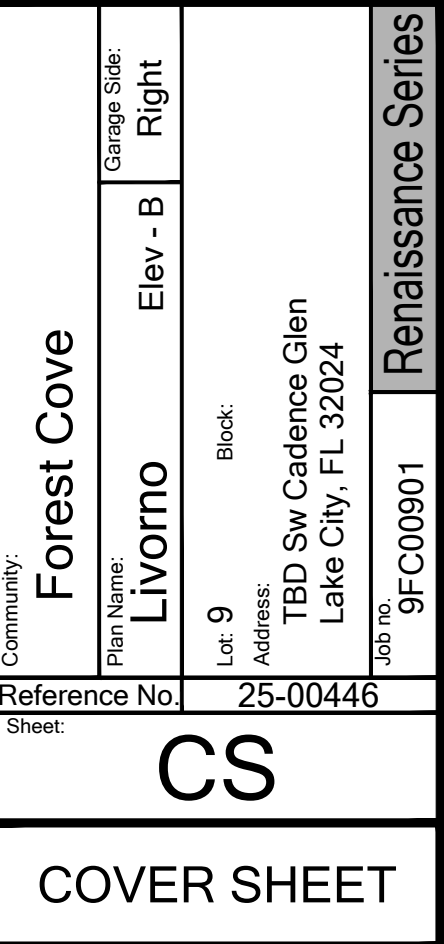


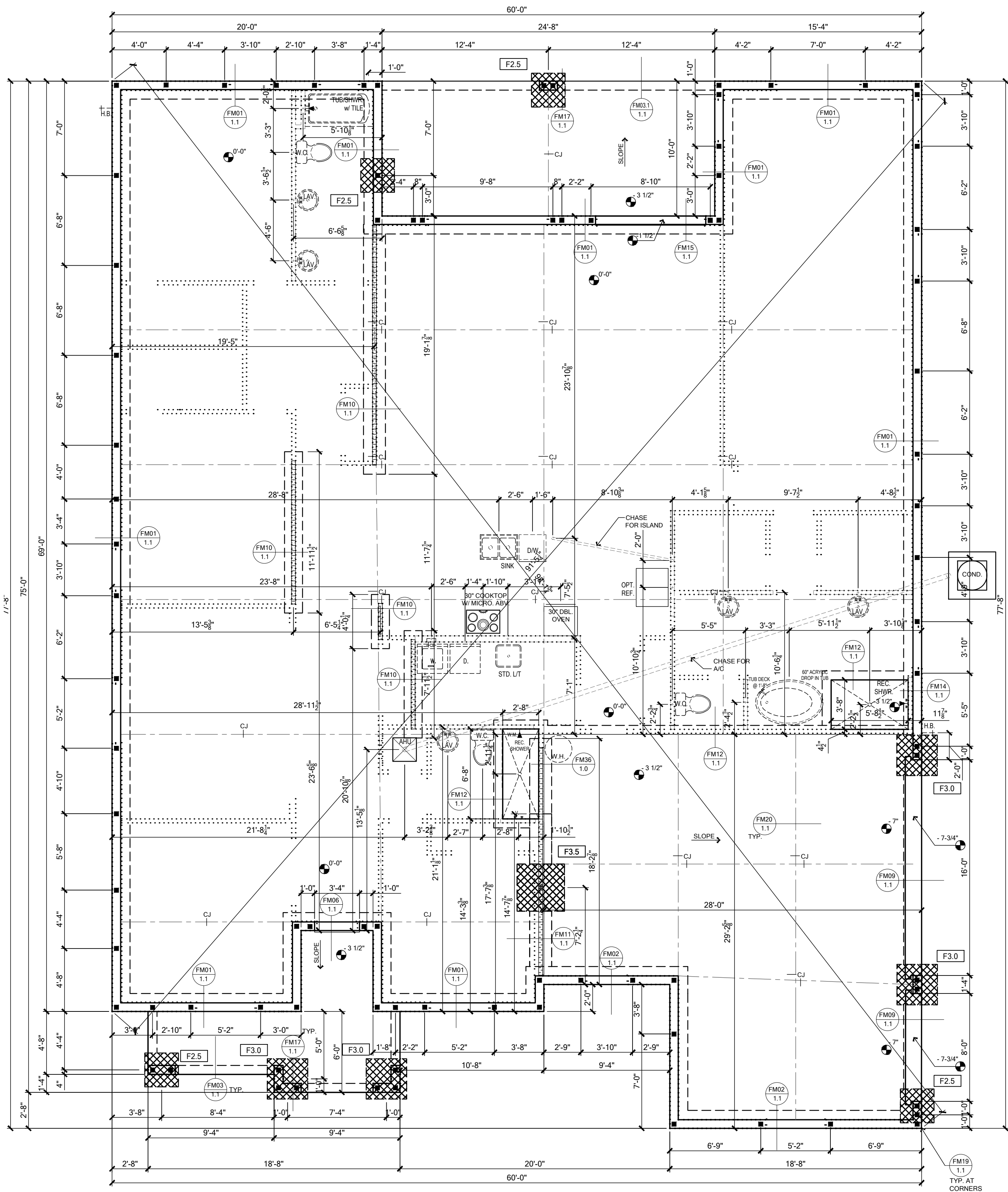
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the structural plans and specifications contained within these
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(2023) Residential. Engineer's signature and seal is only for the
structural engineering portions of the drawing pages bearing
Engineer's signature and seal.

CA No. 9161 AA26003115

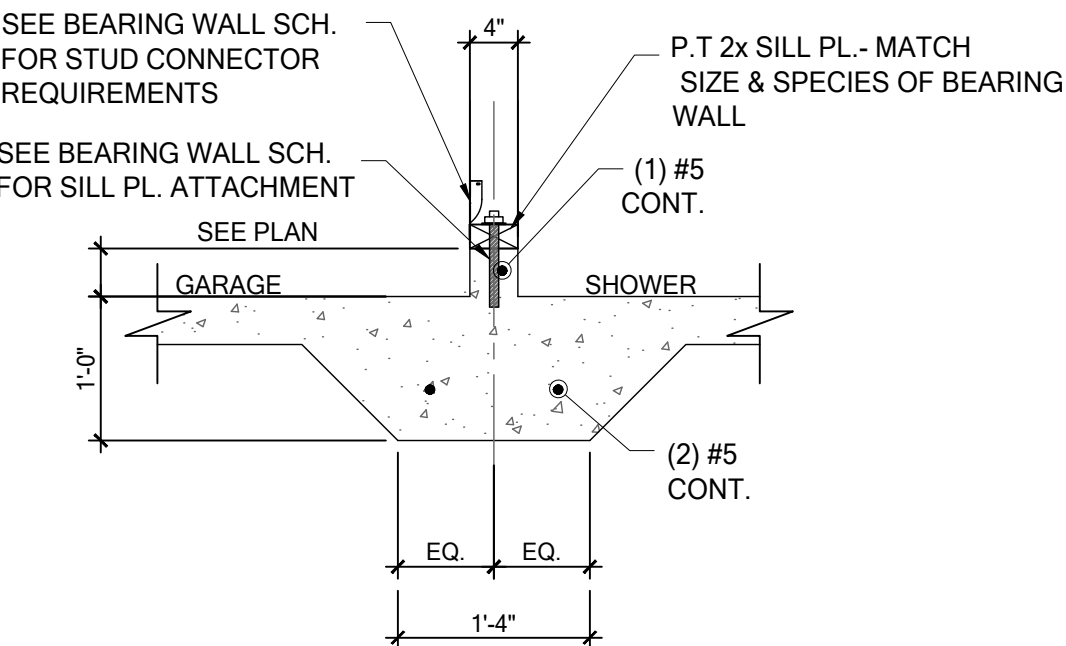


MARIA HERNANDEZ 1/20/2025



TERMITE SPECIFICATIONS:				
SECTION R318 PROTECTION AGAINST TERMITES				
GIVEN THAT STRUCTURE IS LOCATED IN A VERY HEAVY TERMITE INFESTATION AREA, TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE A PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMITICIDE). UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."				
NOTE:				
1. METHOD OF TREATMENT SHALL BE APPROVED BY THE GOVERNING JURISDICTION "LIQUID BORATE OR BORA-CARE" PRODUCT METHODS MUST BE DETERMINED AT PERMIT STAGE AND PRODUCT APPROVAL DATA MUST BE ON FILE WITH THE BUILDING DEPARTMENT.				
2. PRESSURE TREATED LUMBER THAT HAS BEEN CUT OR DRILLED THAT EXPOSES UNTREATED PORTIONS OF WOOD ARE REQUIRED TO BE FIELD TREATED TO PREVENT INSECT INFESTATION.				
3. OPTIONAL BORATE APPLIED TO ALL FRAME MEMBERS MIN. 24" A.F.F.				

NOTE:
FM03.1 IS TO BE USED IF
OPT. SCREENED PORCH /
LANAI IS SELECTED



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

FOUNDATION SCHEDULE				
MARK	SIZE	DEPTH	REINFORCING	GRAVITY CAP. [lbs]
F2.0	2'-0" x 2'-0"	1'-0"	3 #5 E.W. BOT.	7200
F2.5	2'-6" x 2'-6"	1'-0"	3 #5 E.W. BOT.	11000
F3.0	3'-0" x 3'-0"	1'-0"	4 #5 E.W. BOT.	15600
F3.5	3'-6" x 3'-6"	1'-0"	4 #5 E.W. BOT.	21500
F4.0	4'-0" x 4'-0"	1'-0"	5 #5 E.W. BOT.	28000

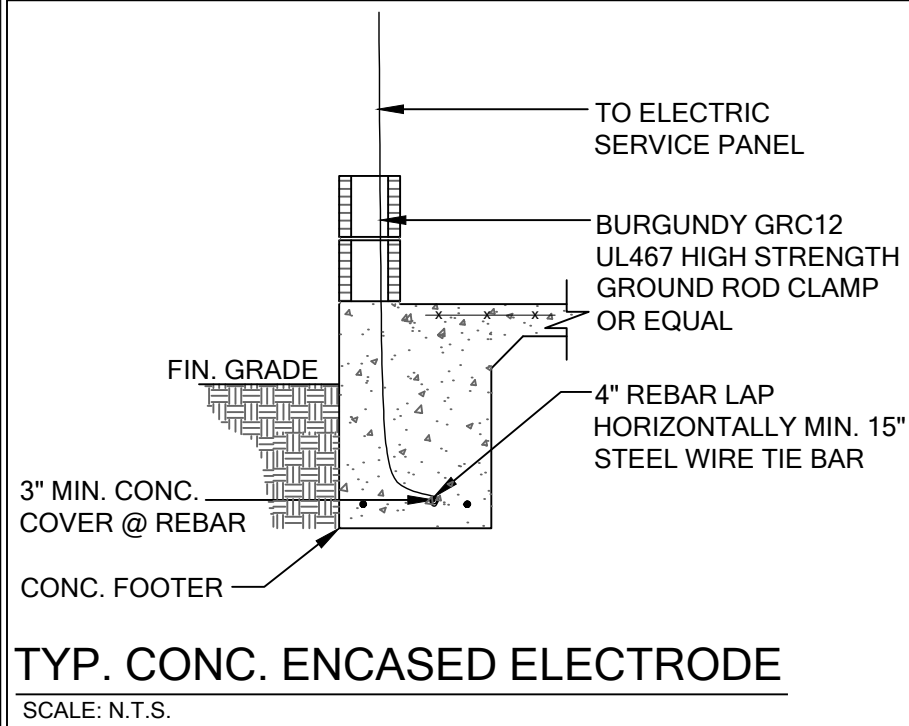
FOUNDATION DEPTH NOTE:

- INTERIOR PAD DEPTHS AS LISTED IN THE SCHEDULE ARE THE TOTAL DEPTH AND MEASURED FROM THE TOP OF THE SLAB.
- EXTERIOR PAD DEPTHS AS LISTED IN THE SCHEDULE ARE TOTAL DEPTH WITH THE BOTTOM OF THE FOOTING TO MATCH THE BOTTOM OF THE CONTINUOUS MONOLITHIC POUR WHICH RUNS THROUGH IT.

- GENERAL FOUNDATION NOTES
- PROVIDE MIN. 6 MIL. APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MIN. 6" AND SEALED.
 - 3-1/2" 2500 PSI CONC. SLAB W/ 6X6 10/10 WWF, OR FIBERMESH /FIBERMIX ADDED TO THE CONCRETE. IN ACCORDANCE W/ MANUF'S INSTRUCTIONS AND NER-284 FOR FIBERMESH OR NER-414 FOR FIBERMIX, OVER 6 MIL VISQUEEN VAPOR BARRIER
 - INDICATES FILLED CELL W/3000 PSI CONC. FROM FOUNDATION TO BEAM W/ (1) #5 REBAR, GRADE 60 U.N.O. TYPICAL ABOVE SLAB. HOOKED FTG. DOWELS 5" EMBEDMENT W/ 25" EXTENSION ABOVE SLAB. FILLED CELLS TO BE PLACED @ EACH CORNER, END OF INDICATED BRG. WALLS, EACH SIDE OF ALL OPENINGS, UNDER GIRDER TRUSSES (FLOOR AND ROOF) AND SEE PLAN FOR SPACING.
 - CONSULT W/ MANUFACTURER SPECIFICATIONS PRIOR TO POURING OR RECESSING DOOR SILLS OR SLIDING GLASS DOOR SILLS.
 - EXTERIOR SLABS SHALL SLOPE MIN. 2% OR 1/4" PER FOOT AWAY FROM HOUSE U.N.O. ON PLAN.
 - CONTROL JOINTS (IF SHOWN) ARE NOT REQUIRED BY CODE BUT ARE SUGGESTED (ESPECIALLY WHEN USING FIBER REINFORCED CONCRETE OR IN EXTERIOR CONDITIONS). CONTROL JOINTS TO BE 1/8" SAW CUT A DEPTH OF 1/4 OF THE THICKNESS OF THE SLAB. FILL CUT W/ APPROVED JOINT MATERIAL OR USE ALTERNATE APPROVED METHOD.
 - NO WOOD STAKES PERMITTED IN FOUNDATION.
 - PENDING SITE CONDITIONS, FOUNDATION MAY HAVE TO BE STEPPED DOWN. SEE FM18 ON SHEET 1.1 FOR ADDITIONAL INFORMATION. G.C. TO DETERMINE STEP LOCATIONS IF REQUIRED.
 - SEE TYPICAL DETAIL ON LINTEL PLAN FOR REQUIRED STEEL BENDS AND LAP SPLICE.
 - ANY EQUIPMENT AND/OR APPLIANCES HAVING AN IGNITION SOURCE SHALL BE ELEVATED A MIN OF 18". CONTRACTOR TO PROVIDE SUCH PLATFORM W/ EITHER MASONRY OR WOOD CONSTRUCTION.
 - ASSUMED ALLOWABLE SOIL BEARING PRESSURE AFTER COMPACTION: 2000 PSF (SEE SOILS REPORT AND SPECIFICATIONS FOR COMPACTION REQUIREMENTS). IF SOIL CONDITIONS IN THE PROJECT DO NOT MEET OR EXCEED THE CAPACITY, THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO FOUNDATION POUR FOR VERIFICATION OF FOUNDATION DESIGN. SOIL TO BE FREE OF ORGANIC MATERIAL AND COHESIVE SOILS. COMPACTED IN 12" LIFTS TO AT LEAST 95% OF MAX. DRY DENSITY AS DETERMINED BY ASTM - 1557 (MODIFIED PROCTOR). THE FOUNDATION SIZES INDICATED ON THE FOUNDATION PLAN HAS BEEN DESIGNED FOR A MINIMUM SOIL BEARING CAPACITY OF 2000 PSF.

FOUNDATION LEGEND	
	- INDICATES SINGLE-STORY WALL FOUNDATION
	- INDICATES TWO-STORY WALL FOUNDATION
	- INDICATES CONCRETE PAD FOUNDATION
	- INDICATES FILLED CELL WITH (GRADE 60) REBAR

NOTE:
PRIOR TO COMMENCING FOOTER VERIFY WASTE SYSTEM DRAIN LOCATION WITH PLUMBING CONTRACTOR.
SEE DETAIL FM23/1.1 FOR FOUNDATION PENETRATIONS.



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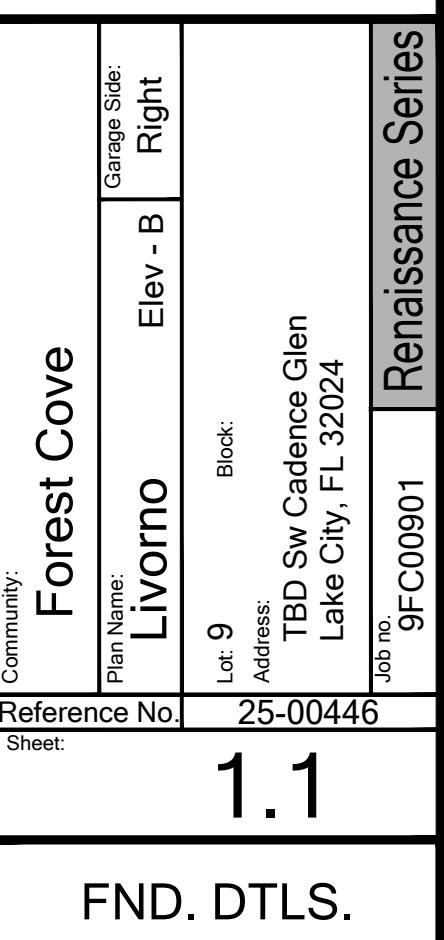
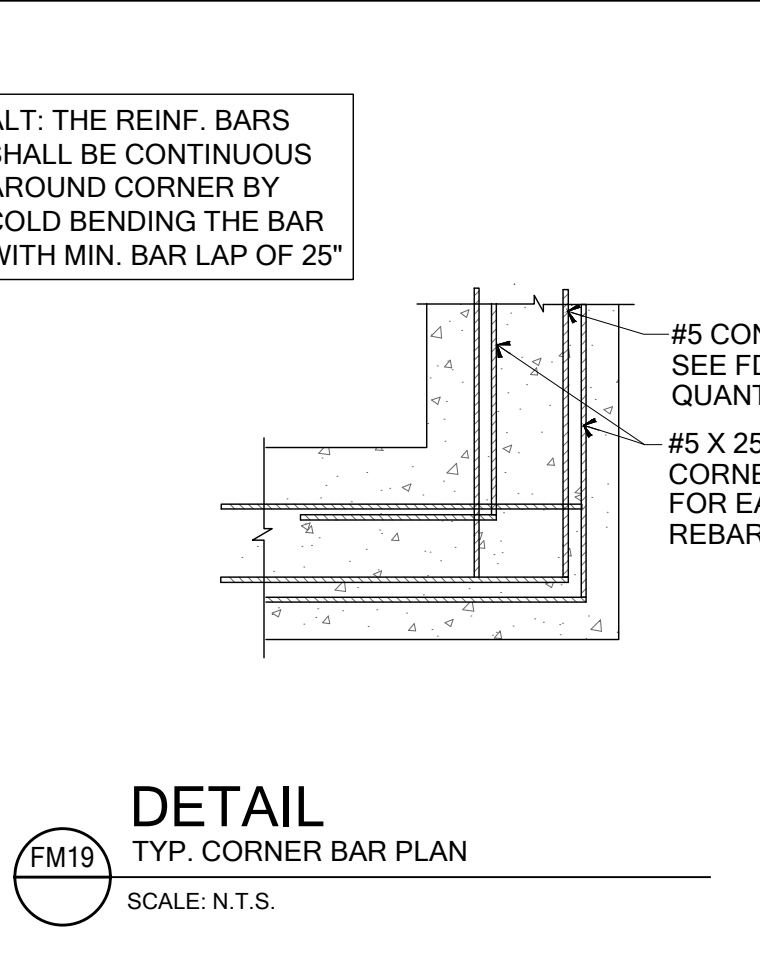
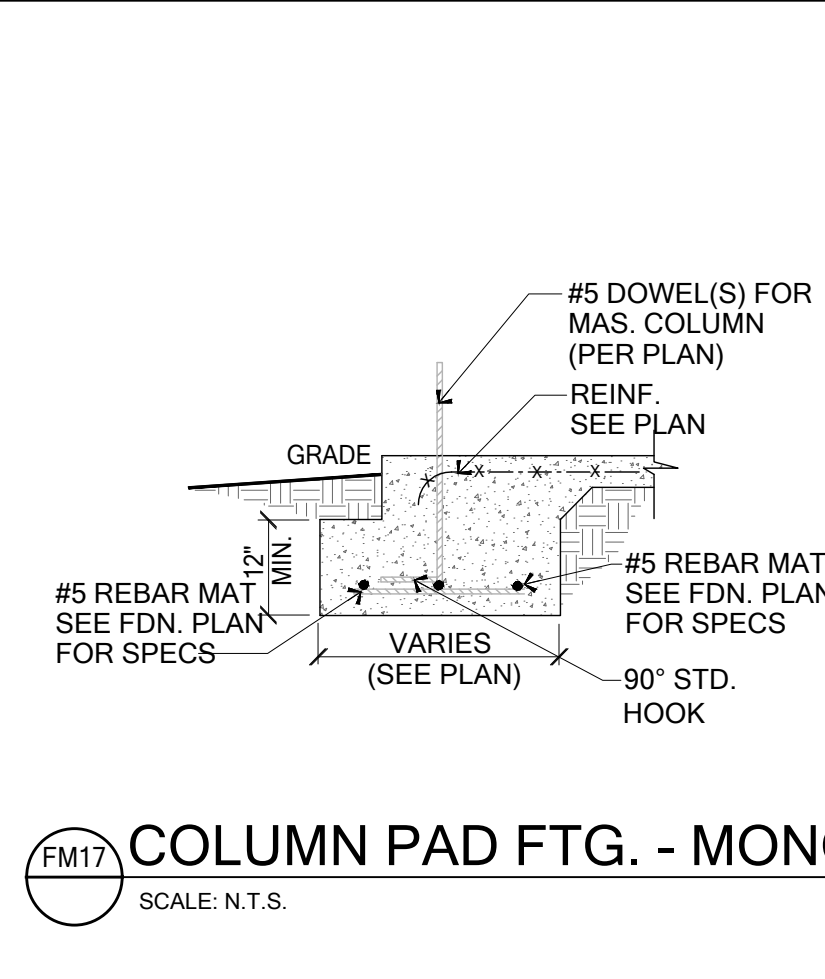
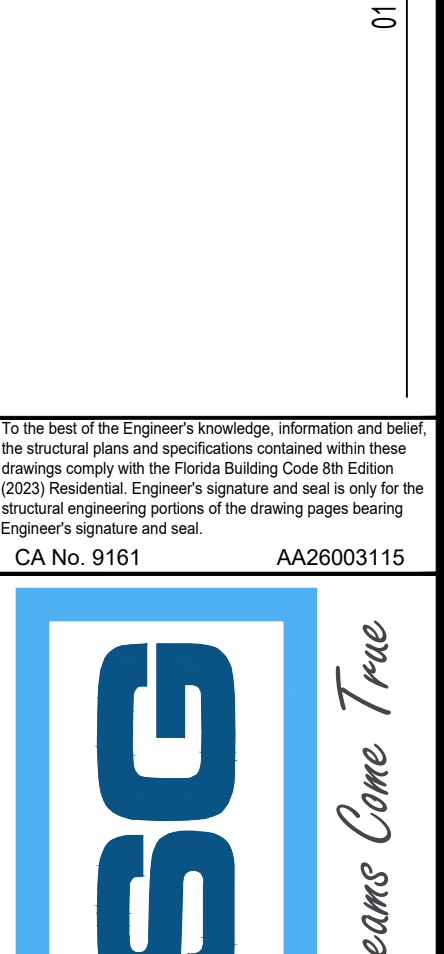
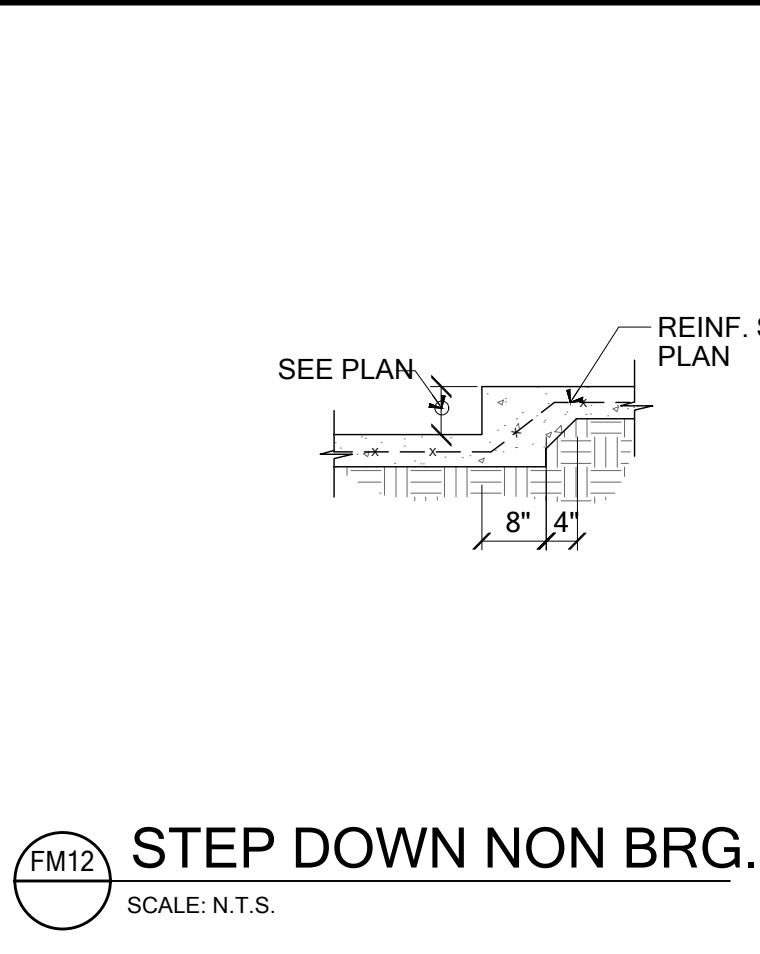
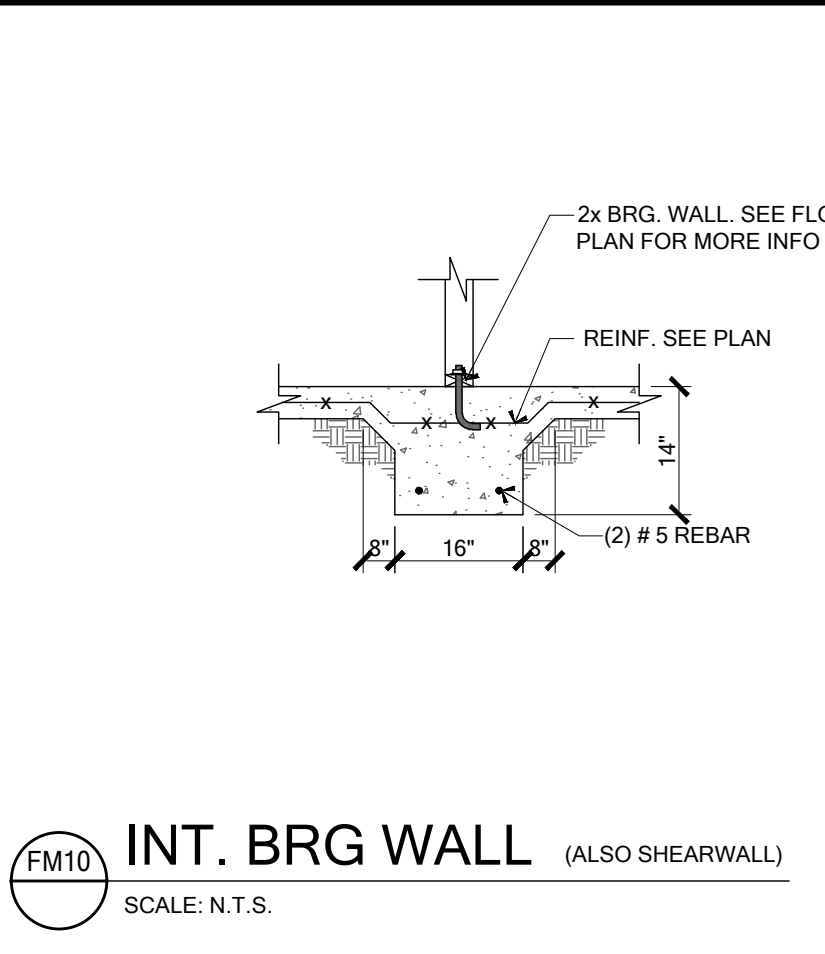
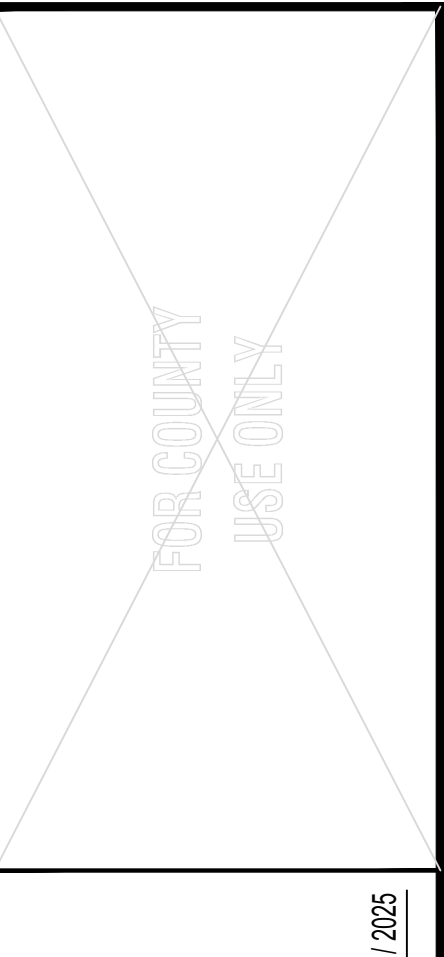
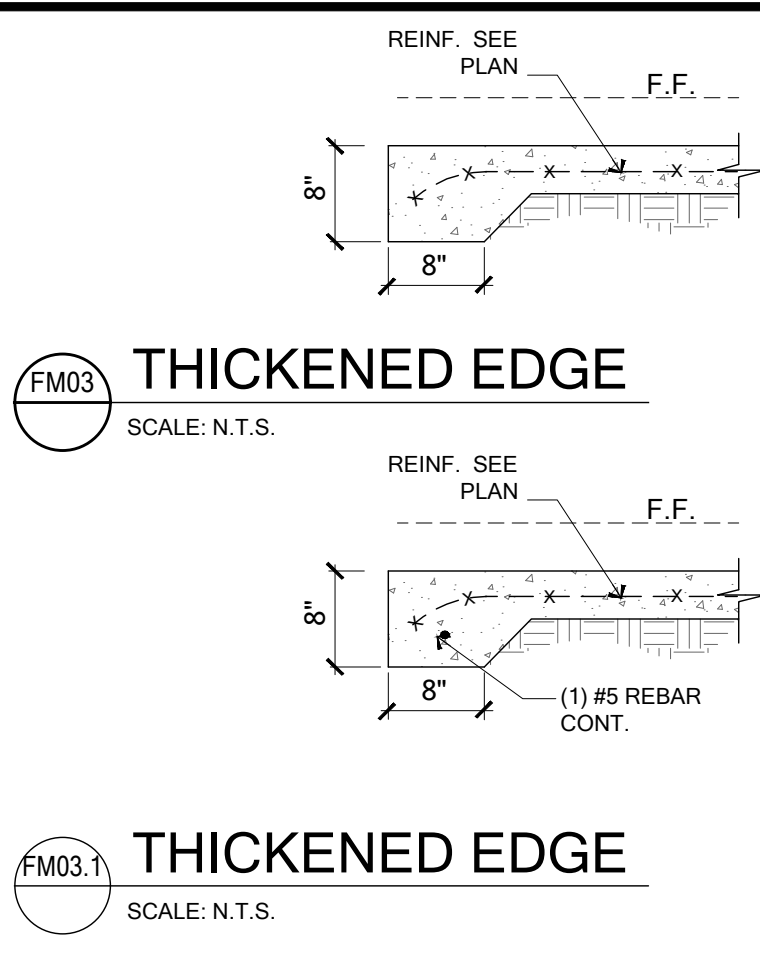
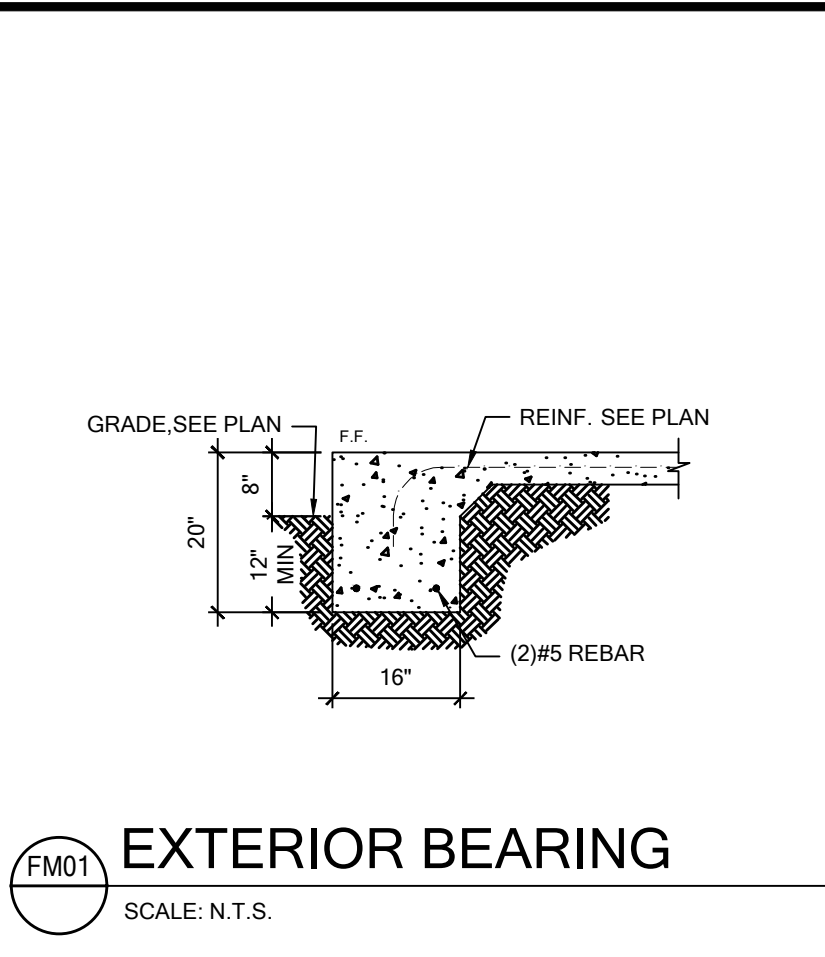
MARONDA Homes
3999 West First Street
Sanford, FL 32771
(407) 902-9871

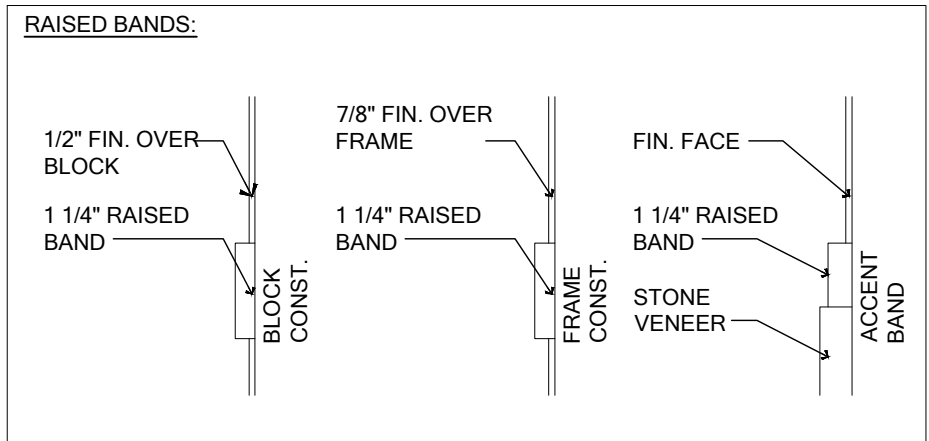
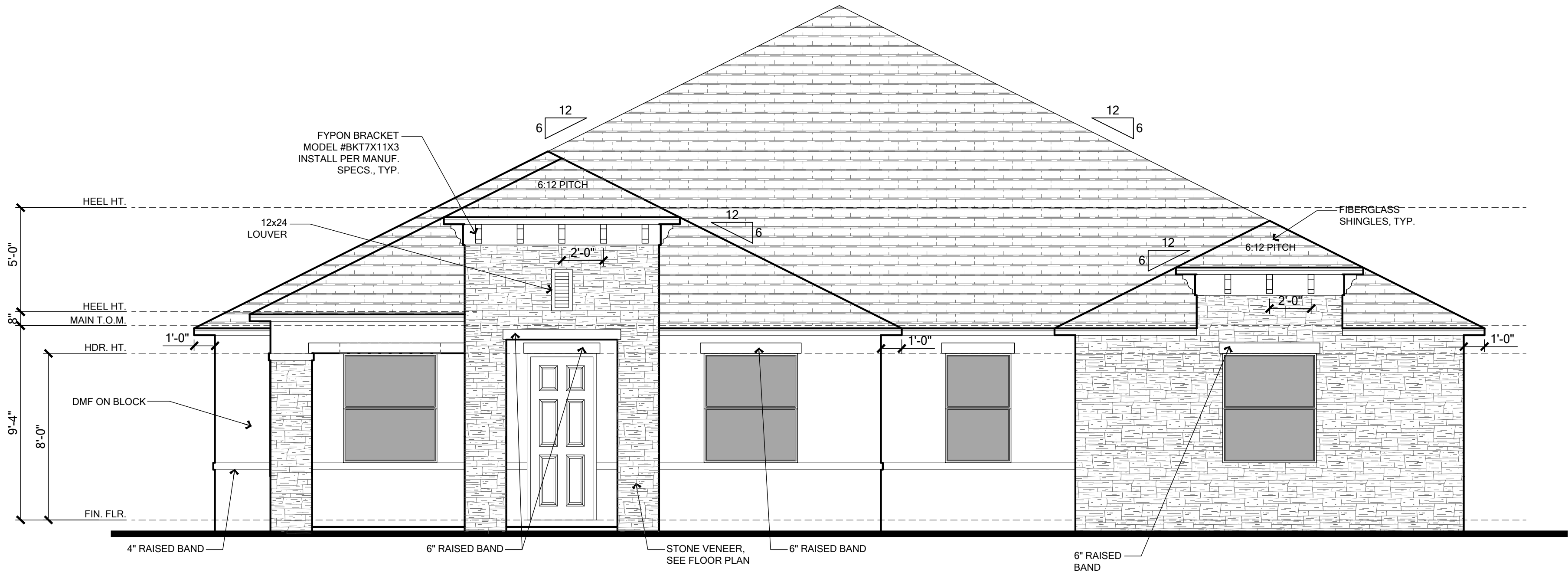
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Lot:	9	Block:	
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Job No.	9FC00901	Reference No.	25-00446
Sheet:			

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FOUNDATION

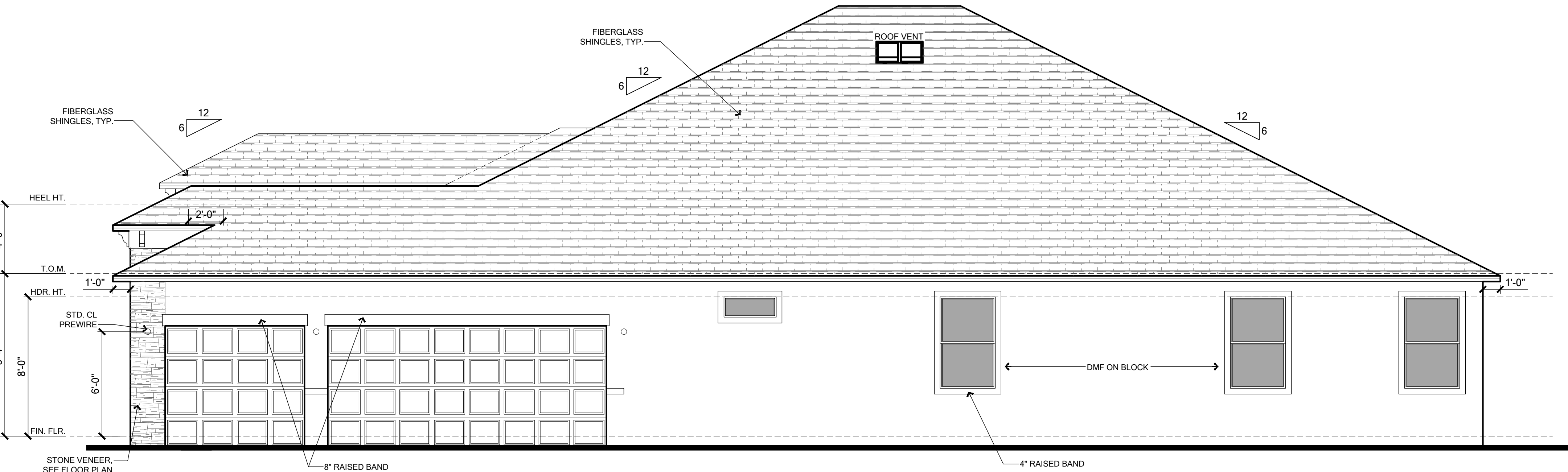
Renaissance Series





FRONT ELEVATION

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



RIGHT ELEVATION

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

ELEVATION NOTES

EAVE OVERHANG 12" ALUM. FASCIA AND SOFFITS, AND SOFFITS AND GABLE OVERHANG 9" ALUM. FASCIA AND SOFFITS, U.N.O. PLUMB CUT WITH LEVEL RETURNS

Banding/Stucco General Notes

- Etched Banding typical at Front Elevation.
- Raised banding to return 1'-0" around corner.
- Side and Rear elevations to have 4" etched banding unless otherwise noted.
- When installed with stone/brick veneer increase thickness of banding by 2" typical.

R703.7 Exterior Plaster
Installation of these materials shall be in compliance with ASTM C926, ASTM C1063, or ASTM C1787 and the provisions of this code.

R703.7.1 Lath

Lath and Lath attachments shall be of corrosion-resistant materials. Expanded metal or woven wire lath shall be attached with 1-1/2" long, 11 gage nails having a 7/16" head, or 1-1/2" long, 16 gage staples, spaced in accordance with ASTM C1063 or C1787, or as otherwise approved. (Refer to Sheet SN for the engineered method for Lath attachment.)

Lathing Accessories

Attachments shall be of corrosion-resistant materials. Wood Application: 16 Ga x1-1/2" long (3/4"-1" crown) staples @ 6" O.C. vertically/horizontally into the framing members. Masonry Application: Concrete stud nail, 3/8" (10 mm) head dia. Min. @ 6" O.C. vertically/horizontally or compatible adhesives, exterior gun-grade, construction adhesive with 1" dabs @ 6" O.C. or in a semi-continuous bead between the solid plaster base and the solid portion of the key attachment flange. Control Joints: Install control joint lathing accessories in conformance with C1063. Lath shall not be continuous through control joints, but shall be stopped and tied at each side. All accessories shall be in accordance with the latest ASTM C1063 & ASTM C1861.

R703.7.2 Plaster

Plastering with cement plaster shall be not less than three coats where applied over any type of code-approved lath and shall be not less than two coats where directly applied over masonry, concrete, clay brick, stone, or tile. If the plaster surface is completely covered by veneer or other facing material or is completely concealed, plaster application need be only two coats, provided total thickness is as set in Table R702.1(1).

Cement plaster shall be in accordance with ASTM C926 and material shall be in accordance with one of the types listed in R703.7.2.

R703.7.3 Water-Resistive Barriers

Water-resistive barriers shall be installed as required in Section R703.2 and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. The individual layers shall be installed independently such that each layer provides a separate continuous plane and any flashing (installed in accordance with Section R703.4) intended to drain to the water-resistive barrier is directed between the layers.

R703.2 Water-Resistive Barrier

Not fewer than one layer of water-resistive barrier shall be applied over studs or sheathing of all exterior walls with flashing as indicated in Section R703.4, in such a manner as to provide a continuous water-resistive barrier behind the exterior wall veneer. The water-resistive barrier material shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to meet the requirements of the exterior wall envelope as described in Section R703.1.

Water-resistive barrier materials shall comply with one of the following:
1. No. 15 felt complying with ASTM D226, Type 1.
2. ASTM E2568, Type 1 or 2.
3. ASTM E331 in accordance with Section R703.11.
4. Other approved materials in accordance with the manufacturer's installation instructions.
No. 15 asphalt felt and water-resistive barriers complying with ASTM E2568 shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51mm), and where joints occur, shall be lapped not less than 6 inches (152 mm).

R703.4 Flashing

Approved metal flashing, vinyl flashing, self-adhered membranes and mechanically attached flexible flashing shall be applied shingle-fashion or in accordance with the manufacturer's instructions. Metal flashing shall be corrosion resistant. Fluid-applied membranes used as flashing shall be applied in accordance with the manufacturer's instructions. All flashing shall be applied in a manner to prevent the entry of water into the wall cavity or penetration of water to the building structural framing components.

Self-adhered membranes used as flashing shall comply with AAMA 711. All exterior fenestration products shall be sealed at the juncture with the building wall with a sealant complying with AAMA 800 or ASTM C920 Class 25 Grade NS or greater for proper joint expansion and contraction, ASTM C1261, AAMA 912, or other approved standard as appropriate for the type of sealant. Fluid-applied membranes used as flashing in exterior walls shall comply with AAMA 714. The flashing shall extend to the surface of the exterior wall finish.

Approved flashings shall be installed at the following locations.

- Exterior window/door openings.
- Intersection of chimneys or other masonry construction with frame walls.
- Under and at the ends of masonry, wood or metal copings and sills.
- Continuously above all projecting wood trim.
- Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.
- At wall and roof intersection.
- At built-in gutters.

R703.12 Adhered Masonry Veneer

Adhered masonry veneer (or stone veneer) installation shall comply with the requirements of Section R703.7.3 and the requirements in Sections 12.1 and 12.3 of TMS 402/ACI 530/ASCE 5. Adhered masonry veneer shall be installed in accordance with Sections R703.7.1, Article 3.3C of TMS 602/ACI 530.1/ASCE 6 or the manufacturer's instructions.

Coastal Flashings: all flashing material for coastal locations (ex. within 3,000 feet of the ocean) shall be corrosion resistant material (ex. zinc and/or stainless steel) and shall be selected for compatibility with adjacent wood preservatives per the manufacturer's recommendations.

"CALCULATIONS BASED ON THE FOLLOWING VALUES:"
• RIDGE VENTS - 15 SQ. IN. OF NET FREE AREA / LINEAR FT.
• OFF-RIDGE VENTS - 140 SQ. IN. OF NET FREE AREA / UNIT
• SOFFIT VENTS - 14.9 SQ. IN. OF NET FREE AREA / SQ. FT.

	1/150 Rule			1/300 Rule		
	ATTIC SPACE	SQ. IN. of ventilation required	SQ. FT. of vented soffit provided	SQ. IN. of ventilation required	SQ. FT. of vented soffit provided	SQ. IN. of ventilation to be provided by upper ventilators
1st FLOOR PLAN	4383	4207.7	282.4	282	2103.8	70.6
						1051.9

VENTILATION PROVIDED		
	Amt.	Total Ventilation Provided (Sq. Inches)
Off-Ridge Vent (1st Floor)	2	280
Total Ventilation Provided by Upper Ventilators		280
1/150 Rule used; Off-Ridge Vents not part of Calculations		

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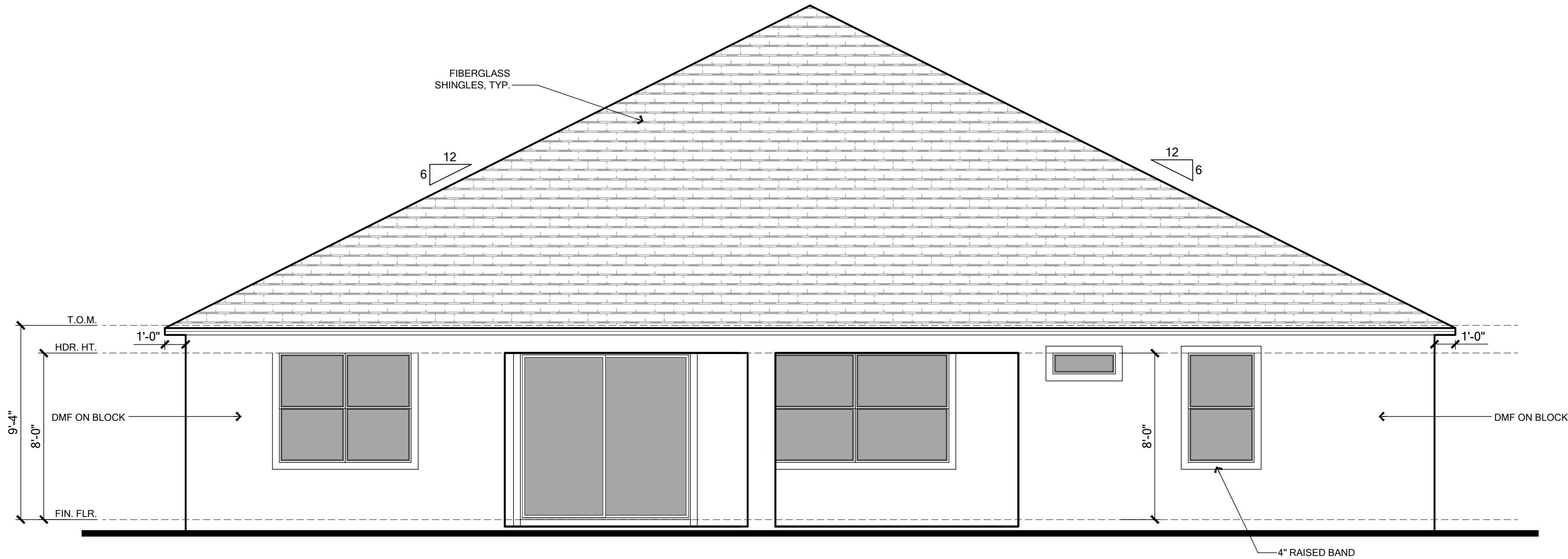
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MARONDA Homes
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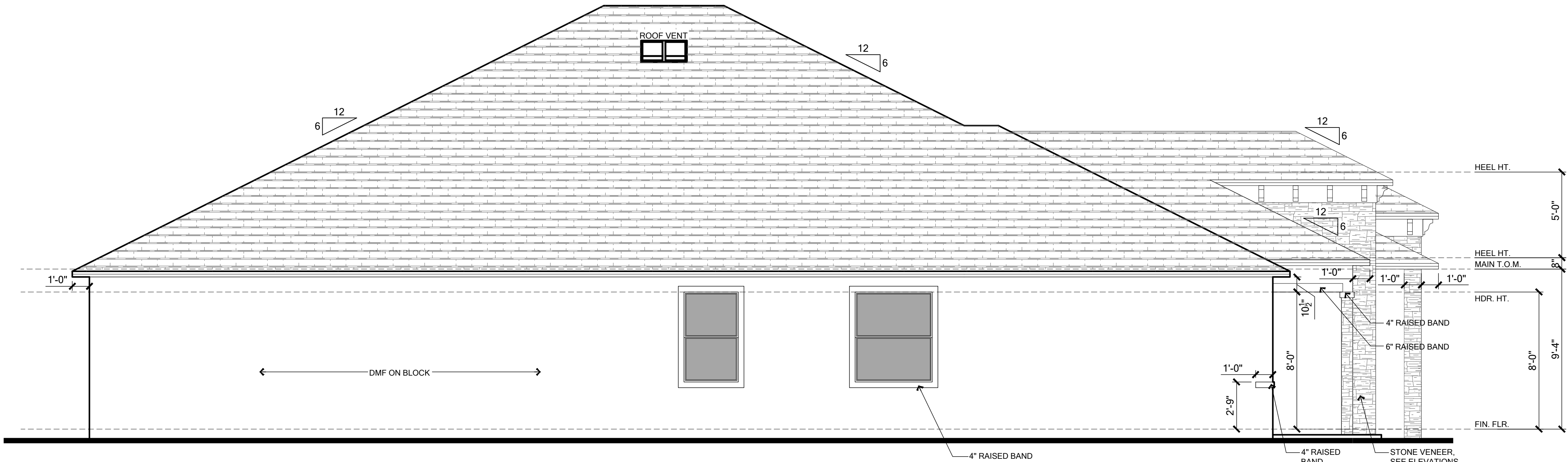
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Plan Name:	Livorno	Elev - B	
Lot:	9	Block:	
Address:	TBD Sw Cadence Glen Lake City, FL 32024		
Job no:	9FC00901	Renaissance Series	

Reference No.	25-00446
Sheet:	4.0
ELEVATIONS	



REAR ELEVATION

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



LEFT ELEVATION

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

ELEVATION NOTES

EAVE OVERHANG 12" ALUM. FASCIA AND SOFFITS, AND SOFFITS AND GABLE OVERHANG 9" ALUM. FASCIA AND SOFFITS, U.N.O. PLUMB CUT WITH LEVEL RETURNS

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R703.7.1 Lath

Lath and Lath attachments shall be of corrosion-resistant materials. Expanded metal or woven wire lath shall be attached with 1-1/2" long, 11 gage nails having a 7/16" head, or 1-1/2" long, 16 gage staples, spaced in accordance with ASTM C1063 or C1787, or as otherwise approved. (Refer to Sheet SN for the engineered method for Lath attachment.)

Lathing Accessories

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- Other approved materials in accordance with the manufacturer's installation instructions.

No. 15 asphalt felt and water-resistive barriers complying with ASTM E2568 shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51mm), and where joints occur, shall be lapped not less than 6 inches (152 mm).

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- OFF-RIDGE VENTS - 140 SQ. IN. OF NET FREE AREA / UNIT
- SOFFIT VENTS - 14.8 SQ. IN. OF NET FREE AREA / SQ. FT.

	1/150 Rule			1/300 Rule		
	ATTIC SPACE	SQ. IN. of ventilation required	SQ. FT. of vented soffit needed	SQ. IN. of ventilation provided	SQ. FT. of vented soffit needed	SQ. IN. of ventilation to be provided by upper ventilators
1st FLOOR PLAN	4383	4207.7	282.4	282	2103.8	70.6
						1051.9

VENTILATION PROVIDED		
	Amt.	Total Ventilation Provided (Sq. Inches)
Off-Ridge Vent (1st Floor)	2	280
Total Ventilation Provided by Upper Ventilators		280
1/150 Rule used: Off-Ridge Vents not part of Calculations		

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MARONDA Homes

3999 West First Street

Sanford, FL 32771

(407) 302-9871

Community: Forest Cove

Garage Side: Right

Plan Name: Livorno

Elev - B

Lot: 9

Block: TBD Sw Cadence Glen Lake City, FL 32024

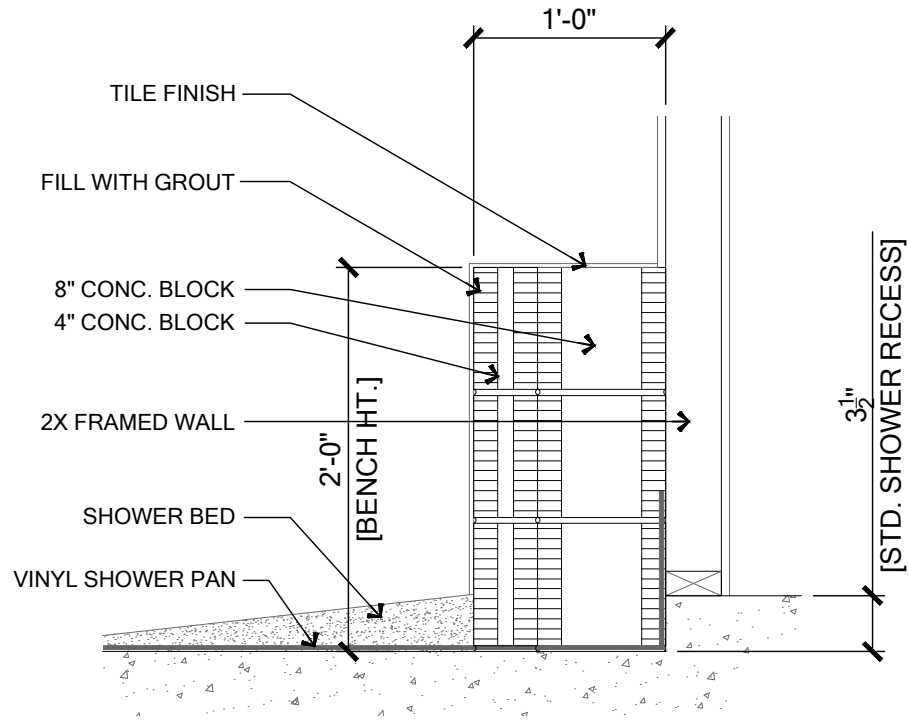
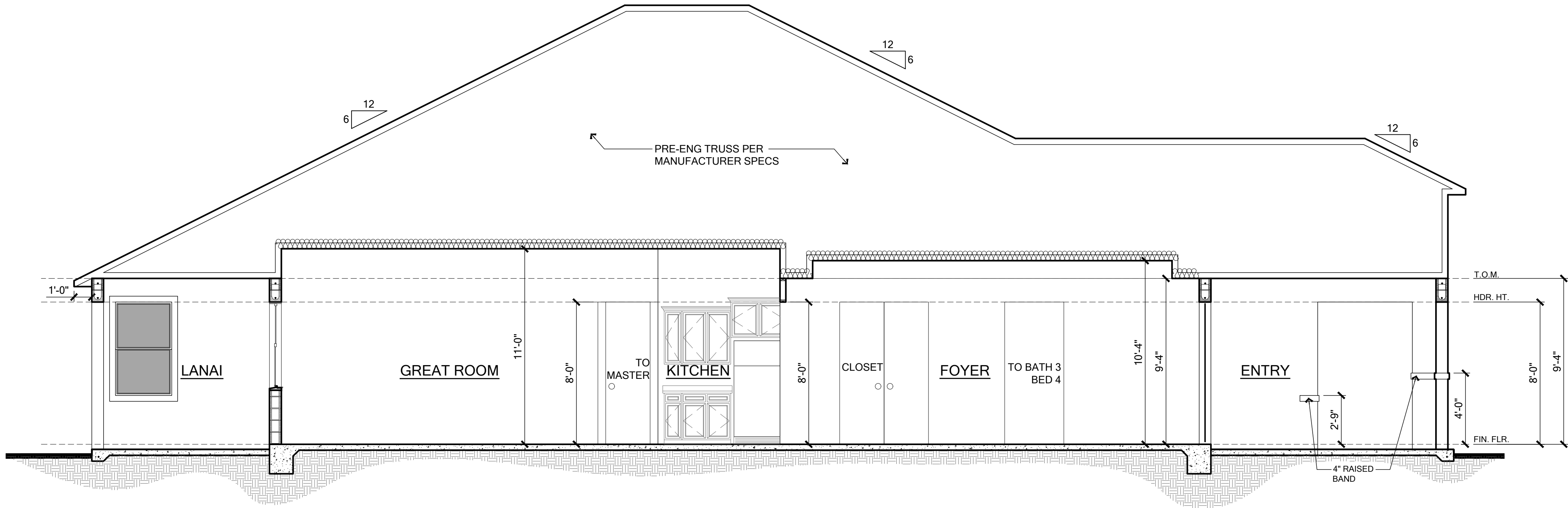
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Reference No: 25-00446

Sheet: 4.1

Renaissance Series

MARIA HERNANDEZ 1/20/2025



SHOWER BENCH DETAIL B 5.0
SCALE: 1/2" = 1'- 0"

To the best of the Engineer's knowledge, information and belief, the structural plans and specifications contained within these drawings comply with the Florida Building Code 8th Edition (2022) Residential. Engineer's signature and seal is only for the structural engineering portions of the drawing pages bearing Engineer's signature and seal.

CA No. 9161 AA26003115

TSG

Making Dreams Come True

TOTAL SOLUTIONS GROUP

258 Southhall Lane, Suite 200

Maitland, Florida, 32751

(407) 880 2333

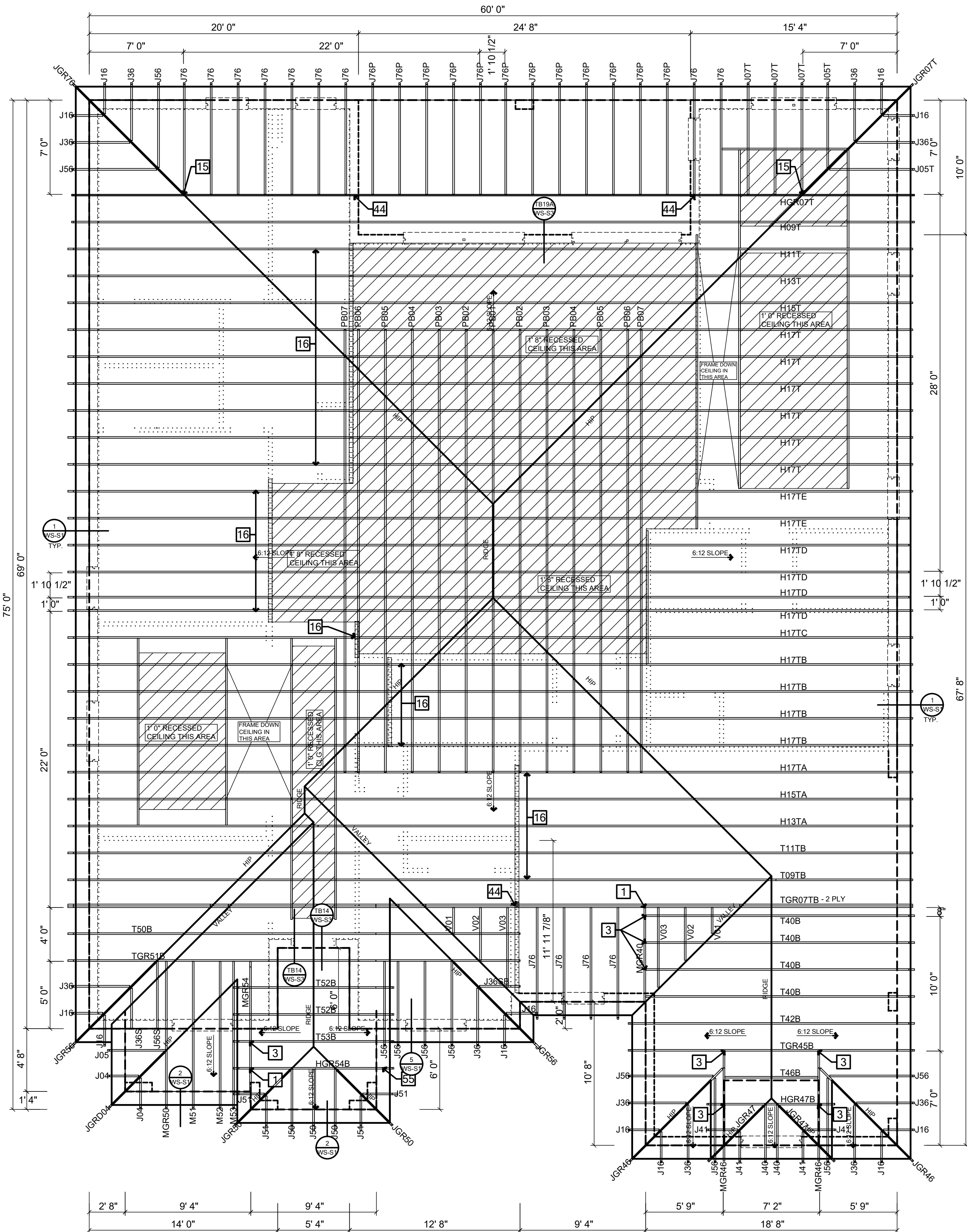
100% Employee Owned
myTSGhome.com

MARONDA
Home
3999 West First Street
Sanford, FL 32771
(407) 302-9871

Community: Forest Cove	Garage Side:	Right
	Plan Name:	Livorno
Reference No. Sheet:	Elev - B	
	Address:	TBD Sw Cadence Glen Lake City, FL 32024
Lot:	Block:	
	Address:	TBD Sw Cadence Glen Lake City, FL 32024
Job No.	Block:	
	Address:	TBD Sw Cadence Glen Lake City, FL 32024
Job No.	Block:	
	Address:	TBD Sw Cadence Glen Lake City, FL 32024

5.0
BLDG. SECTION

A 5.0 BUILDING SECTION
SCALE: 1/4" = 1'- 0"



FRAMING PLAN

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

[illegible]

TYPICAL TRUSS STRAPS	
U.N.O. ON ROOF FRAMING PLAN	
- TRUSS TO WOOD FRAMING: (1) 6" L.G. TRUSS SCREW w/(2) 10d TOENAILS (SEE NOTE 18/WS-S1)	
- TRUSS TO MASONRY: (1) HTA 20	25

JACK TRUSSES TO GIRDER TRUSS SHALL BE NAILED TOP/BOTTOM CHORD. FOR VALLEY SEET TRUSSES, SEE ENGINEERING TRUSS PACKAGE FOR CORRECT CONNECTION [VC1]

FLOOR TRUSS
 DRAFTSTOPPING R302.12 - CONTRACTOR SHALL DIVIDE CONCEALED FLOOR SPACE EQUALLY SO THAT SPACE DOES NOT EXCEED 1000 SQ. FT. USING 7/16" OSB PLYWOOD, LOCATED BETWEEN THE CONCEALED FLOOR SPACES.

DRAFTSTOPPING DETAIL

R302.6 THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC BY NOT LESS THAN 1/2-INCH (12.7MM) GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGE BENEATH ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS ABOVE BY NOT LESS THAN 5/8-INCH (15.9MM) TYPE X 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-INCH (12.7MM) GYPSUM BOARD OR EQUIVALENT.

ROOF FRAMING NOTES	
SHINGLE, METAL OR TILE ROOFING SYSTEM (SEE ARCH.) OVER APPROVED UNDERLAYMENT, OVER SHEATHING PER ENGINEERED ROOF SPECIFICATIONS (SEE FRAMING PLAN) ON PRE-ENGINEERED WOOD TRUSSES AT 2'-0" O.C. MAX OR CONVENTIONAL FRAME ROOF. (SEE PLAN FOR SIZE, SPACING, TYPICAL ROOF SLOPE, AND OTHER INFORMATION)	

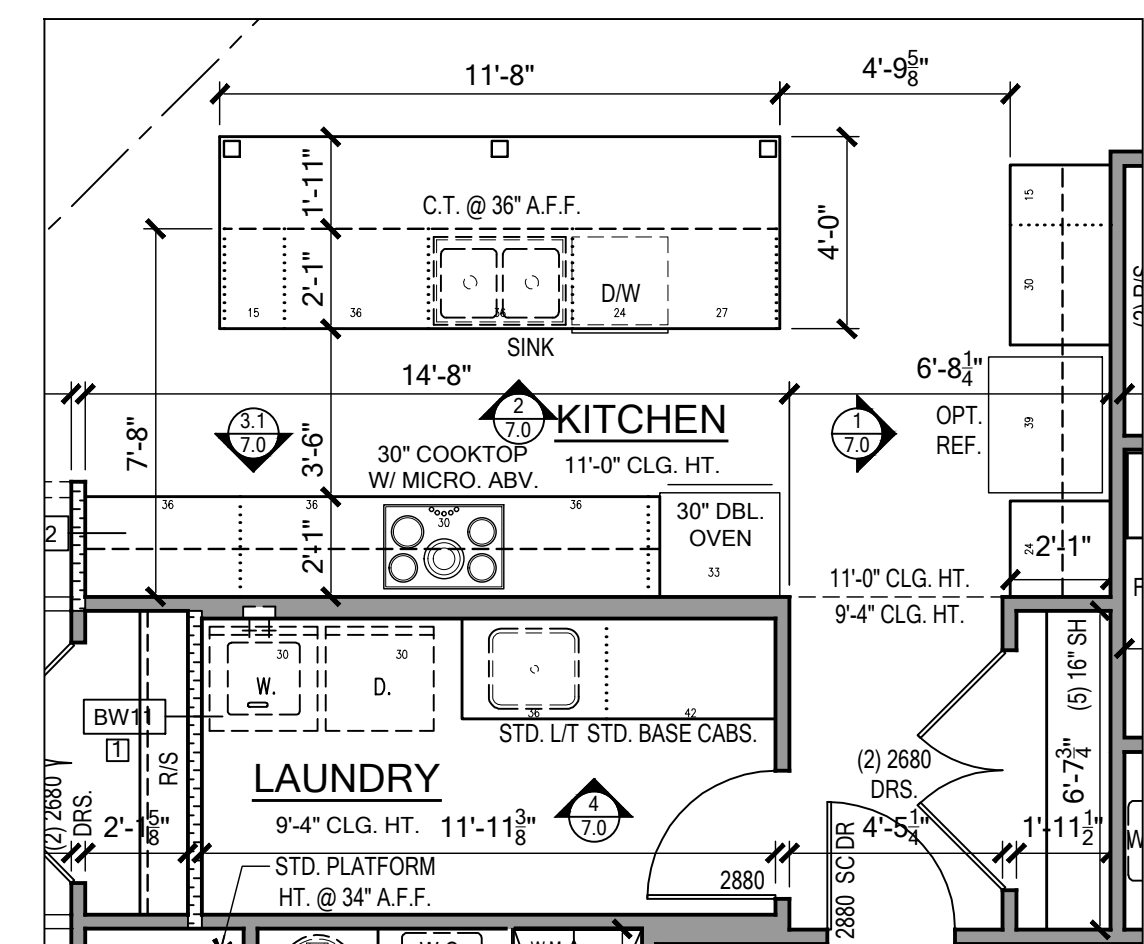
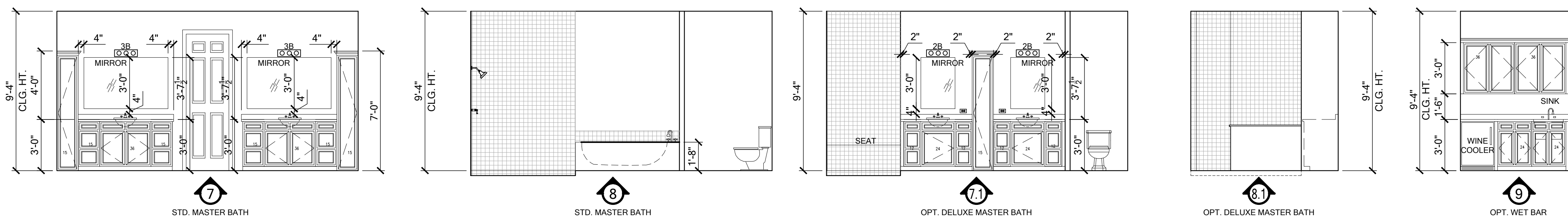
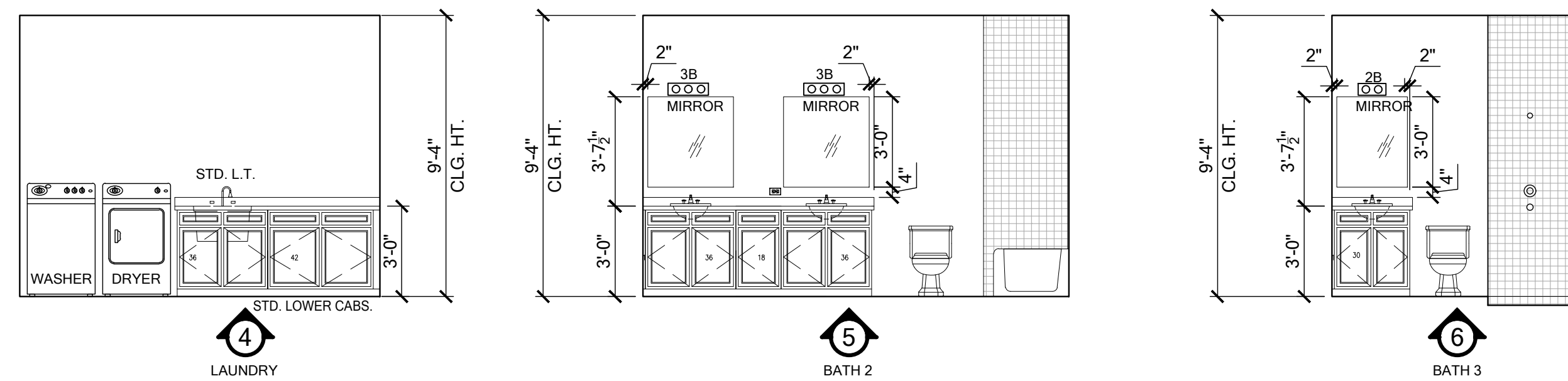
ATTN: BUILDING DEPARTMENT
PLEASE NOTE THAT TRUSS LABELS MAY VARY BUT IF THE TRUSS LAYOUT SHOWN DOES NOT MATCH THE TRUSS MANUFACTURERS LAYOUT PLEASE CONTACT THE ENGINEER OF RECORD PRIOR TO PLACEMENT OF ANY TRUSSES.

USF HARDWARE 160% 61ST EDITION CATALOG				REV FOR ETHN EDITION	
MARK	PRODUCT CODE	REF. NO.	FASTENERS	UPLIFT	ROOF 110% 201% 201%
HANGERS FOR TRUSS TO TRUSS CONNECTION					
1	HUS26	HUS26	HEADER: (14) 16d TRUSS: (6) 16d	2045	3140
2	HUS28	HUS28	HEADER: (22) 16d TRUSS: (8) 16d	2890	4745
3	JUS26	LUS26	HEADER: (4) 16d TRUSS: (1) 16d	1690	1000
12	THD20-2	HTU20-2	HEADER: (26) 16d TRUSS: (12) 16d x 1-1/2"	2895	4660
13	THD20-3	HUS20-3	HEADER: (26) 16d TRUSS: (12) 16d x 1-1/2"	4345	6175
14	THD-48	HUS48	HEADER: (26) 16d TRUSS: (14) 16d HIP: (3) 16d	2895	4660
15	HJC26	THJU26	HEADER: (16) 16d JACK: (7) 16d	2345	3655
28	HJC28-3K60	LTHJAC28, THJU26	HIP: (3) 16d HEADER: (15) 16d TRUSS: (7) 16d	2345	3655
60	HUS175	HUS175.010	HEADER: (26) 16d TRUSS: (10) 16d	4110	6690
71	HD410	HU410	SOLID POUR CMU: (20) 3/16 x 1-3/4" FRAM: (20) 16d JOISTBEM: (10) 16d	1950	3475
72	THD20-3	HUS102-3	HEADER: (26) 16d TRUSS: (20) 16d	4035	7235
73	HD40-IF	HU40	SOLID POUR CMU: (14) 3/16 x 1-3/4" FRAM: (14) 16d JOISTBEM: (10) 16d	2430	1170
74	HD40-IF	HU410	SOLID POUR CMU: (20) 3/16 x 1-3/4" FRAM: (20) 16d JOISTBEM: (10) 16d	3475	1950
75	LUM4010	LUM4010-505	SOLID POUR CMU: (8) 3/16 x 4" FRAM: (20) 16d JOISTBEM: (10) 16d	3350	9905
76	HD28-2 IF	HUS102-2	SOLID POUR CMU: (14) 3/16 x 1-3/4" FRAM: (14) 16d JOISTBEM: (6) 16d	1170	2430
CONNECTORS FOR TRUSS TO WALL					
N	16d NAILS (2) TOP CHORD NAILS (2) BOTTOM CHORD NAILS				
6	C LONG TRUSS	PFM900	FASTEN MASTER FRAMESTRAP SIMPSON STRONG DRIVE	690	12-1165 615
16	(2) 6" LONG TRUSS	PFM900 SIMPSON S1660	FASTEN MASTER FRAMESTRAP SIMPSON STRONG DRIVE	1105	615 NA
16	(2) MTU1W1	MTS192	(2) 16d (2) 16d (16) 1/8" THREADED ROD 12" EMBED	2370	
17	(2) M2U1W1	(2) M2U1	(2) 16d (16) 1/8" THREADED ROD 12" EMBED FRAM: (2) 16d PHD4 W/ (16) W3 SCREWS & (1) 6" EXT THREADED ROD	6140	
18	(2) RT16-2	(2) H102	PLATE: (16) 8d TRUSS: (16) 8d	2820	
19	(2) M2STA24	(2) M2STA24	(16) 16d	3280	
20	RTA3	MS	PLATE: (5) 16d x 1-1/2" TRUSS: (5) 16d x 1-1/2"	750	
21	FA3	HAS	TOP: (4) 16d x 1-1/2" SIDE: (2) 16d x 1-1/2"	1350	
25	HTA20	HETA20	(10) 16d x 1-1/2"	1670	
26	HTA20	(2) HETA20	(20) 16d x 1-1/2"	2430	
27	HTW24	HT24	(20) 16d	1350	
31	LTA2	LTA2	(16) 16d x 1-1/2" FACE OF GABLE W/24	1470	
32	LTA2	LTA2	(16) 16d	625	
35	KST227	MS27	(34) 16d NAILS (4) 1/2 BOLTS	4215	2190
36	LTA24	LTA24	(16) 16d NAILS	1350	
37	MSA12	MSA12	(16) 16d	935	1235
38	MSA18	MSA18	(14) 16d	1185	
39	MSA24	MSA24	(18) 16d	1645	
40	MSA30	MSA30	(22) 16d	2060	
41	MTW12	MTS12	(16) 16d	1185	
43	MSA36K	MSA36K	CONCRETECMU: (8) 1/4" x 3-1/4" TAPCON FRAM: (12) 16d	1945	
44	MUG15	MOT	(20) 16d (16) 1/8" THREADED ROD 12" EMBED FRAM: (20) 16d PHD4 W/ (16) W3 SCREWS & (1) 6" EXT THREADED ROD	4240	
46	MS1C40	MS1C40	(26) 16d NAILS (26) 1/2 BOLTS	2690	2735
47	MS1C60	MS1C60	CONCRETECMU: (14) 1/4" x 3-1/4" TAPCON FRAM: (24) 16d (20) 16d	3655	TENSION
48	RT16A	H10A, H14	PLATE: (8) 8d TRUSS: (8) 16d x 1-1/2"	1025	
49	UPH08	HD08-SD03	(2) 16d x 1-1/2"	9165	
50	DTB-72	DT72Z	(1) 1/2" x 6" HD SCREW (PHD141680) (8) W516-EXT SCREWS	1835	
51	PAU66	ABU4	(1) 5/8" x 8" HD SCREW (PHD141680) (12) 16d NAILS OR (2) 1/2 BOLT	2495 NAILS 2265 BOLTS	
53	PAU44	ABU4	(1) 5/8" x 8" HD SCREW (PHD141680) (12) 16d NAILS OR (2) 1/2 BOLT	2535 NAILS 2265 BOLTS	
54	PHD8	HDUR-SD02.5	(1) 7/8" THREADED ROD 8" EPOXY EMBED. (24) W33 WOOD SCREWS	8185	
55	PHD4A	HDUR-SD02.5	STRAP: (16) W33 WOOD SCREWS CMU: (20) 16d PHD4 W/ 8" EPOXY EMBED. FRAM: 5/8" x 8" HD SCREW (PHD141680)	5215	
56	HGAM19K7	HGAM19K7A	RAFTERSTRUSS: (6) W515 CMU BEAM: (6) 1/4 x 1-3/4" TAPCON	980	
57	LUG74	LGT4-SD03	TOP PLATE: (16) 16d FRAM: (20) 16d TRUSS: (16) W33 SCREW	4725	
58	PHD2A	HDUR-SD02.5	STRAP: (16) W33 WOOD SCREWS CMU	3265	
59	KST716	ST6216	(26) 16d TOP PLATE: (16) 16d FRAM: (20) 16d	2915	
64	HGA10K7	HGA10K7	RAFTERSTRUSS: (6) W515 TOP PLATE: (16) 16d	790	
66	LUO72	LG72	STRAP: (16) 16d TOP PLATE: (2) 16d TRUSS: (16) 16d	2020	
66	(2) LUO72	(2) LG72	STRAP: (16) 16d TOP PLATE: (2) 16d TRUSS: (16) 16d	4040	
67	LUG73	LG73-SD02.5	FRAM: (20) 16d SINKER CMU: (4) 3/8" x 5" TAPCON TOP PLATE: (4) 16d SINKER TRUSS: (2) W532 SCREW	3500	
68	HT45	HT45	STRAP: (16) 16d TOP PLATE: (2) 16d CMU: 5/8" THREADED ROD 12" EPOXY EMBED. 5/8" x 8" HD SCREW (PHD141680)	5795	

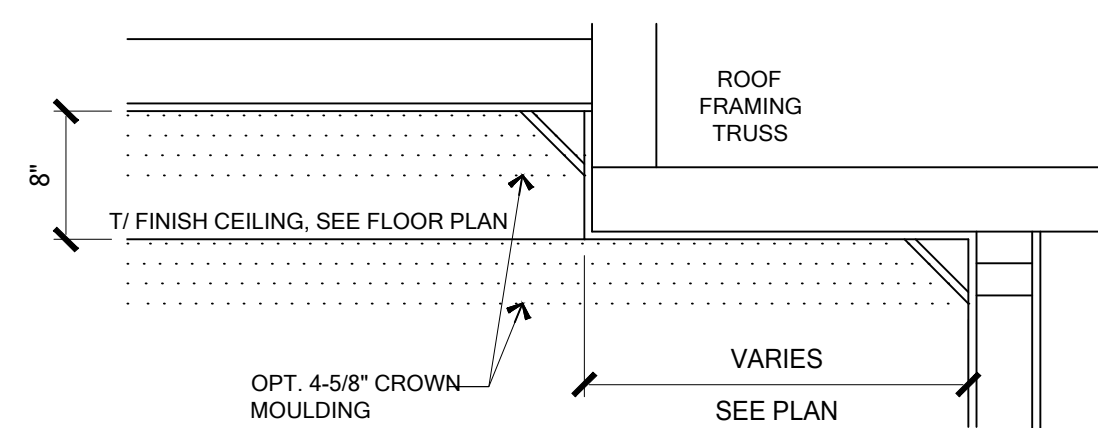
To the best of the Engineer's knowledge, information and belief, the structural plans and specifications contained within these drawings comply with the Florida Building Code 8th Edition (2023) Residential. Engineer's signature and seal is only for the structural engineering portions of the drawing pages bearing Engineer's signature and seal.

The advertisement for Total Solutions Group (TS&G) is presented in a vertical layout. At the top, the company logo consists of the letters 'TS&G' in a bold, blue, sans-serif font, enclosed within a blue rectangular border. To the right of the logo, the slogan 'Making Dreams Come True' is written in a blue, cursive script. Below the logo, the company name 'TOTAL SOLUTIONS GROUP' is printed in a bold, black, sans-serif font. This is followed by the address '258 Southhall Lane, Suite 200' and 'Maitland, Florida, 32751' in a standard black font, with the phone number '(407) 880 2333' on the next line. A thick black horizontal line separates this section from the one below. The lower section features the phrase '100% Employee Owned' in a bold, black, sans-serif font, with the website 'myTS&Ghome.com' underneath it. The bottom half of the advertisement is a white rectangular area with a black border. On the left side of this area, the name 'MARIONDA' is written vertically in a large, green, sans-serif font. To its right, the word 'Homes' is written in a green, cursive script. Further right, the address '3999 West First Street' and 'Sandford, FL 32711' are listed in a black font, with the phone number '(407)302-9871' on the final line.

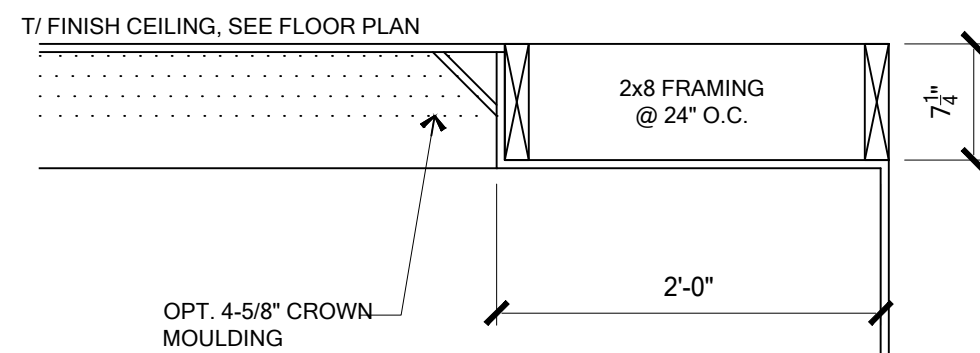
Community	Forest Cove		Garage Side:
	Plan Name: Livorno	Elev - B	Right
Lot: 9		Block:	
Address: TBD SW Cadence Glen Lake City, FL 32024			
Job no.	9F-C00901		Renaissance Series
Reference No:		25-00446	
Sheet:			
6.0			
FRAMING PLAN			



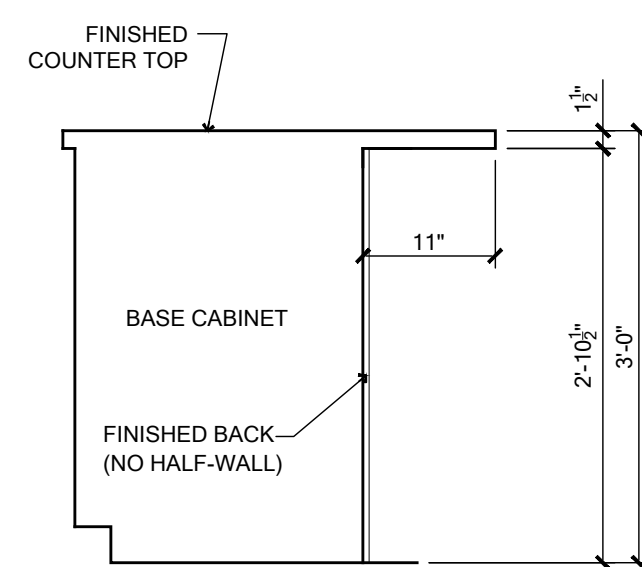
GOURMET KITCHEN PLAN



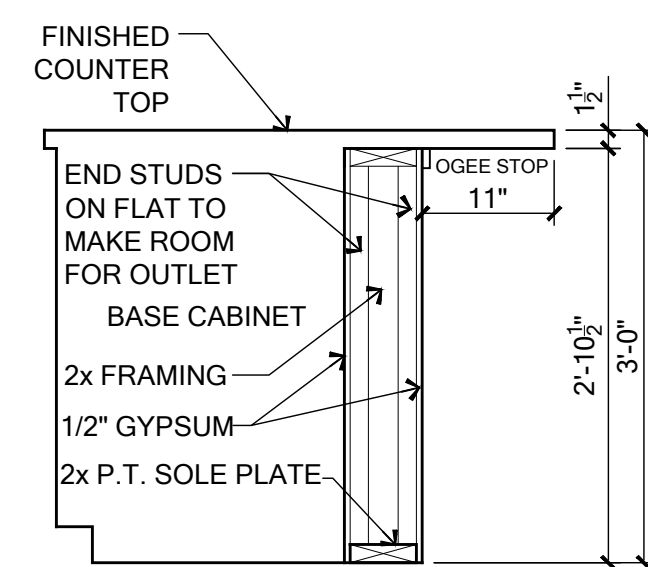
POP-UP ROOF TRUSS TRAY CEILING



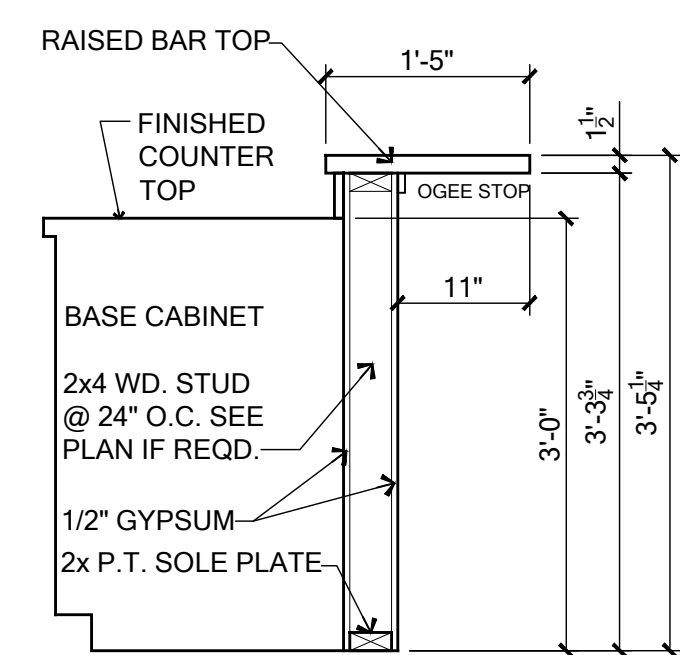
DROP DOWN TRAY CEILING



FLOW-THRU BAR SECTION
w/ FINISHED BACK
SCALE: 3/4" = 1'- 0"

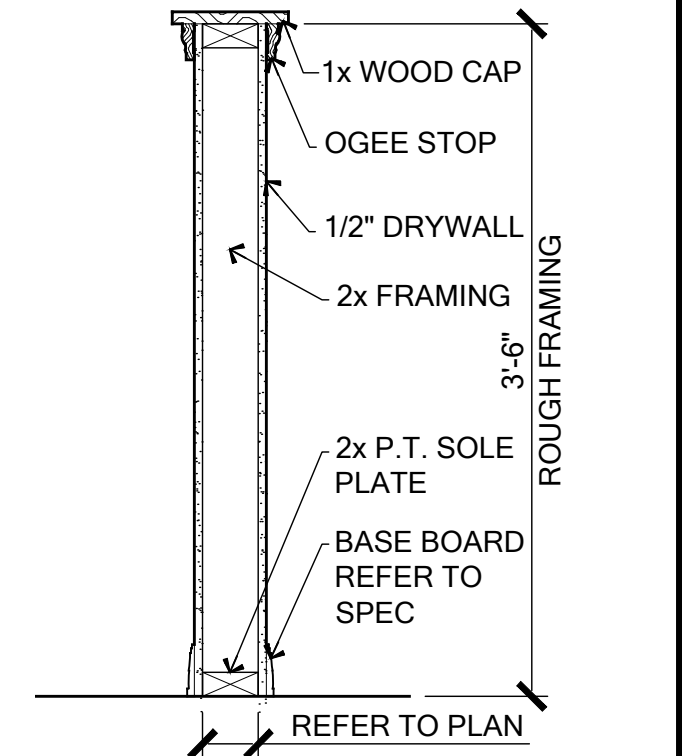


FLOW-THRU BAR SECTION
w/ HALF WALL
SCALE: 3/4" = 1'- 0"



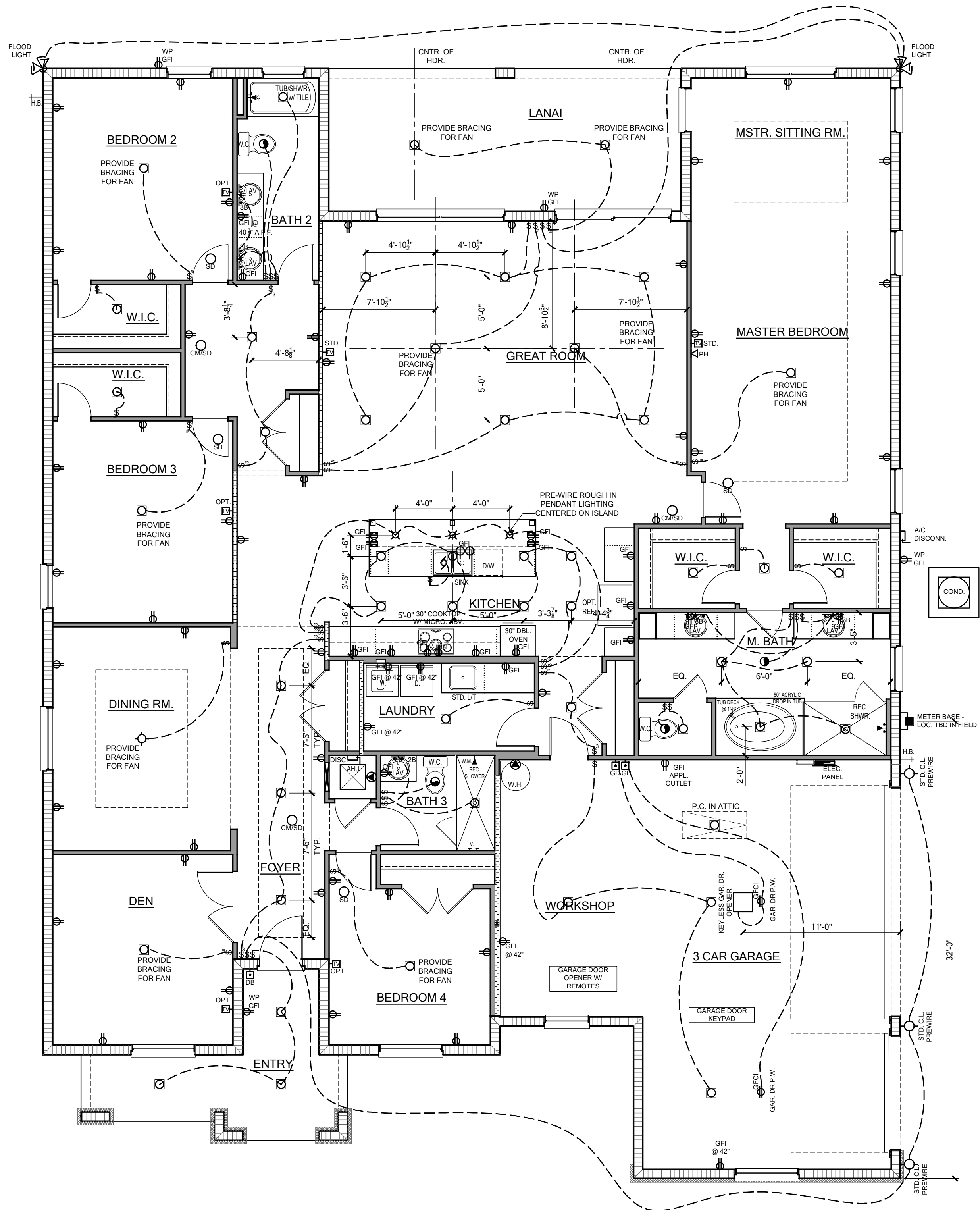
RAISED BAR SECTION

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

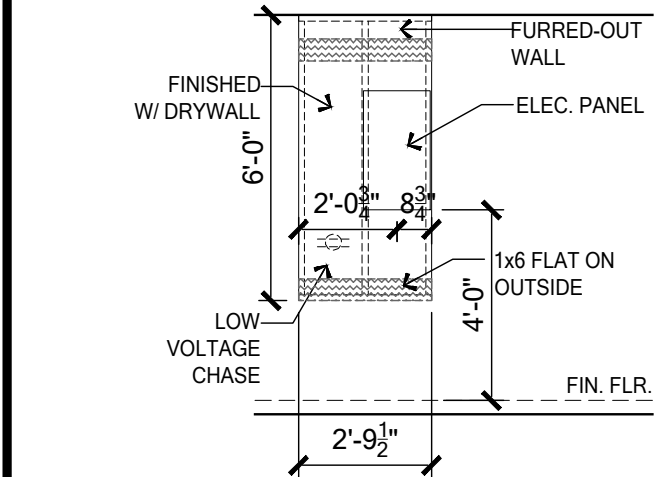


TYPICAL HALF-WALL

SCALE: 1" = 1'-0"



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



PANEL WALL DETAIL
SCALE: 1/4" = 1'-0"

ELECTRICAL LEGEND

POWER SYMBOLS	
	WP WEATHER PROOF
	VP VAPOR PROOF
	GFI GROUND FAULT INTERRUPT
	A ARC FAULT INTERRUPT
	48 MOUNTING HEIGHT
	GDO GARAGE DOOR OPENER
	PS PULL STRING

LIGHTING SYMBOLS	

LOW VOLTAGE SYMBOLS	

ELECTRICAL RISER DIAGRAM

8/16 METER/MAIN COMBO
150 OR 200 AMP
OVERHEAD OR UNDERGROUND

• USE 22k AIC RATED AT THE SERVICE
• USE 10k AIC RATED AT THE PANELS

150 = #1 Copper or 2/0 Aluminum
200 = 2/0 Copper or 4/0 Aluminum in 2" Conduit.
WP / GFI (TUG) RECEPTACLE FOR TEMPORARY POWER (AS NEEDED)

#6 CU PER NEC 2020 250-94 INTERSYSTEM BONDING TERMINAL INTERSYSTEM BONDING TERMINATION PER NEC 2020, 250.94
#4 GROUNDING WIRE WITH CODE APPROVED CLAMP PER 250.50 AND 250.52 OF THE 2020 NEC.

NOTE:
ELECTRICAL MATERIAL AND INSTALLATIONS SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE NFPA 70, LOCAL CODES AND LOCAL POWER/UTILITY COMPANY

Notes: unless otherwise noted.

- Electrical outlet heights as measured from finished floor to centered line of the box to be: 16" AFF (general). In a Flood Zone, all electrical equipment to be at or above DFE.
- 44" AFF GFI's AT Front Entry 24" AFF
- 39" AFF Door Bell Push Button 44" AFF
- 36" AFF Thermostat 60" AFF
- Exterior Waterproof 12" AFF To Chandelier Bottom 66" AFF
- Garage General Purpose 42" AFF Microwave Outlet 80" AFF
- Range 2" AFF Vented Hood 80" AFF
- All trim plates and devices to be ganged, where possible.
- Electrical switches to be at 42" centerline above finished floor.
- Electrical plan is intended for bid purposes only. All work shall be done in strict accordance with the National Electric Code (NEC), latest edition, by a licensed electrical contractor who shall be responsible for the installation & sizing of all electrical, wiring & accessories.
- Smoke alarms shall comply with NFPA 72 and Section R314 and shall be listed in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be listed in accordance with UL 217 and UL 2034.
- Provide AFCI's (Arc-Fault Circuit Interrupters) combination type installed to provide protection of the branch circuits in all dwelling units per NFPA 70 (Current Edition) and the NEC and as defined in UL 1699.
- Provide Tamper Resistant Receptacles as required by the NFPA 70 (Current Edition).
- Carbon Monoxide Protection: carbon monoxide alarms or detectors shall be installed in all dwelling units in accordance with FBC R315 and NFPA 70. Such devices shall be listed by the appropriate standard, either ANSI/UL 2034, standard for single and multiple station CO alarms or UL 2075, gas and vapor detector sensor, according to the installation.
- R315.1.2 Combination Alarms: combination smoke/carbon monoxide alarms shall be listed and labeled by a Nationally Recognized Testing Laboratory.
- Keep all smoke detectors minimum of 36" from bathroom doors.
- In new construction, smoke detectors shall be hardwired into an A/C electrical power source and shall be equipped with a monitored battery backup.
- Bathroom exhaust fans must vent to the exterior of the building, ventilation to attic space and soffits is not acceptable.
- Chapter 45 Private Swimming Pools - Outdoor swimming pools shall be provided with a barrier complying with R4501.17.1.1 through R4501.17.1.14.
- Add GFCI protection to receptacles in laundry rooms and utility rooms of dwellings where installed within 6' of the outside edge of a sink. This would include the receptacle installed for a washing machine. Receptacle outlets shall not be required on a wall directly behind a range or sink to fulfill the requirement of an outlet every 24". The width of the sink or range is not to be included in the spacing of the outlets unless the distance from the sink or range is greater than 12" for straight counter tops and 18" for sinks and ranges installed in corner counters.
- Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with section R314.3, 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 dwelling unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.
- For one- and two-family dwelling units, all service conductors shall terminate in disconnecting means having a short-circuit current rating equal to or greater than the available fault current, installed in a readily accessible outdoor location. Each disconnect shall be one of the following:
(1) Service disconnects marked as follows:
EMERGENCY DISCONNECT,
SERVICE DISCONNECT
(2) Meter disconnects installed per 230.82(3) and marked as follows:
EMERGENCY DISCONNECT,
METER DISCONNECT,
NOT SERVICE EQUIPMENT
(3) Other listed disconnect switches or circuit breakers on the supply side of each service disconnect that are suitable for use as service equipment and marked as follows:
EMERGENCY DISCONNECT,
NOT SERVICE EQUIPMENT
Markings shall comply with 110.21(B).
- All permanently installed luminaires, excluding those in kitchen appliances, shall have an efficacy of at least 45 lumens-per-watt or shall utilize lamps with an efficacy of not less than 65 lumens-per-watt.

FOR COUNTY USE ONLY

01/20/2025

To the best of the Engineer's knowledge, information and belief, the structural plans and specifications contained within these drawings comply with the Florida Building Code 8th Edition (2023) Residential. Engineer's signature and seal is only for the structural engineering portions of the drawing pages bearing Engineer's signature and seal.

CA No. 9161 AA26003115

TSG
TOTAL SOLUTIONS GROUP
258 Southhall Lane, Suite 200
Maitland, Florida, 32751
(407) 880 2333

100% Employee Owned
myTSGhome.com

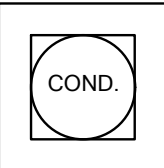
MARONDA Homes

3999 West First Street
Sanford, FL 32771
(407) 902-9871

Community:	Forest Cove	Garage Side:	Right
Plan Name:	Livorno	Elev - B	
Lot:	9	Block:	
Address:	TBD Sw Cadence Glen Lake City, FL 32024		
Job no:	9FC00901	Renaissance Series	

Reference No.	25-00446
Sheet:	8.0

ELECTRICAL



CEILING PLAN

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

TERMITE SPECIFICATIONS

SECTION R318 PROTECTION AGAINST TERMITES

GIVEN THAT STRUCTURE IS LOCATED IN A VERY HEAVY TERMITE INFESTATION AREA, TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE A PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMITICIDE). UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

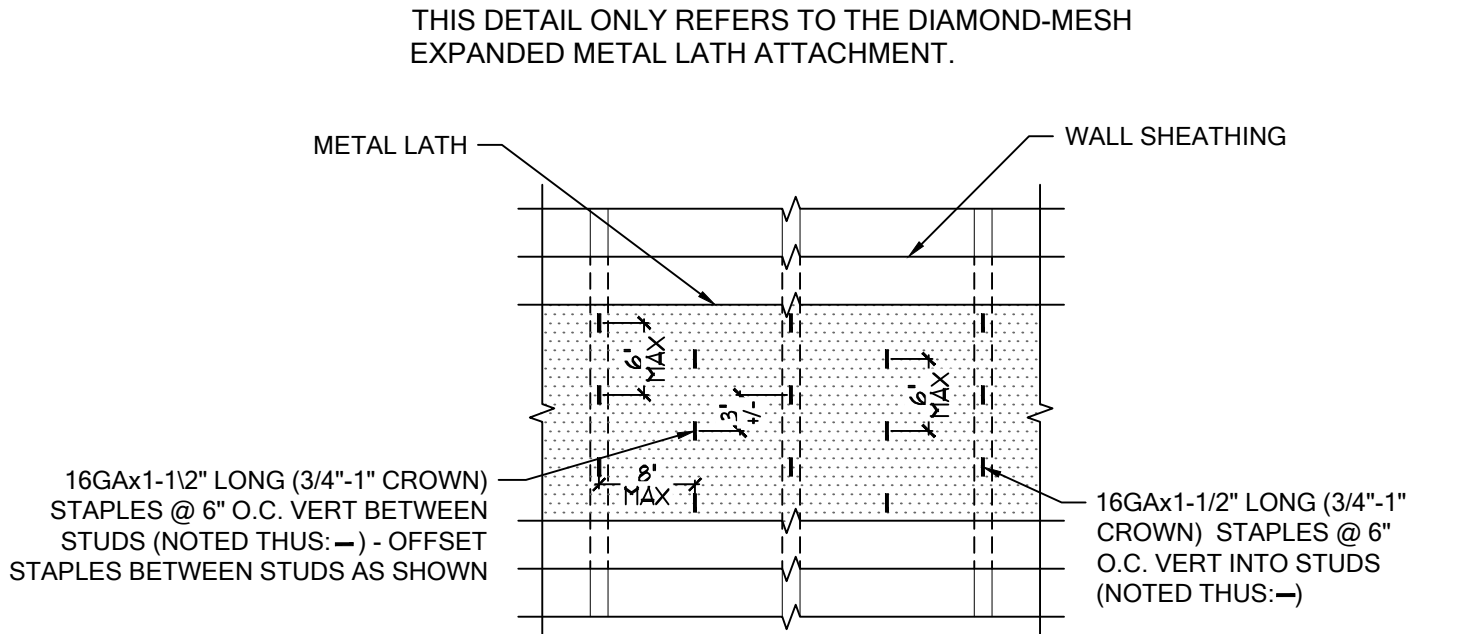
NOTES:

- METHOD OF TREATMENT SHALL BE APPROVED BY THE GOVERNING JURISDICTION "LIQUID BORATE OR BOR-A-COR" PRODUCT METHODS MUST BE DETERMINED AT PERMIT STAGE AND PRODUCT APPROVAL DATA MUST BE ON FILE WITH THE BUILDING DEPARTMENT.
- PRESSURE TREATED LUMBER THAT HAS BEEN CUT OR DRILLED THAT EXPOSES UNTREATED PORTIONS OF WOOD ARE REQUIRED TO BE FIELD TREATED TO PREVENT INSECT INFESTATION.
- OPTIONAL BORATE APPLIED TO ALL FRAME MEMBERS WITHIN 24" A.F.F.

NOTICE TO BUILDER AND ALL SUBCONTRACTORS

It is the intent of the Engineer listed in the titleblock of these documents that these documents be accurate, providing Licensed Professionals clear information. Every attempt has been made to prevent error. The Builder and all subcontractors are required to review all the information contained in these documents, prior to the commencement of any work. The Engineer are not responsible for any plan errors, omissions, or misinterpretations undetected and not reported to the Engineer prior to construction. All construction MUST be in accordance to the information found in these documents. Any questions regarding the information found in these plans should be directed to our Quality Assurance Manager at 321-972-0491 immediately. No backcharges will be considered for reimbursement by the the Engineer without advanced notification and approval by the Engineer. Payments will be made in accordance to the terms of the agreement.

Care and Maintenance: Yearly maintenance and inspections by the builder/homeowner are necessary for the future life of this home. Care must be taken to check windows and doors for caulking, remove leaves and debris off roofs, make sure that water flow is away from the house and have your home repainted every 3 - 5 years to protect the coatings. The designer and engineer of record are not responsible for instances that may occur over the normal life of the home without proper maintenance.



METAL LATH ATTACHMENT DETAIL

REV. 09.24.21 SCALE: 3/4\"/>

GENERAL STRUCTURAL NOTES

CAST IN PLACE REINFORCED CONCRETE

- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI (SLABS) 3000 PSI (COLUMNS AND BEAMS), A SLUMP OF 5\"/>

MASONRY

- HOLLOW LOAD BEARING UNITS SHALL BE NORMAL WEIGHT, GRADE N, TYPE 2, CONFORMING TO ASTM C90-14, WITH A MINIMUM NET COMPRESSIVE STRENGTH OF 2000 PSI (f_m = 2000 PSI)
- MORTAR SHALL BE TYPE "S", CONFORMING TO ASTM C270-14a.
- COARSE GROUT SHALL CONFORM TO ASTM C476-10 WITH A MAXIMUM AGGREGATE SIZE OF 3/8\"/>

WOOD CONSTRUCTION

- ALL EXTERIOR WOOD STUD WALLS, BEARING WALLS, SHEAR WALLS AND MISC. STRUCTURAL WOOD FRAMING MEMBERS, (I.E. BLOCKING OR GABLE END BRACING) SHALL BE EITHER AS SPECIFIED IN PLAN OR IN DETAILS. IF CONFLICTS OCCUR BETWEEN PLAN AND DETAILS, THE STRONGEST MATERIAL SHALL BE USED. AT A MINIMUM, ALL STRUCTURAL FRAMING MEMBERS SHALL BE S.P.F. #2.
- ALL LUMBER SPECIFIED ON DRAWINGS ARE INTENDED FOR DRY USE ONLY (MOISTURE CONTENT 19% OR LESS), U.N.O. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS.
- ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1\"/>

STRUCTURAL STEEL

- MATERIAL SPECIFICATIONS: WIDE FLANGE SECTIONS: ASTM A992, GRADE 50, F_y=50 KSI TUBE STEEL (HSS): ASTM A500, GRADE B, F_y = 46 KSI PIPE STEEL: ASTM A53, TYPE E OR S, F_y = 35 KSI ALL OTHER STRUCTURAL & MISC. STEEL: A36 F_y=36 KSI STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE ASTM A325N U.N.O
- STRUCTURAL BOLTS SMALLER THAN 5/8\"/>

UPLIFT CONNECTORS

- UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT OR LATERAL FORCES. INTERIOR LOAD BEARING WALLS ARE NOT ALWAYS EXPOSED TO UPLIFT FORCES. THE MEMBERS OF THESE WALLS WOULD NOT NEED TO HAVE CONNECTORS APPLIED. PLEASE COORDINATE WITH THE TRUSS ENGINEER FOR THE LOCATION OF THESE WALLS. SEE STRUCTURAL PLANS FOR MORE INFO.

GYPSON BOARD

- GYPSON BOARD MAY BE INSTALLED USING GWB54 NAILS TO SET IN PLACE. FIELD FASTENING SHOULD BE TYPE "W" 1 1/4\"/>

PRE ENGINEERED WOOD TRUSSES

- ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS PER STRUCTURAL PLAN.
- PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENERS" AS RECOMMENDED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- TRUSS MEMBERS AND CONNECTIONS SHALL BE PROPORTIONED (WITH A MAXIMUM ALLOWABLE STRESS INCREASE FOR LOAD DURATION OF 25%) TO WITHSTAND THE LIVE LOADS GIVEN IN THE NOTES AND TOTAL DEAD LOAD.
- BRIDGING FOR PRE-ENGINEERED TRUSSES SHALL BE AS REQUIRED BY THE TRUSS MANUFACTURER UNLESS NOTED ON THE PLANS.
- TRUSS ELEVATIONS AND SECTIONS ARE FOR GENERAL CONFIGURATION OF TRUSSES ONLY. WEB MEMBERS ARE NOT SHOWN, BUT SHALL BE DESIGNED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH THE FRAMING DESIGN LOADS.
- DESIGN SPECIFICATIONS FOR LIGHT WEIGHT METAL PLATE CONNECTED WOOD TRUSSES PER THE TRUSS PLATE INSTITUTE TPI LATEST EDITION.
- PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH SPECIFIED LOADS AND GOVERNING CODES. SUBMITTALS SHALL INCLUDE TRUSS FRAMING PLANS AND DETAILS SHOWING MEMBER SIZES, BRACING, ANCHORAGE, CONNECTIONS, TRUSS LOCATIONS, AND PERMANENT BRACING AND/OR BRIDGING AS REQUIRED FOR ERECTION AND FOR THE PERMANENT STRUCTURE. EACH SUBMITTAL SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER. SUBMIT 3 COPIES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- THE TRUSS MANUFACTURER SHALL DETERMINE ALL SPANS WORKING POINTS, BEARING POINTS, AND SIMILAR CONDITIONS. TRUSS SHOP DRAWINGS SHALL SHOW ALL TRUSSES, ALL BRACING MEMBERS, AND ALL TRUSS TO TRUSS HANGERS.

FIELD REPAIR NOTES

- MISSED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED WITH 1/2\"/>
- FOR MISSED VERT. DOWELS, DRILL A 3/4\"/>
- FOR MORTAR JOINTS LESS THAN 1/4\"/>
- MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED WITH (1) USP HTWM16 TWIST STRAP W/ (4) 1/2\"/>
- IF MISSED, M5TAM36 OR M5TCM40 STRAP IS MISSED FOR 2ND FLOOR JAMB STUD CONNECTION, CONTRACTOR MAY INSTALL USP HTT5 W/ (28) 16d x 2 1/2\"/>
- MISSED ROOF TIE DOWNS MAY BE SUBSTITUTED WITH (1) USP RT16A W/ (8) 8d x 1 1/2\"/>

STRUCTURAL DESIGN CRITERIA

CODE CRITERIA

- FLORIDA BUILDING CODE 8TH EDITION (2023) RESIDENTIAL
- FLORIDA FIRE PREVENTION CODE 8TH EDITION (2023)
- FLORIDA BUILDING CODE ACCESSIBILITY 8TH EDITION (2023) RESIDENTIAL
- NFPA 70-20, NATIONAL ELECTRICAL CODES (NEC 2020)
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - (ACI 318-19)
- SPECIFICATIONS FOR STRUCTURAL CONCRETE - (ACI 301-20)
- BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES - (ACI 530-13)
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - 2018 EDITION
- WOOD FRAMED CONSTRUCTION MANUAL 2018 EDITION
- APA PLYWOOD DESIGN SPECIFICATION E30-19
- AMERICAN SOCIETY OF CIVIL ENGINEERS: ASCE/SEI 7-22
- ALUMINUM DESIGN MANUAL - AAF-20 (AA ADM-2020)

Code references are summaries of code sections. See FBCR (Current Version) for complete information.

Scan QR Code for the complete FBCR



GENERAL ROOF LOADING				
	SHINGLE ROOF (PSF)	METAL ROOF (PSF)	TILE ROOF (PSF)	HEAVY ROOF (PSF)
TOP CHORD LL	16	20	20	20
TOP CHORD DL	7	10	15	25
BOTTOM CHORD LL*	0	0	0	0
BOTTOM CHORD DL	10	10	10	10
TOTAL (PSF)	33	40	45	55
BOTTOM CHORD LL (OPT)				
ATTICS W/ LIMITED STORAGE	20			
ATTICS W/ HEAVY STORAGE	50			
* ATTICS W/ NO STORAGE (NON-CONCURRENT)	10			

NOTE: LL REDUCTIONS ARE ALLOWED PER CODE BUT ONLY WITH WRITTEN APPROVAL FROM EOR OR INDICATED ON PLAN

GENERAL FLOOR LOADING		
TOP CHORD LL	40 (PSF)	COMMENTS:
TOP CHORD DL	10 (PSF)	
BOTTOM CHORD LL	0 (PSF)	
BOTTOM CHORD DL	5 (PSF)	

SPECIAL FLOOR LOADING

GAME ROOM	60(PSF)	LIBRARY READING ROOMS	60(PSF)
BALCONIES/DECKS	40(PSF)	LIBRARY STACK ROOMS	150(PSF)
BALCONIES OVER 100 SQ. FT.	100(PSF)	NON-SLEEPING ROOMS	40(PSF)
LIGHT STORAGE:	125(PSF)	SLEEPING ROOMS	30(PSF)
GUARDRAILS	200(LBS)(h,i)	HABITABLE ATTICS SERVED	
HANDRAILS(d)	200(LBS)(h)	w/ FIXED STAIRS	30(PSF)
GUARDRAIL IN-FILL COMP.(f)	50(LBS)(i)	PASSENGER VEH. GAR.	50(PSF) 2000(LBS)
STAIRS(g)	40 (PSF) 300(LBS)		

COMMENTS:
(PSF) = UNIFORM LOADS
(LBS) = CONCENTRATED LOADS
c. INDIVIDUAL STAIR TREADS SHALL BE CAPABLE OF SUPPORTING THE UNIFORMLY DISTRIBUTED LIVE LOAD OR A 300-POUND CONCENTRATED LOAD APPLIED ON AN AREA OF 2 INCHES BY 2 INCHES, WHICHEVER PRODUCES THE GREATER STRESSES.
d. A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP. FOR A GUARD NOT REQUIRED TO SERVE AS A HANDRAIL, THE LOAD NEED NOT BE APPLIED TO THE TOP ELEMENT OF THE GUARD IN A DIRECTION PARALLEL TO SUCH ELEMENT.
f. BALUSTERS AND PANELS FILLERS SHALL BE DESIGNED TO WITHSTAND A HORIZONTALLY APPLIED NORMAL LOAD OF 50 POUNDS ON AN AREA EQUAL TO 1 SQ. FT.
h. GLAZING USED IN HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED WITH A LOAD ADJUSTMENT FACTOR OF 4. THE LOAD ADJUSTMENT FACTOR SHALL BE APPLIED TO EACH OF THE CONCENTRATED LOADS APPLIED TO THE TOP OF THE RAIL, AND TO THE LOAD ON THE IN-FILL COMPONENTS. THESE LOADS SHALL BE DETERMINED INDEPENDENT OF ONE ANOTHER, AND LOADS ARE ASSUMED NOT TO OCCUR WITH ANY OTHER LIVE LOAD.
i. WHERE THE TOP OF A GUARD SYSTEM IS NOT REQUIRED TO SERVE AS A HANDRAIL, THE SINGLE CONCENTRATED LOAD SHALL BE APPLIED AT ANY POINT ALONG THE TOP, IN THE VERTICAL DOWNWARD DIRECTION AND IN THE HORIZONTAL DIRECTION AWAY FROM THE WALKING SURFACE. WHERE THE TOP OF A GUARD IS ALSO SERVING AS THE HANDRAIL, A SINGLE CONCENTRATED LOAD SHALL BE APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP. CONCENTRATED LOAD SHALL NOT BE APPLIED CONCURRENTLY.

DEFLECTION CRITERIA			
ROOF TRUSSES*	LL/240	TL/180	COMMENTS:
ROOF RAFTERS	LL/180	TL/120	
ROOF RAFTERS (W/O CLG.)	LL/360	TL/240	
FLOOR TRUSSES/ BEAMS **	LL/360	TL/240	
FLOOR I-JOIST***	LL/480	TL/240	

WIND LOADING CRITERIA 140B

WIND SPEED (ULTIMATE)	140 MPH
WIND SPEED (ALLOWABLE)	108.0 MPH
EXPOSURE CATEGORY	B
BUILDING CATEGORY	II
BUILDING TYPE	V
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	+/- 0.18

NOTE: MEAN ROOF HEIGHT FOR TYPICAL SINGLE STORY HOME IS 15FT, AND FOR 2 STORY HOME IS 25FT

ASCE 7-22 WALL DESIGN ALLOWABLE COMPONENTS AND CLADDING WIND PRESSURES AND SUCTIONS FOR MEAN ROOF HEIGHT ≤ 30 ft

GENERAL PRESSURE NOTES

NOTES:
1. MULTIPLY BY 1.67 TO GET ULTIMATE WIND PRESSURES.
2. "z" = END ZONE IS ONLY W/IN 4'-0" OF ALL EXTERIOR BUILDING CORNERS.
* INDICATED PRESSURES CAN BE INTERPOLATED FOR OTHER DOOR SIZES, OTHERWISE USE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREA.

DESIGNATED AREAS WHERE THE ULTIMATE WIND SPEED IS 140 MPH OR GREATER, CONTRACTOR TO PROVIDE ADDITIONAL INFORMATION AS REQUIRED FOR PERMITTING TO INCLUDE IMPACT GLAZING, SHUTTERS, OR WOOD STRUCTURE PANELS PER THE FBCR R301.2.1.2 PROTECTION OF OPENINGS.

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(407) 902-9871

Community: Forest Cove

Garage Side: Right

Plan Name: Livorno

Elev - B

Block:

Lot: 9

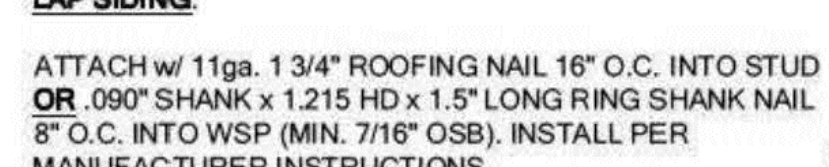
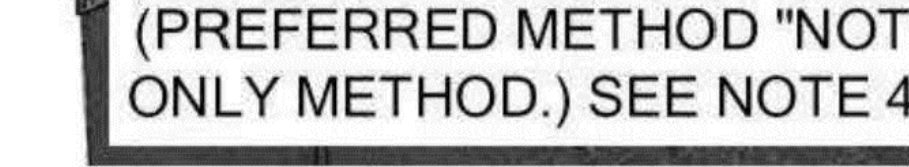
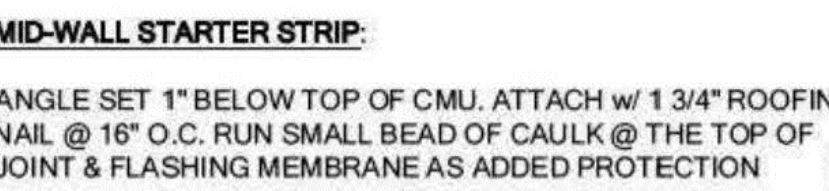
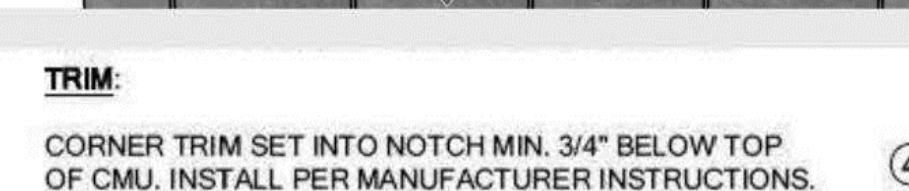
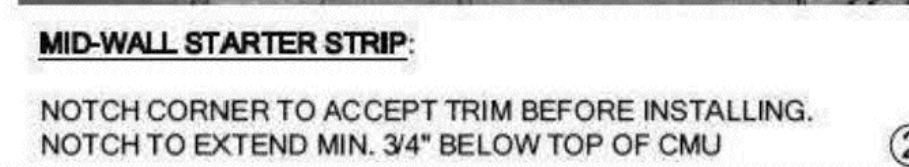
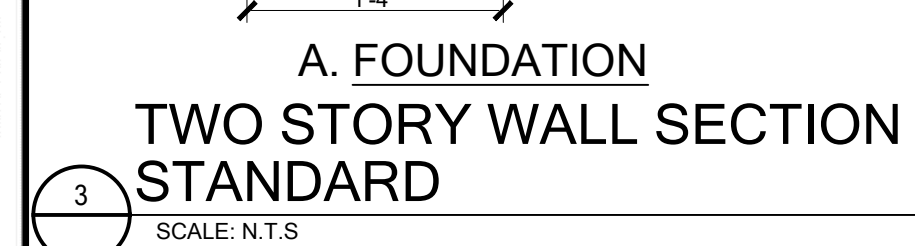
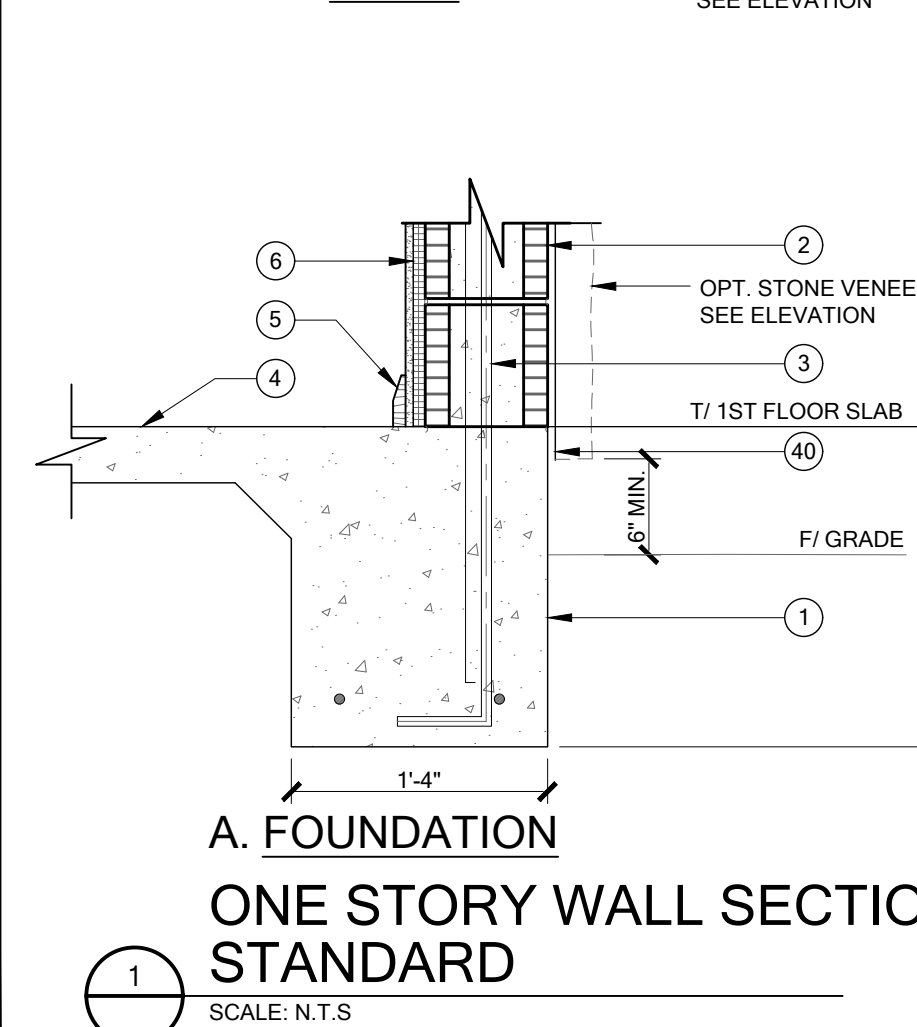
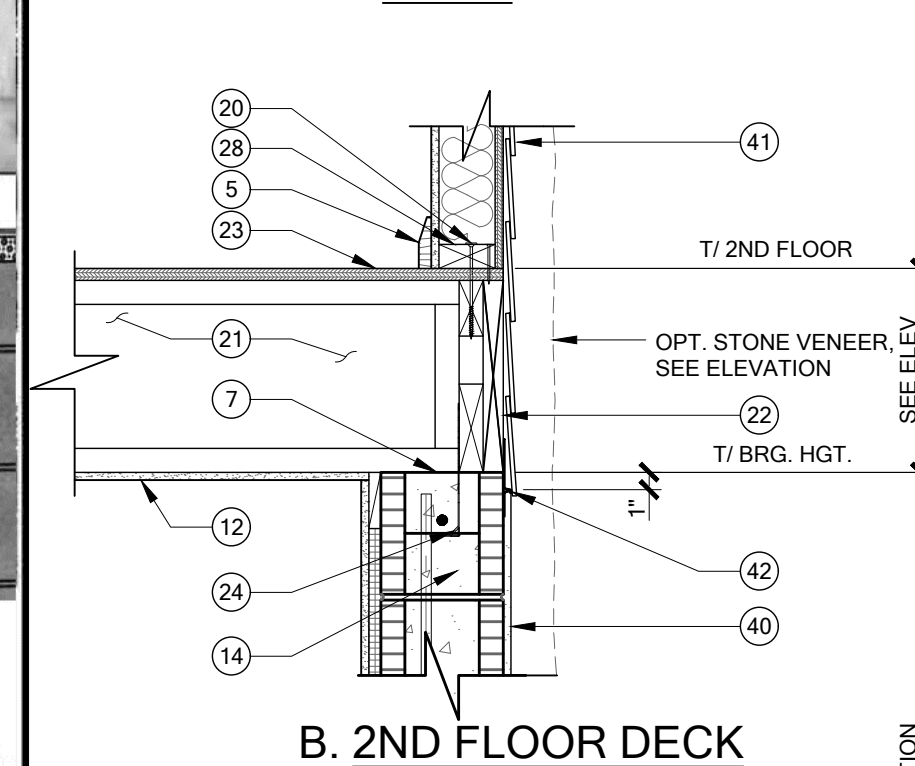
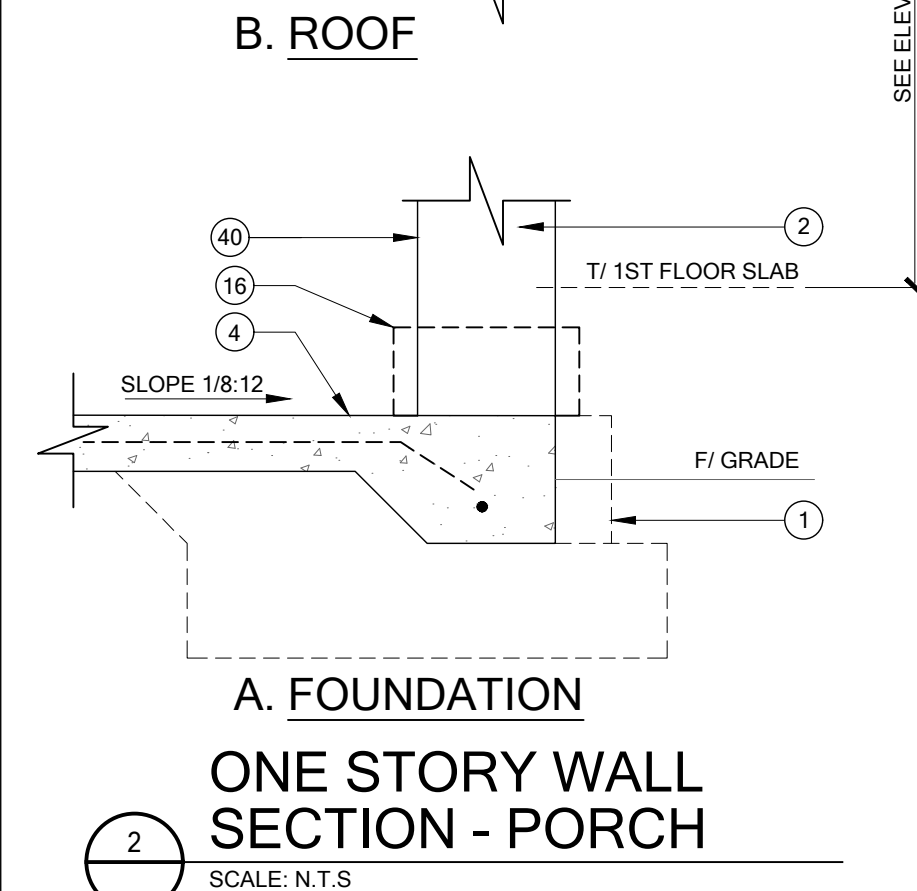
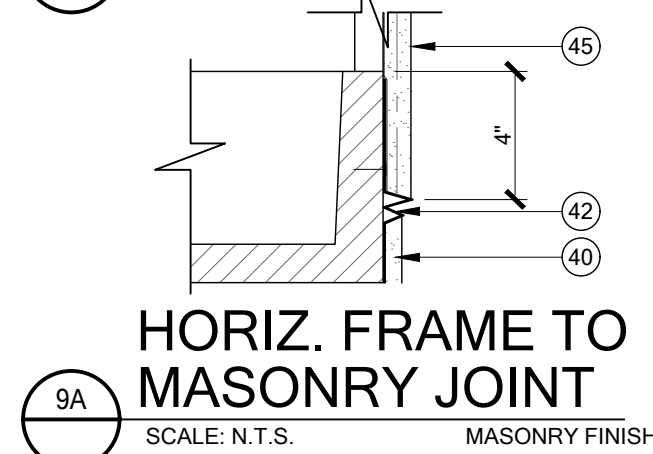
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Sub no: 9F-C00901

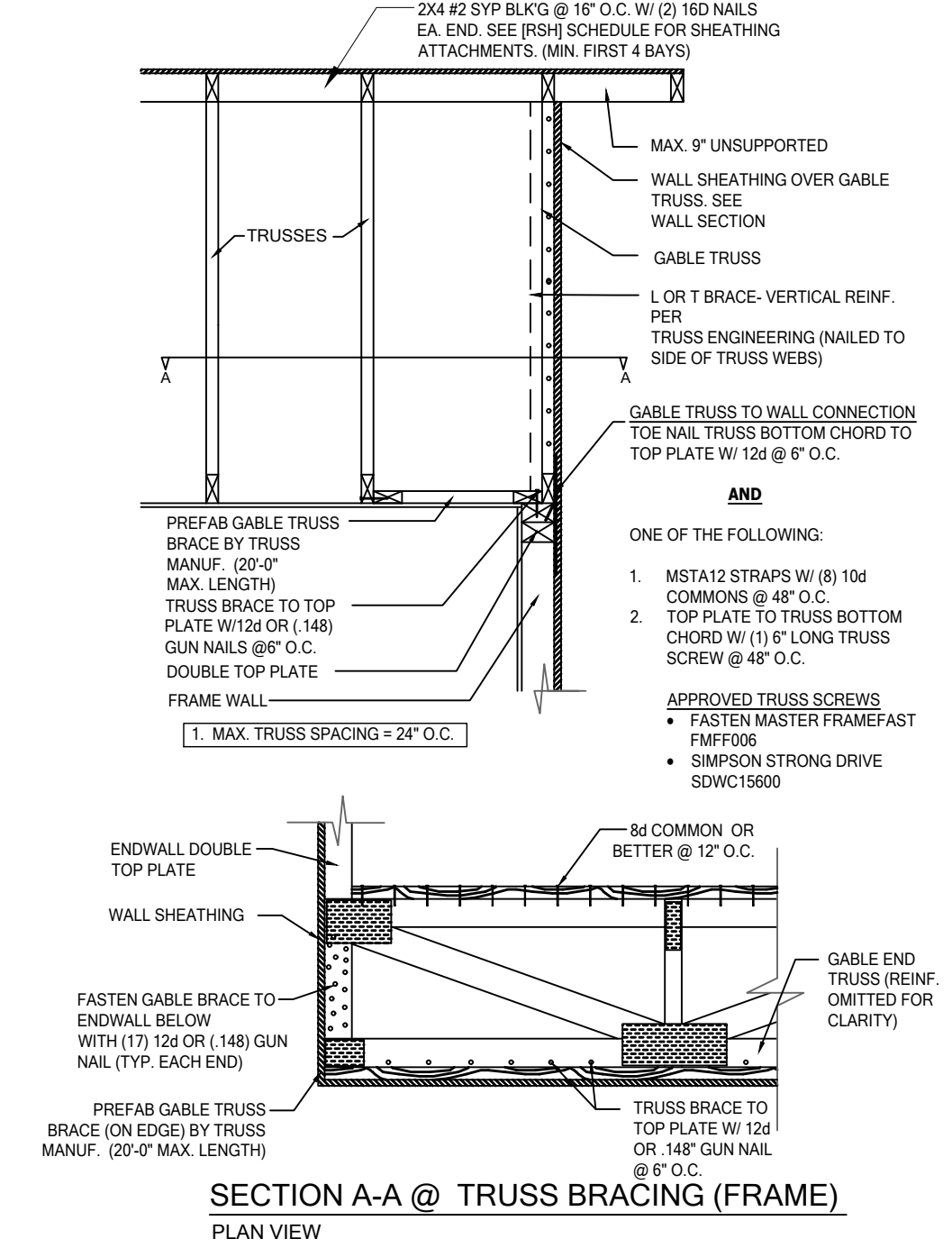
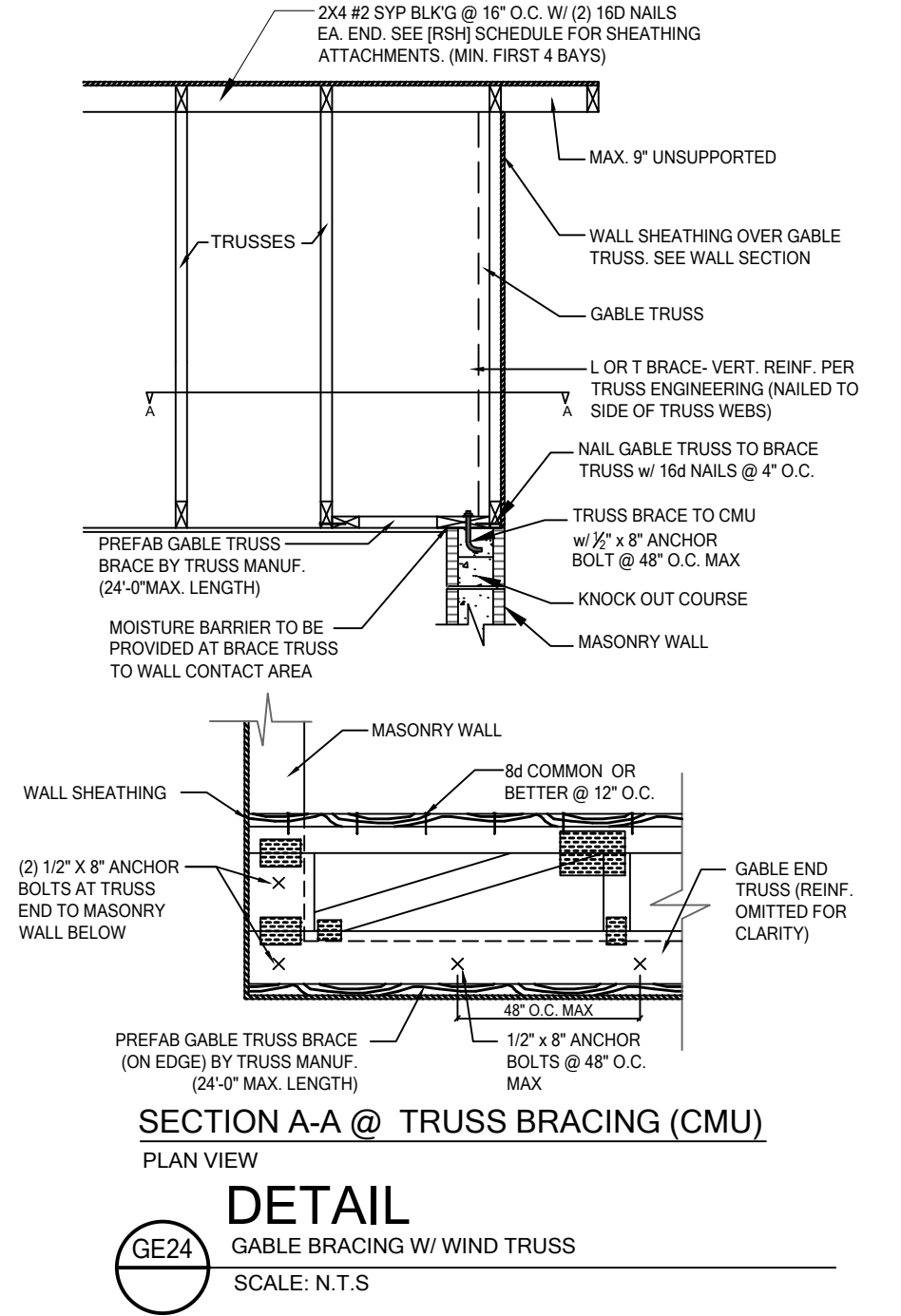
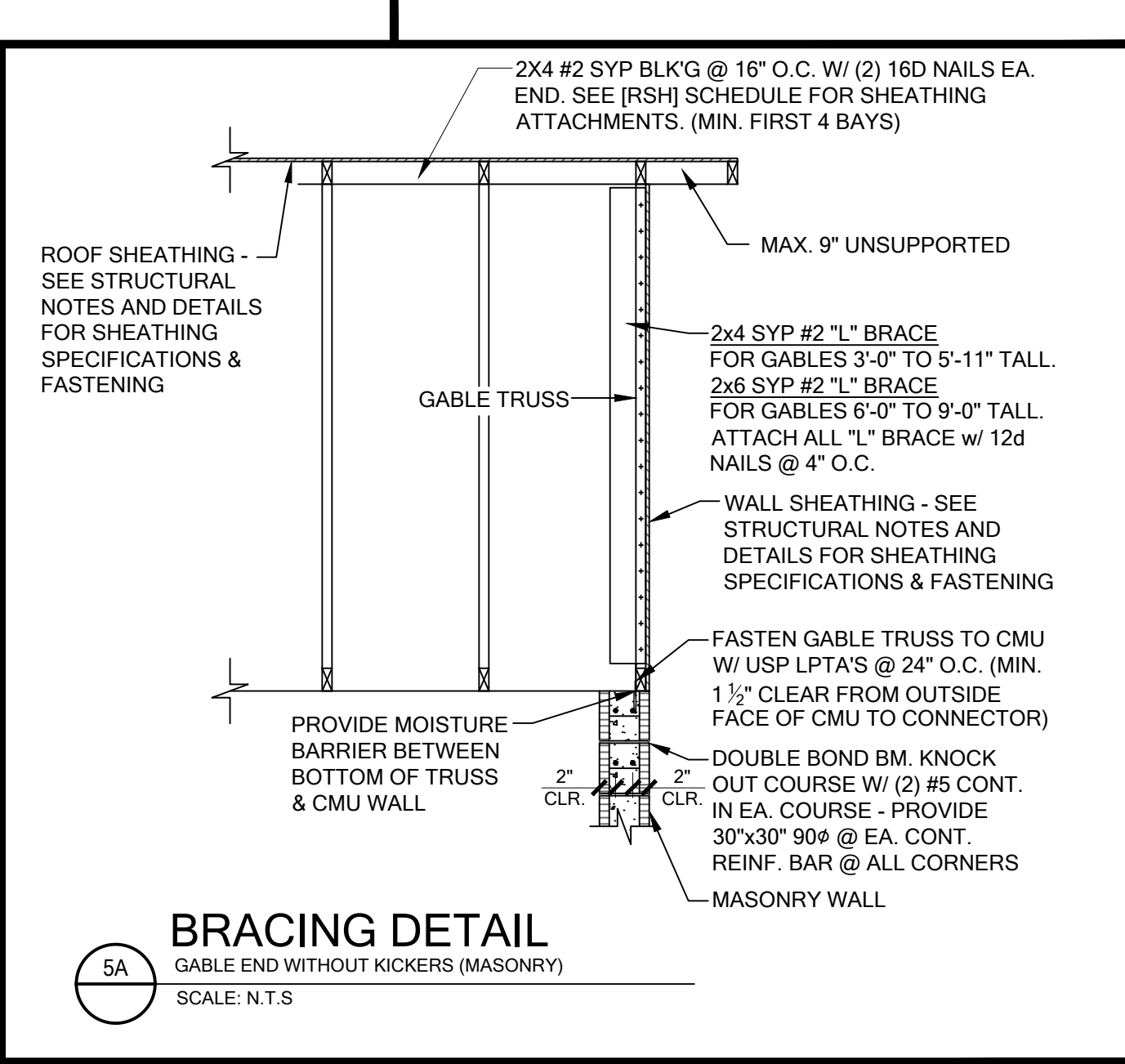
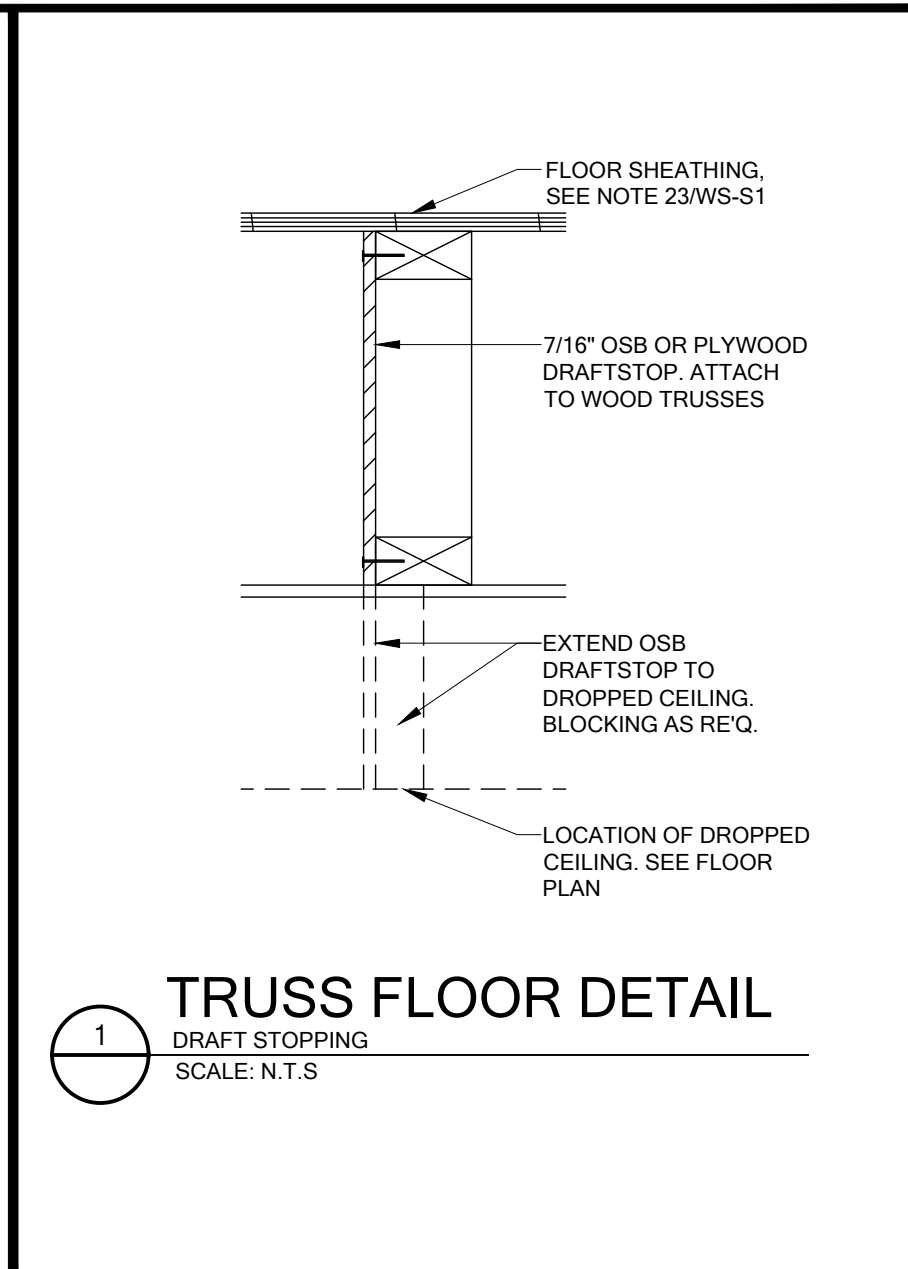
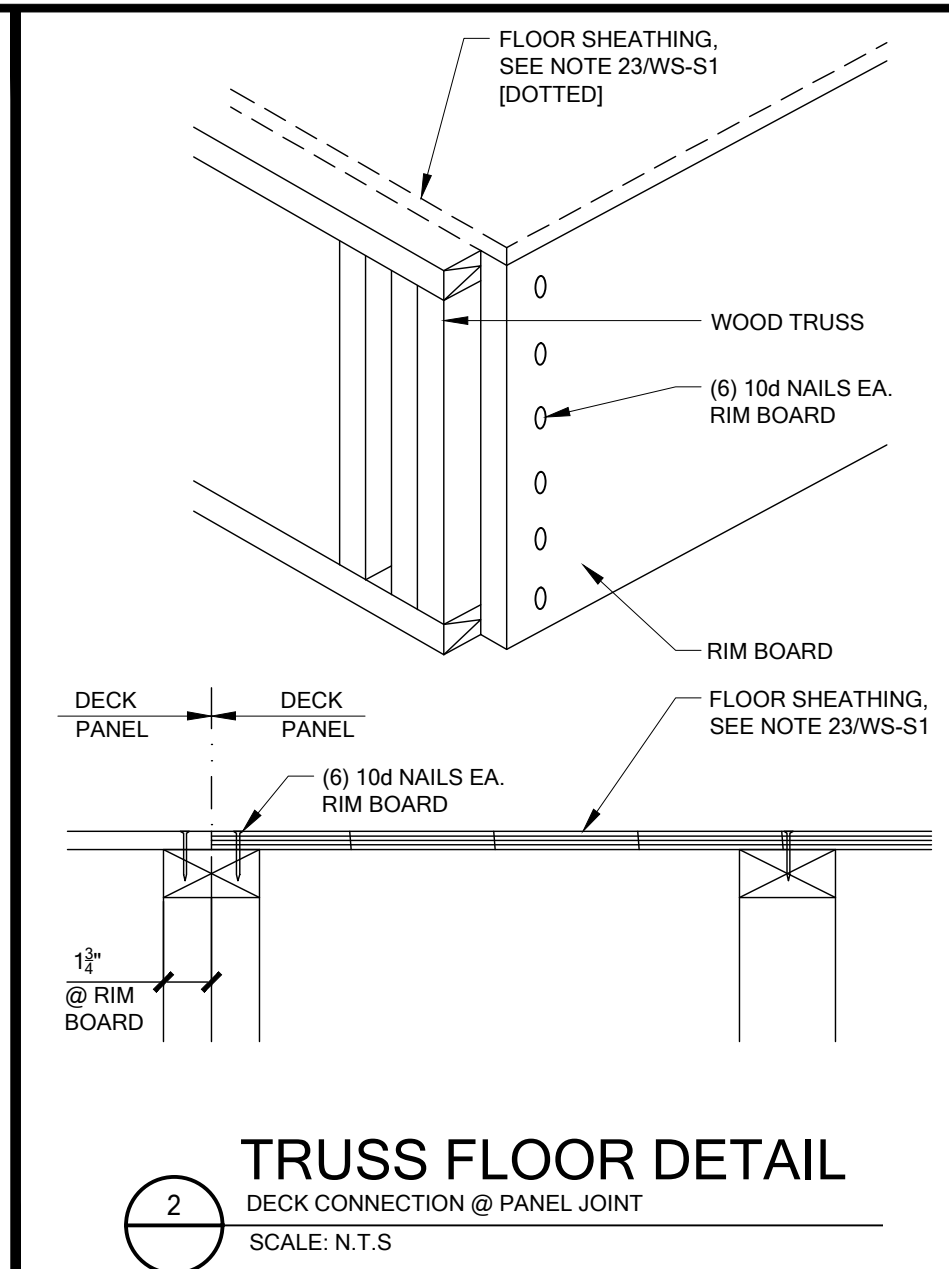
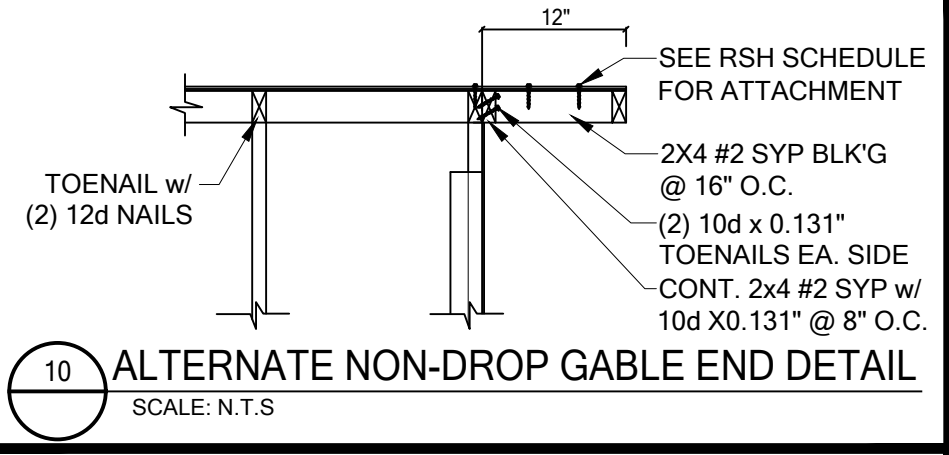
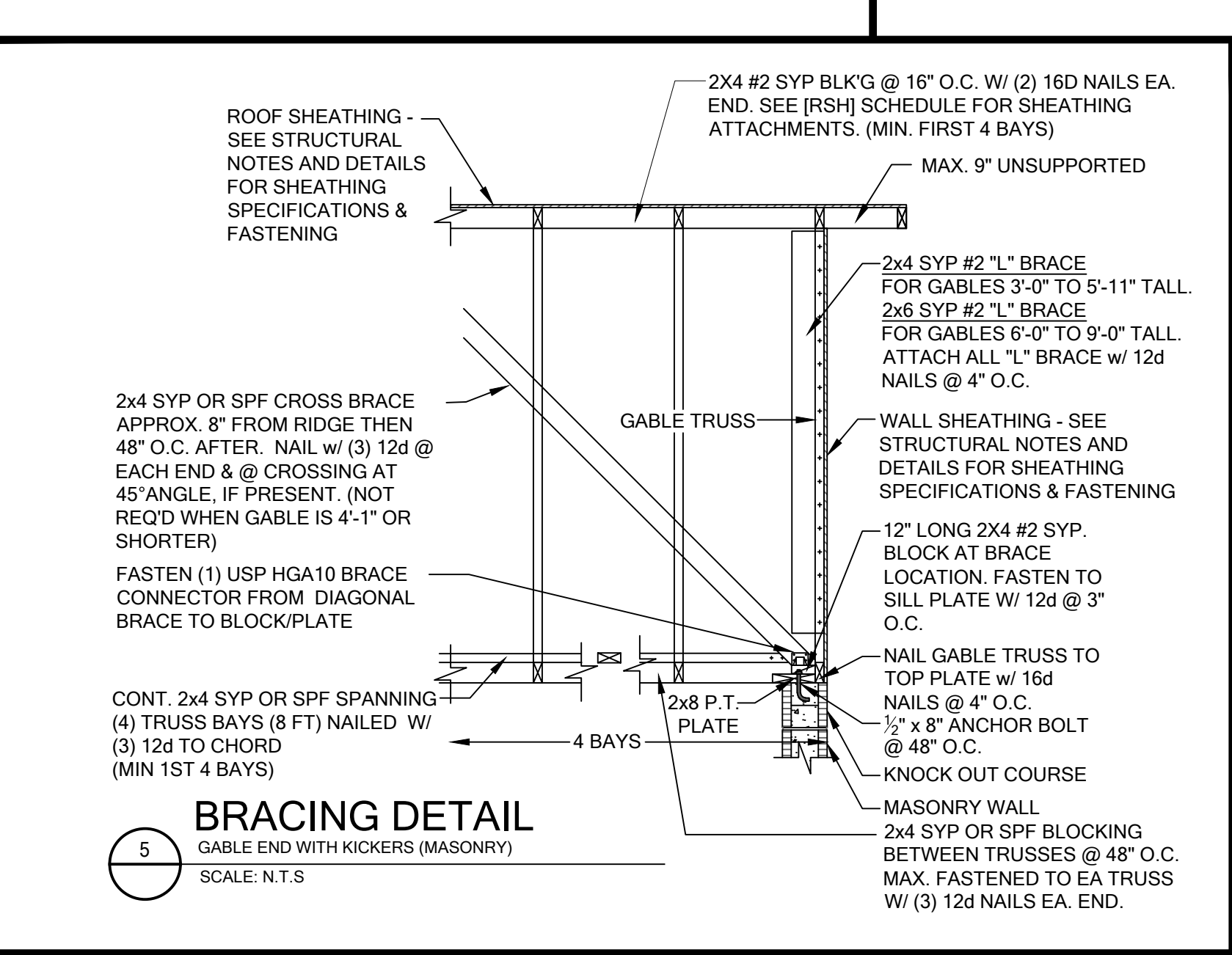
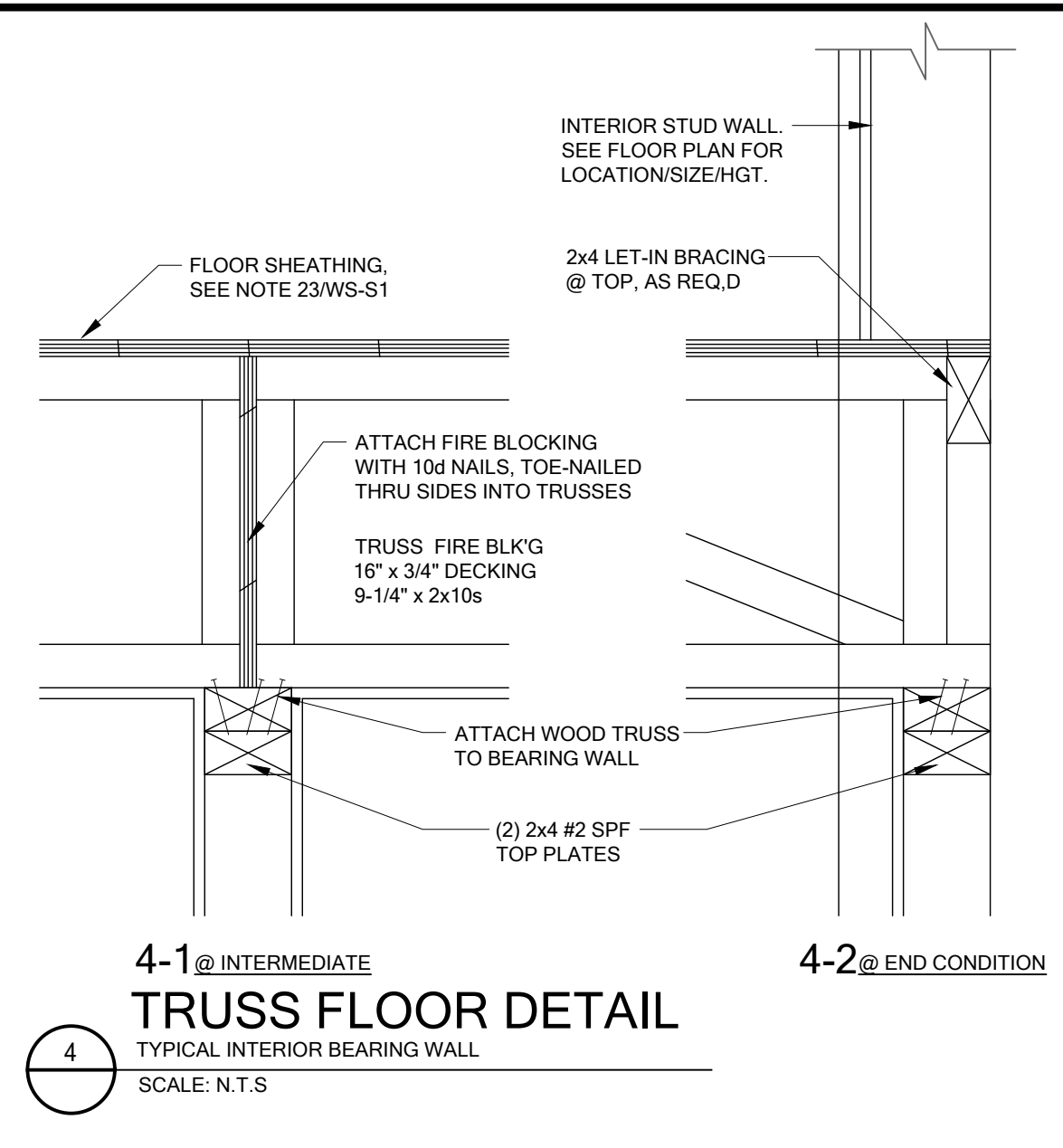
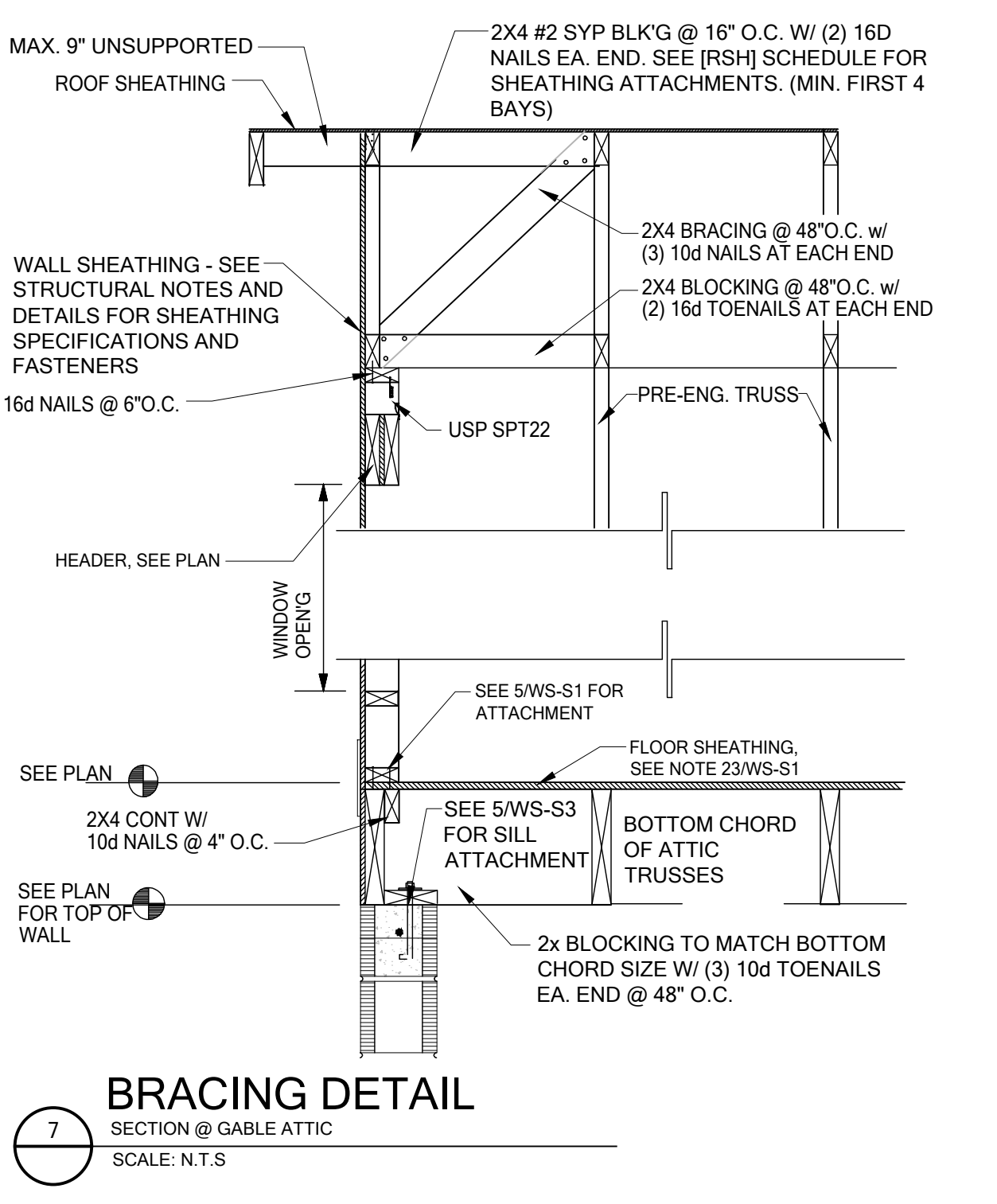
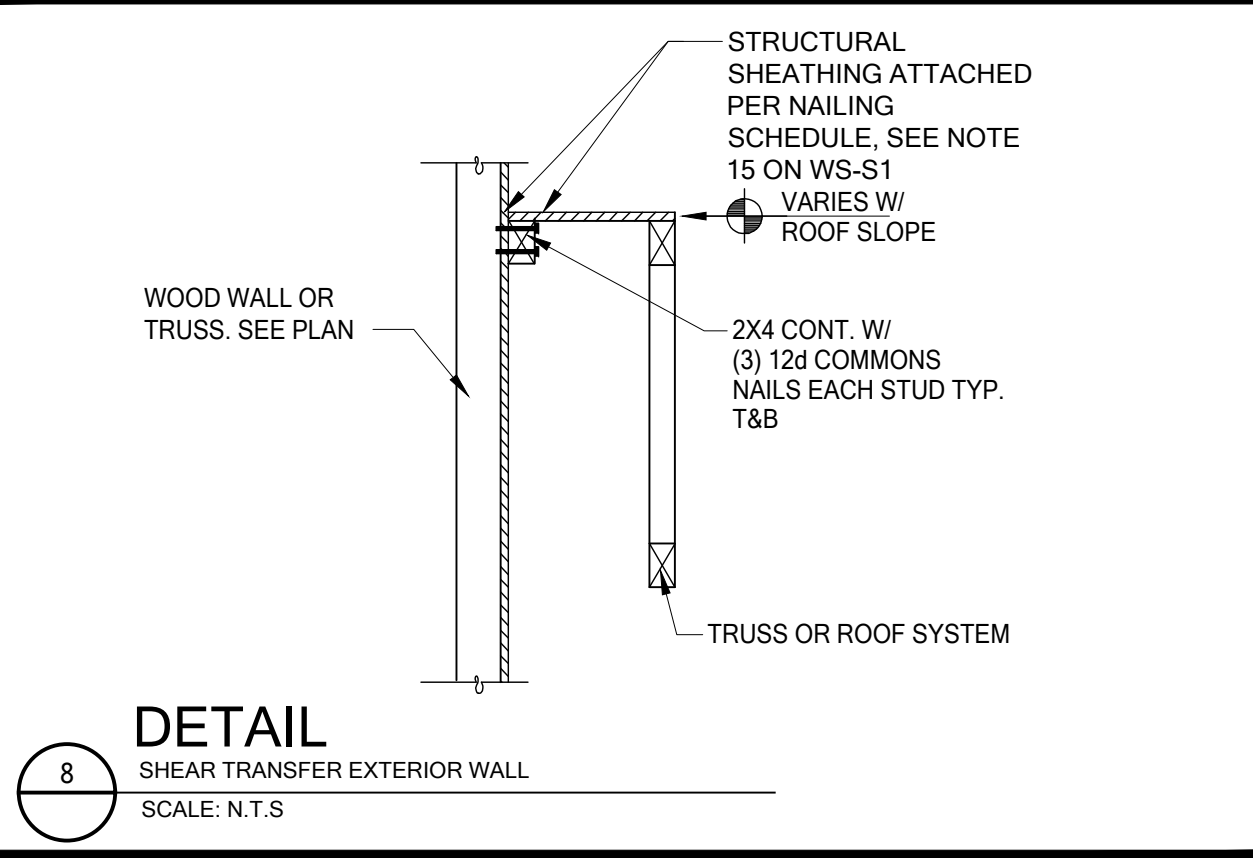
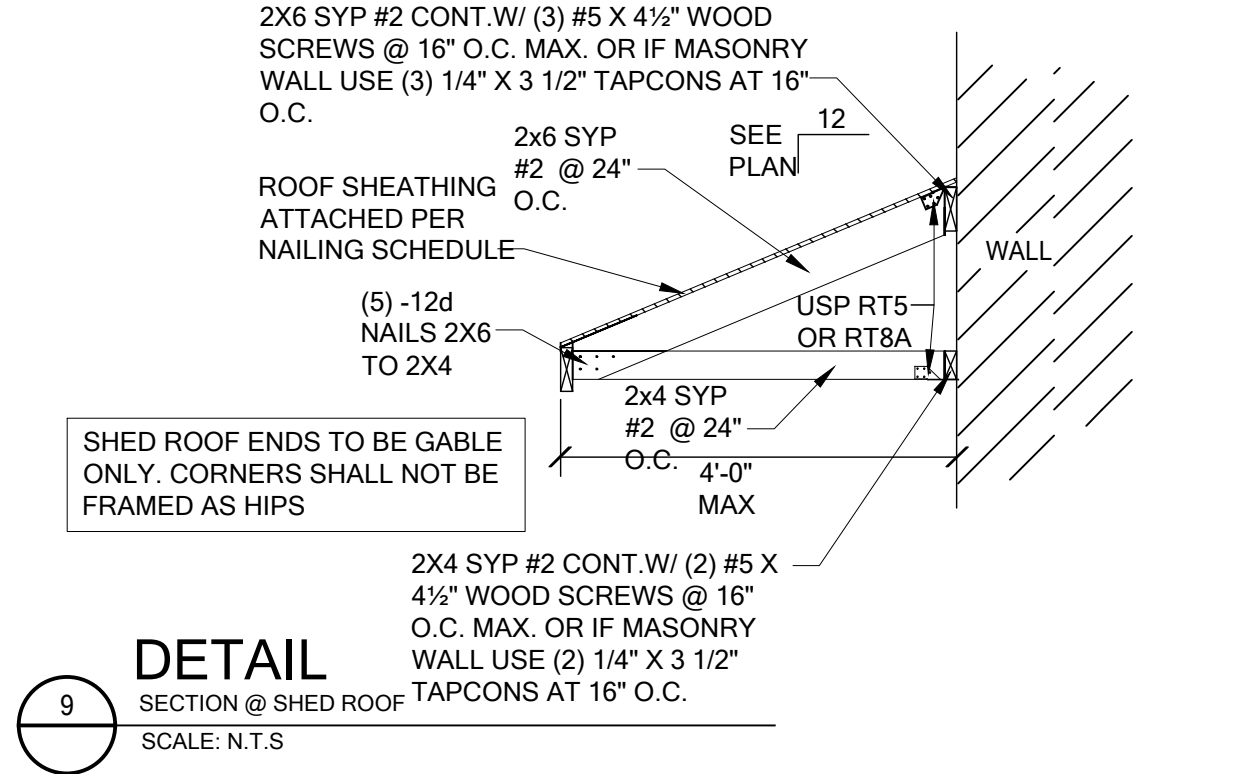
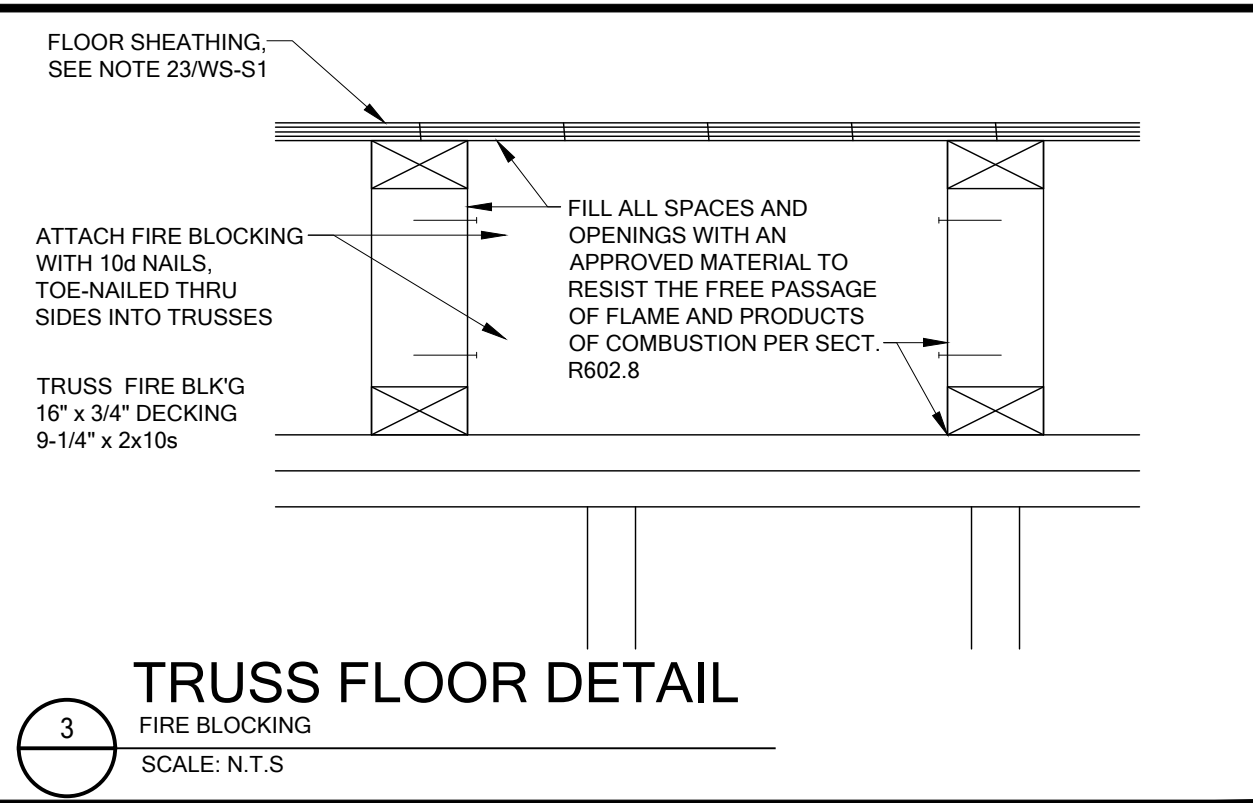
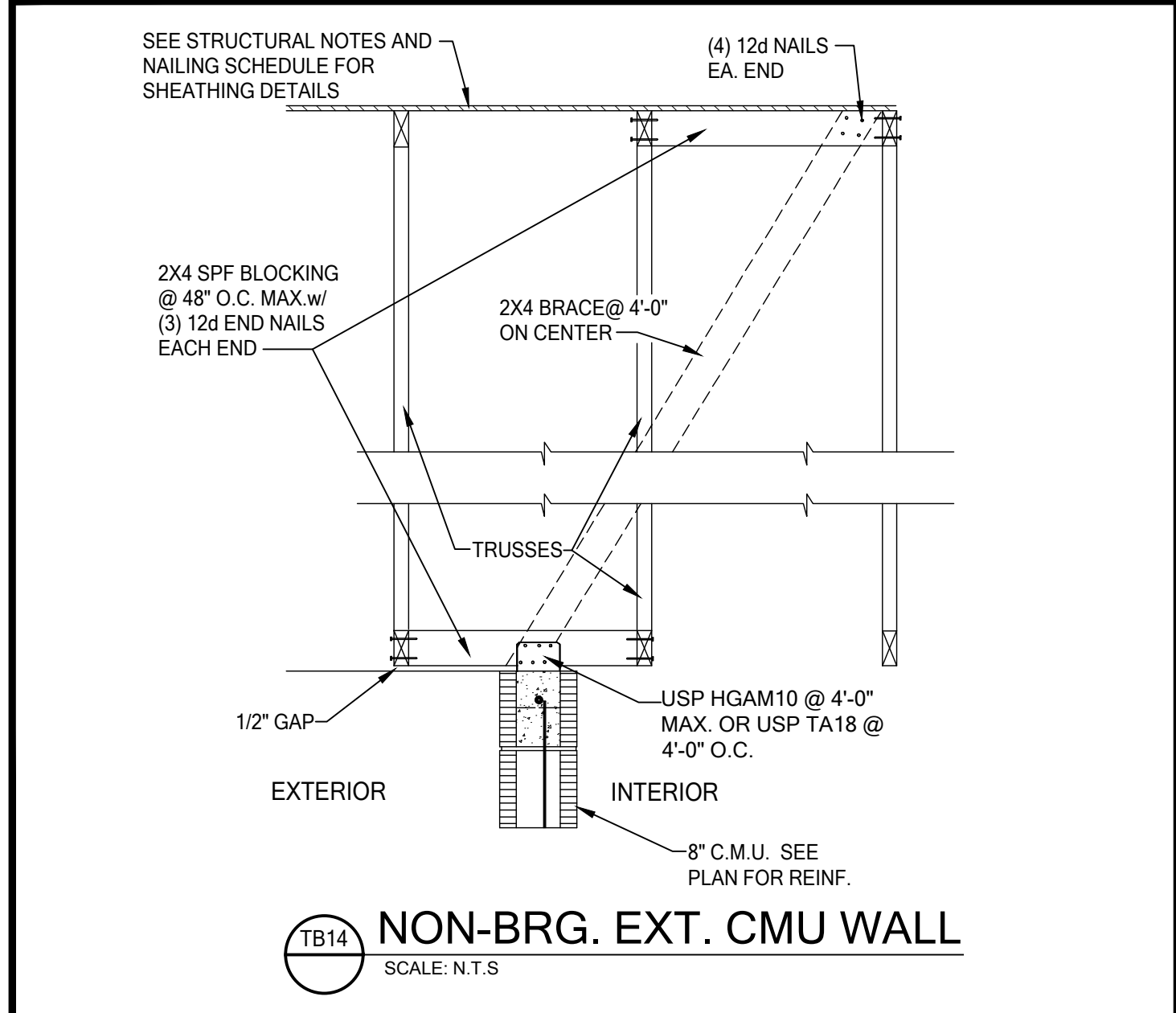
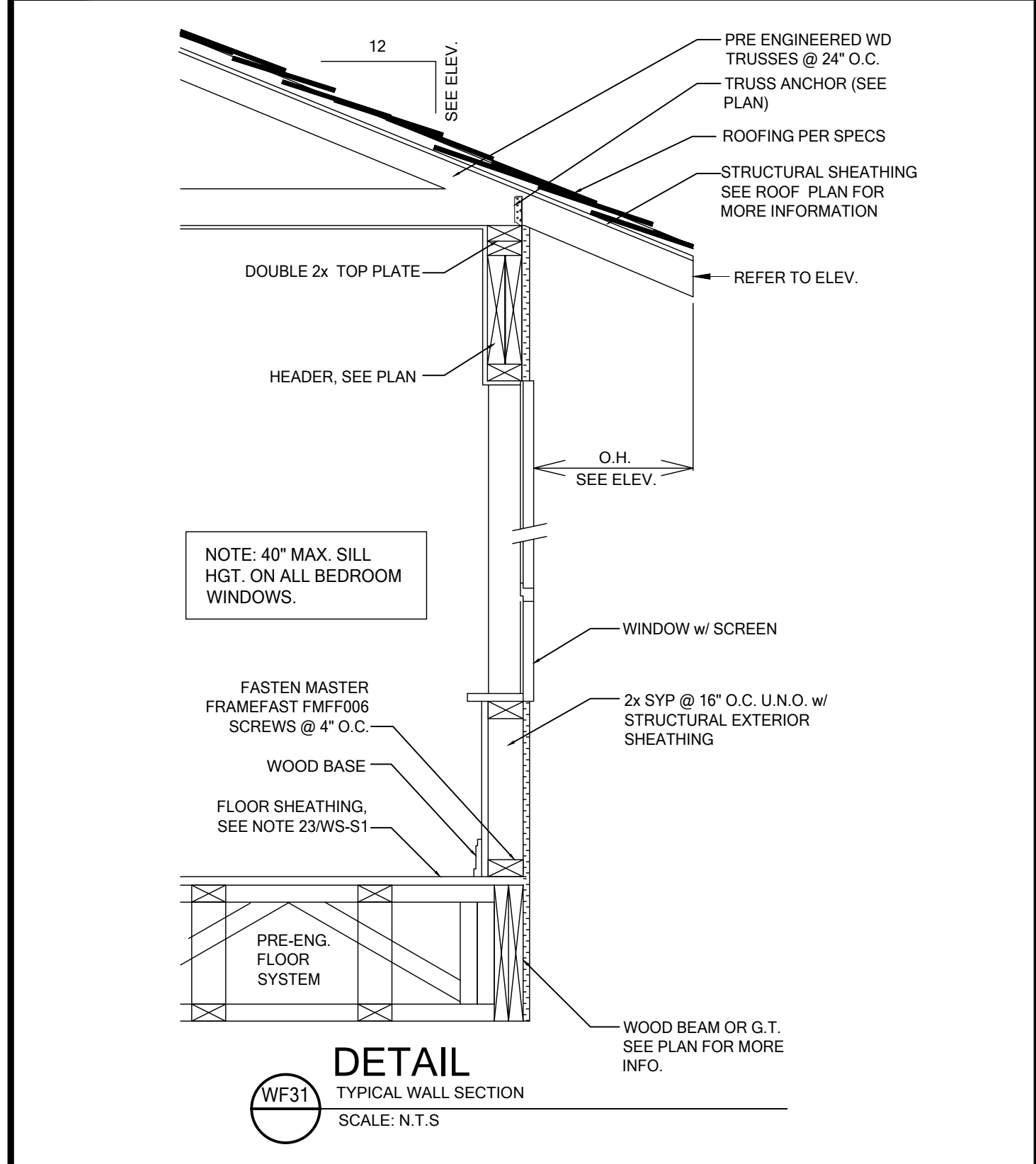
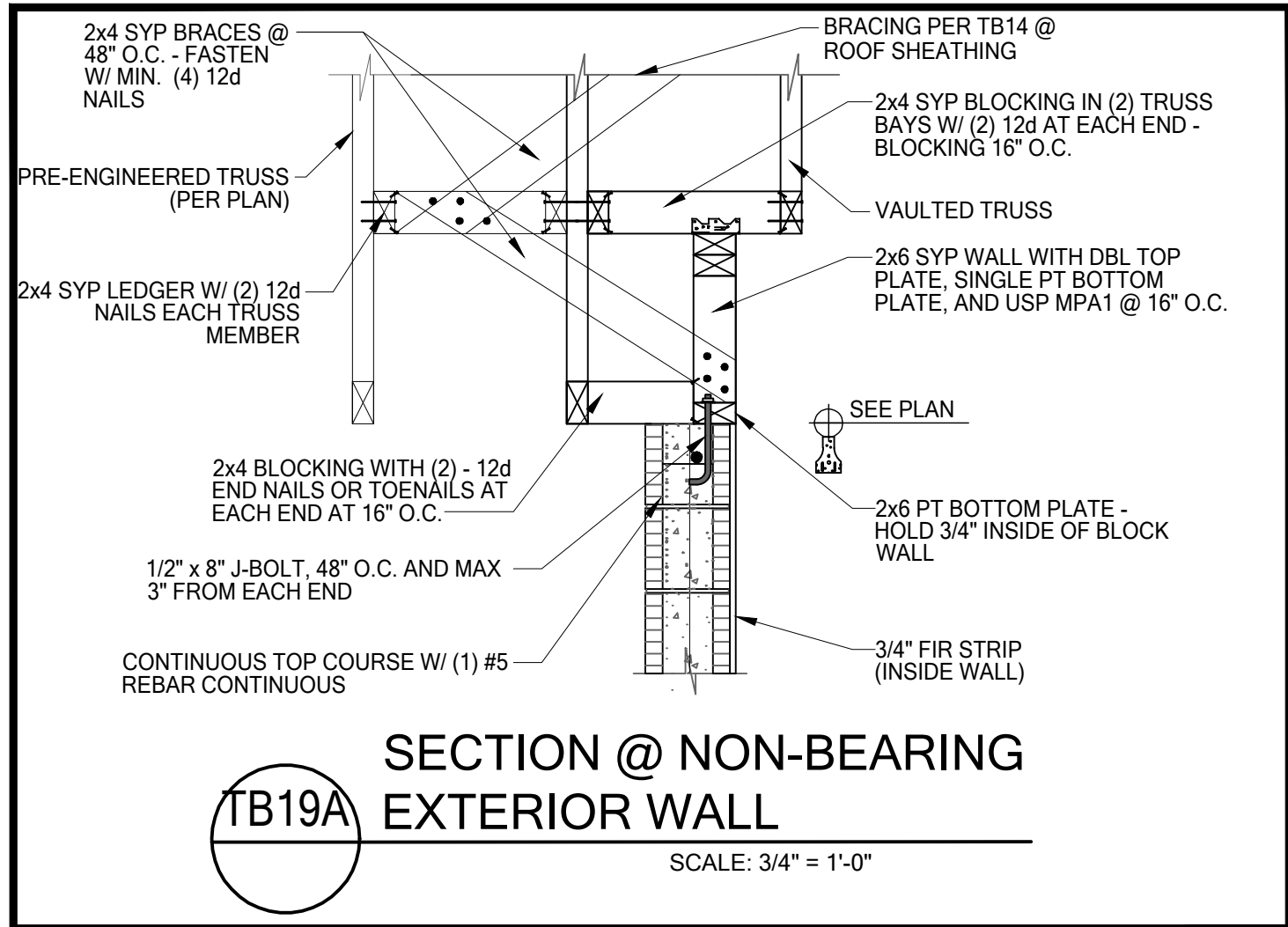
Renaissance Series

Reference No. 25-00446
Sheet:

SN
STRUCT NOTES



45. 7/8 MIN. THICKNESS (3 COAT) EXTERIOR MASONRY PLASTER APPLIED OVER PAPERBACK WIRE LATH ON TYPAR OR EQUAL BUILDING WRAP PAPER.



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01/20/2025

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CA No. 9161 AA26033115

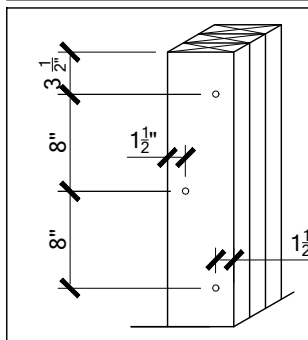
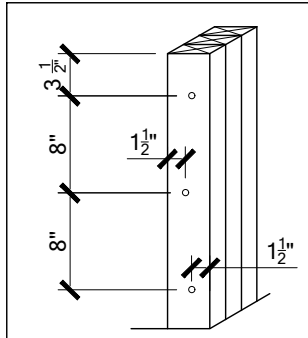
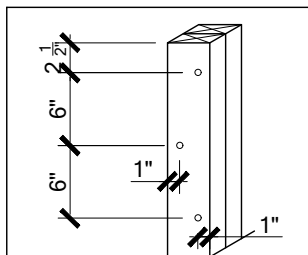
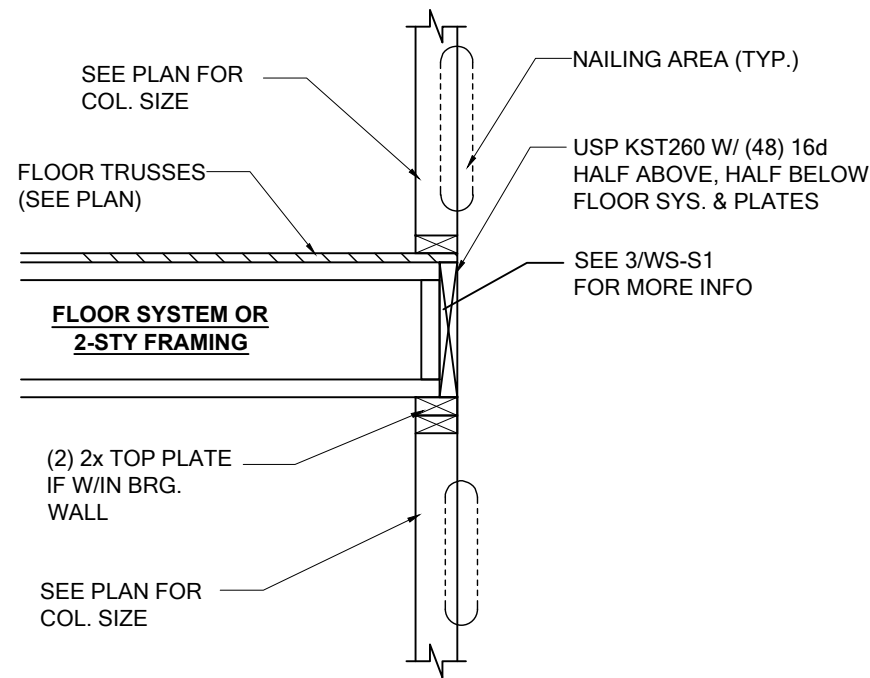
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Community:	Forest Cove	Garage Side:	Right
Plan Name:	Livorno	Elev - B	
Lot:	9	Block:	
Address:	T8D Sw Cadence Glen Lake City, FL 32024		
Job No.	9FC00901		
Reference No.	25-00446		
Sheet:	WS-S3		
DETAILS			

SC07 2-STORY WOOD COLUMN
SCALE: N.T.S.

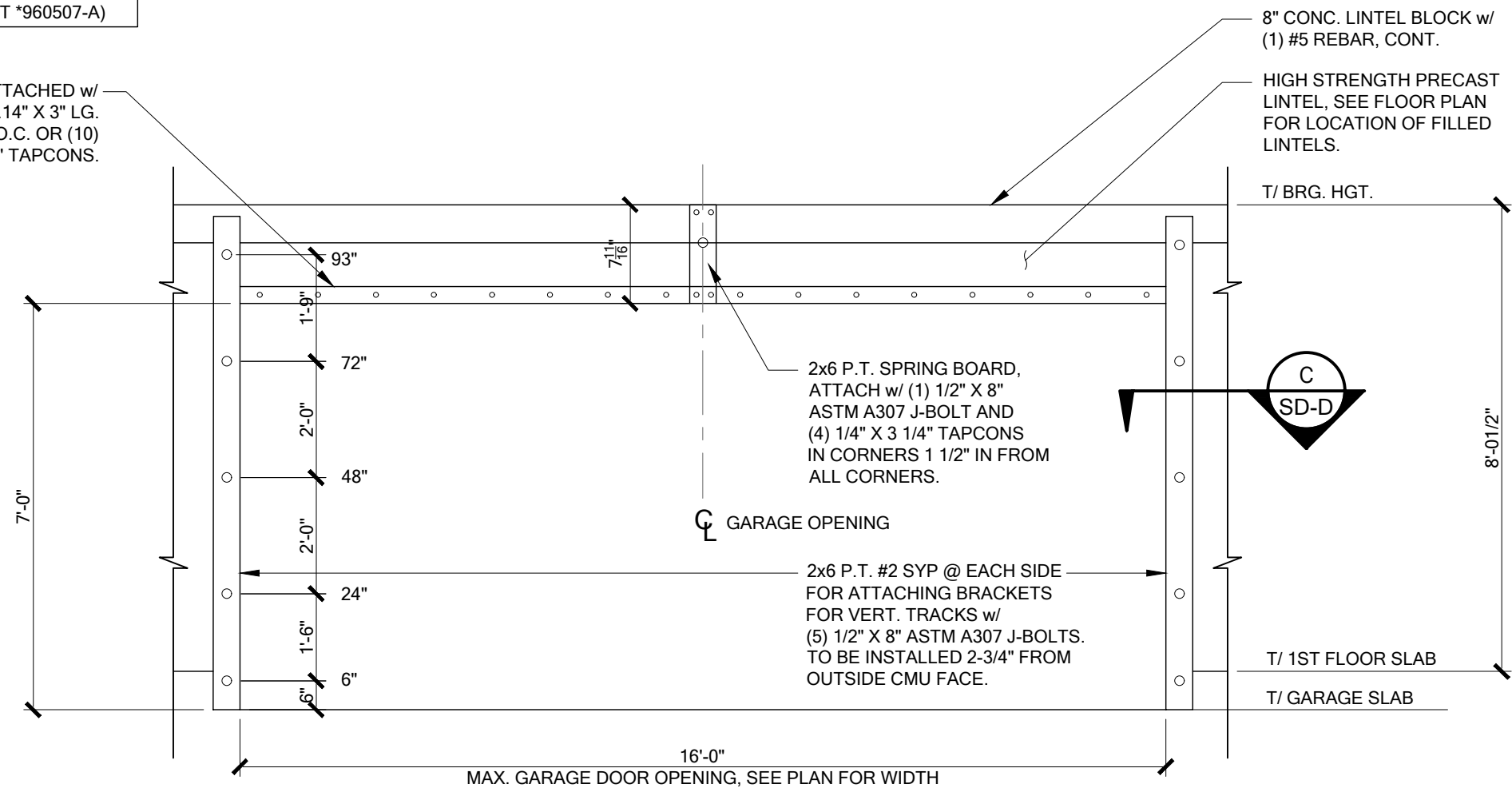


- NOTES:
- 1- ADJACENT NAILS ARE DRIVEN FROM OPPOSITE SIDE OF COLUMN.
 - 2- ALL NAILS PENETRATE AT LEAST 3/4" OF THE THICKNESS OF THE LAST LAMINATION.
 - 3- FOR 4-PLY, PROVIDE 1/4" DIA. X 5 1/2" LAG SCREWS OR EQUAL. (SPACE AS SHOWN FOR 3-PLY)
 - 4- REFER TO NDS SECTION 15.3 FOR ADDITIONAL INFORMATION.

K STD. NAILING FOR BUILT-UP COLUMNS

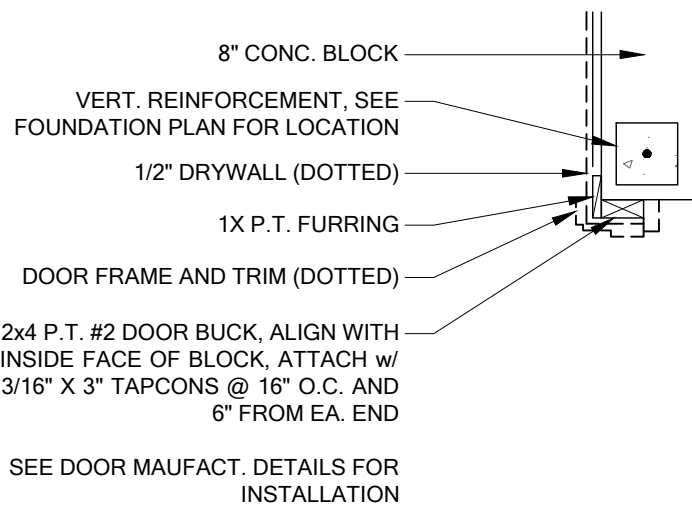
CONTRACTOR NOTE:
INSTALLATION FOR GARAGE DOOR
TYPES (AS PER TEST *960507-A)

2x4 P.T. SYP ATTACHED w/
POWER ACTUATED 0.14" X 3" L.G.
SHOTS @ 12" O.C. OR (10)
3/16" X 3" TAPCONS.

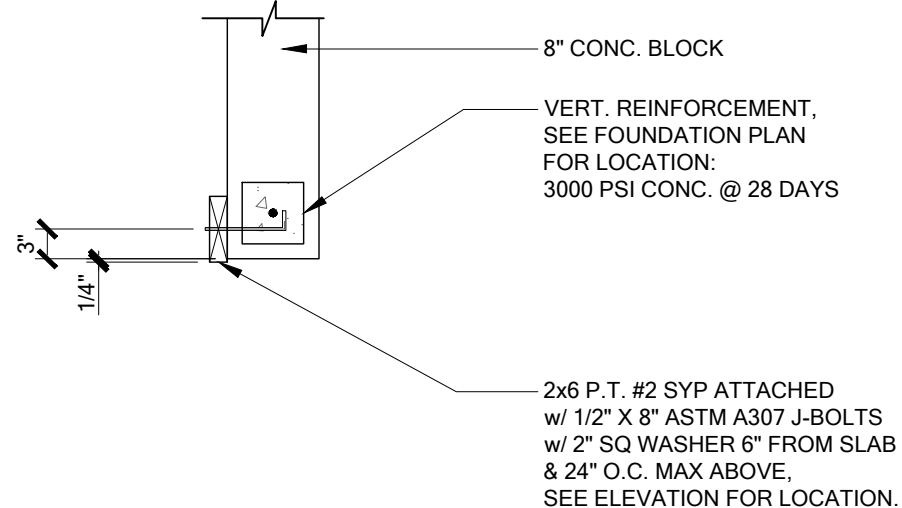


NOTES:
SIDE JAMB ATTACHMENT IS PER ACI 530.1 CHAPTER 2 ASD SECTION 2.1.4
[SUPERCEDES WAYNE DALTON JAMB ATTACHMENT SUPPLEMENT]

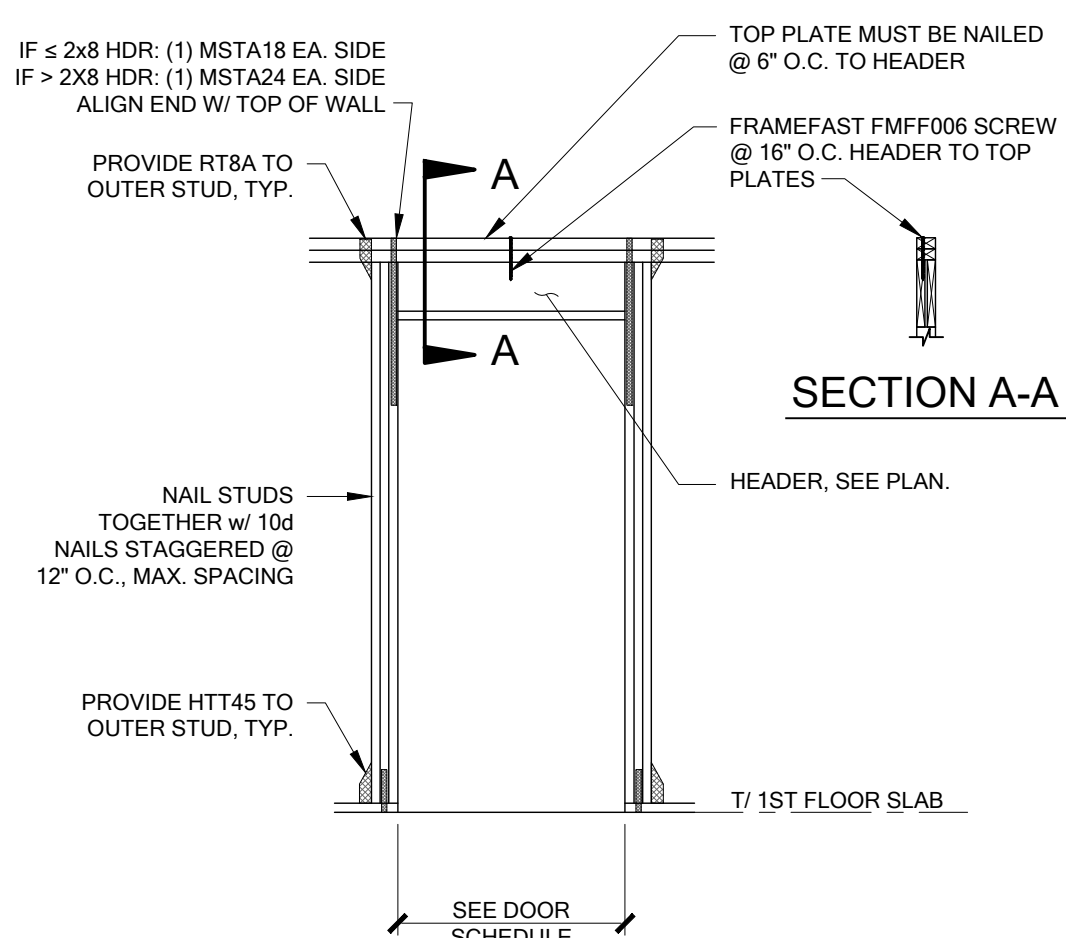
G GARAGE DOOR ELEVATION
SCALE: N.T.S.



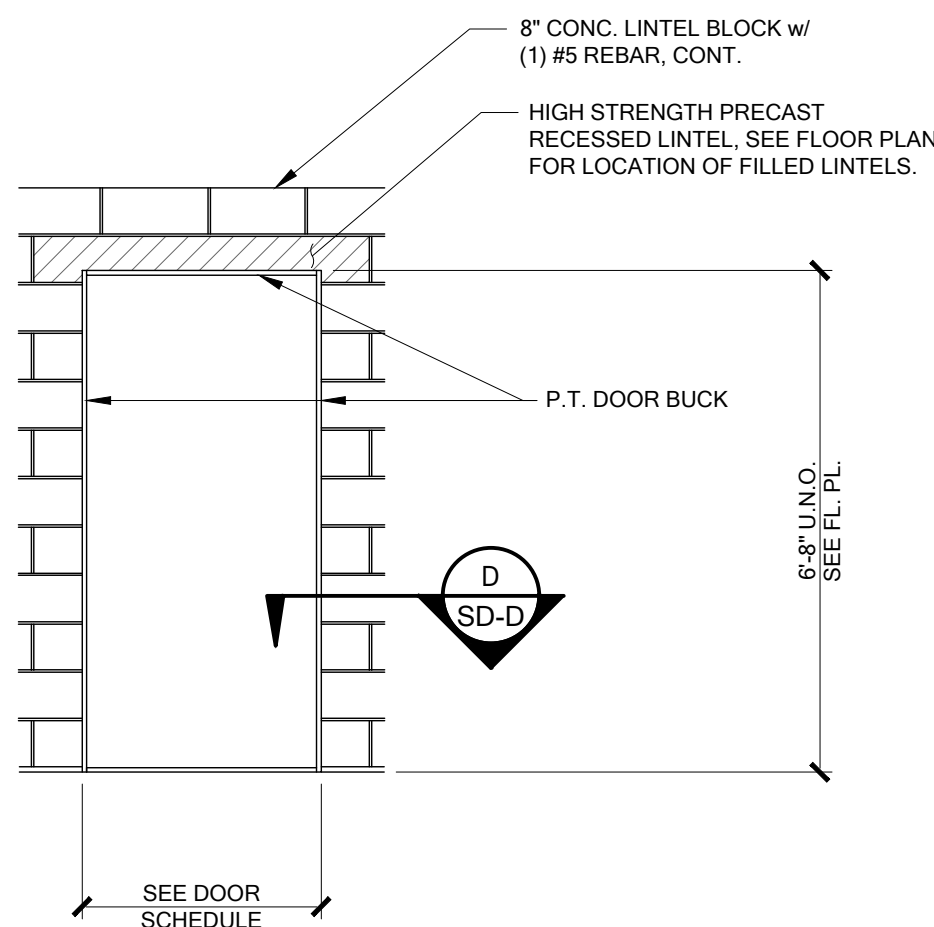
D 2X DOOR BUCK DETAIL
SCALE: N.T.S.



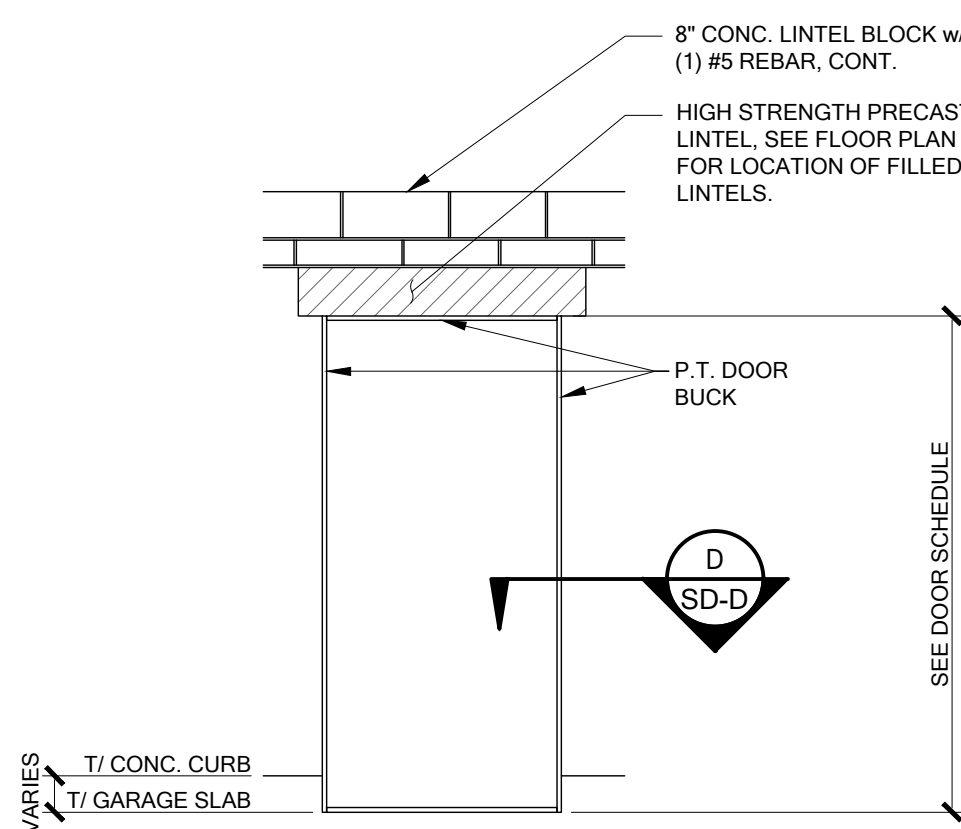
C GARAGE DOOR BUCK DETAIL
SCALE: N.T.S.



J BRG. OR SHEAR WALL
FRM'G @ HEADER w/ UPLIFT
SCALE: N.T.S.

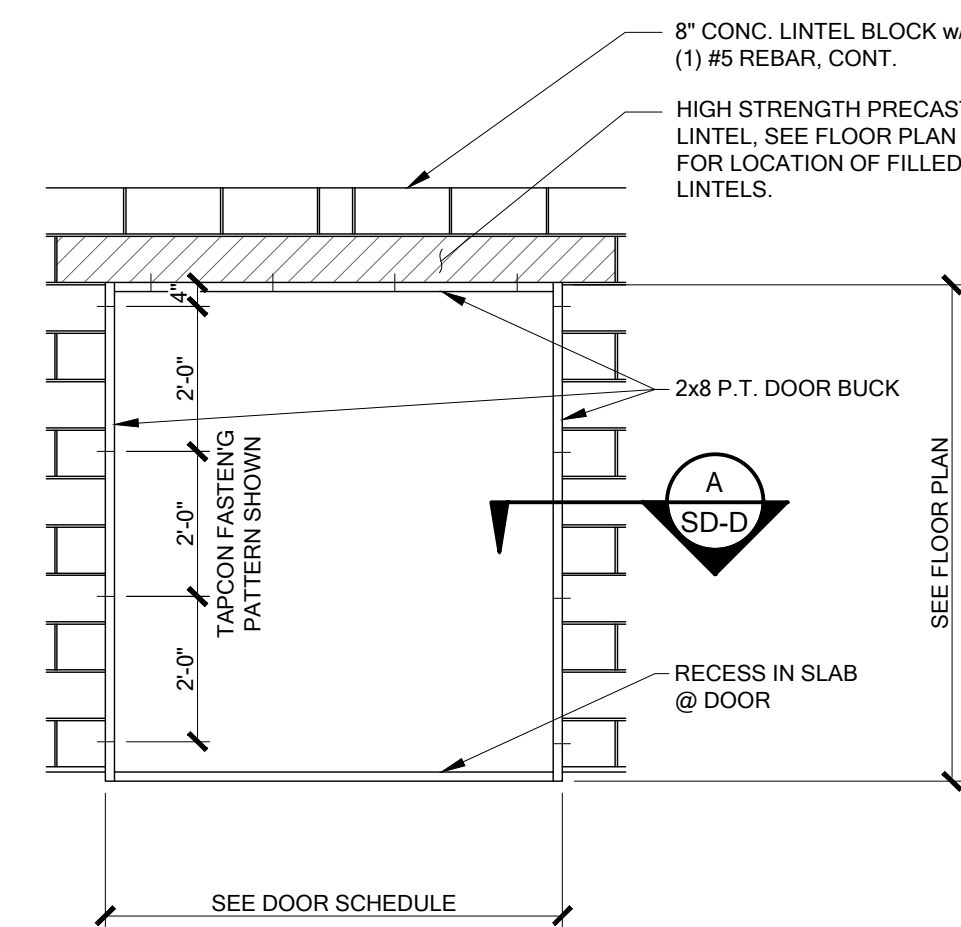


F STANDARD DOOR ELEVATION
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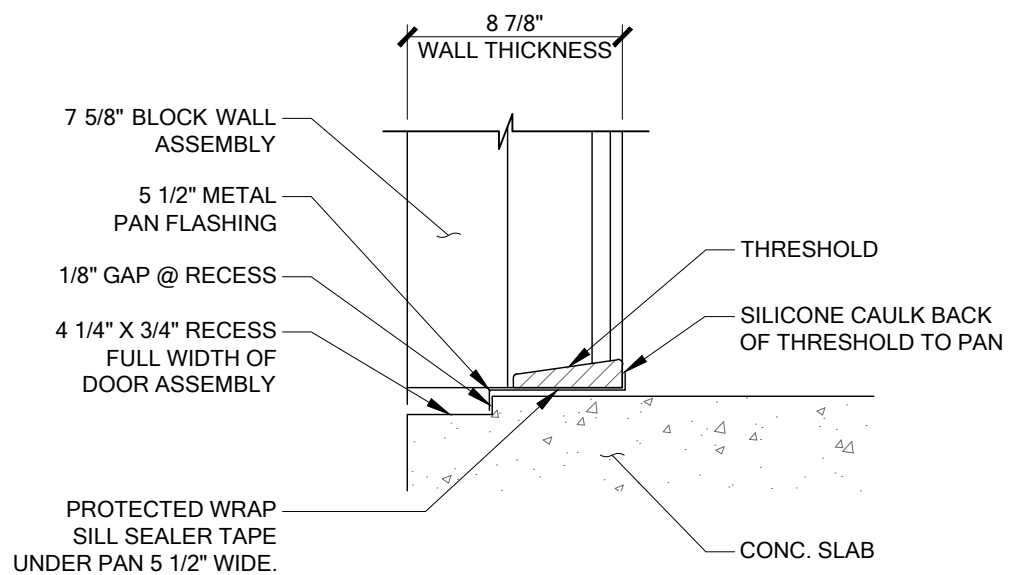


H OPTIONAL SERVICE DOOR
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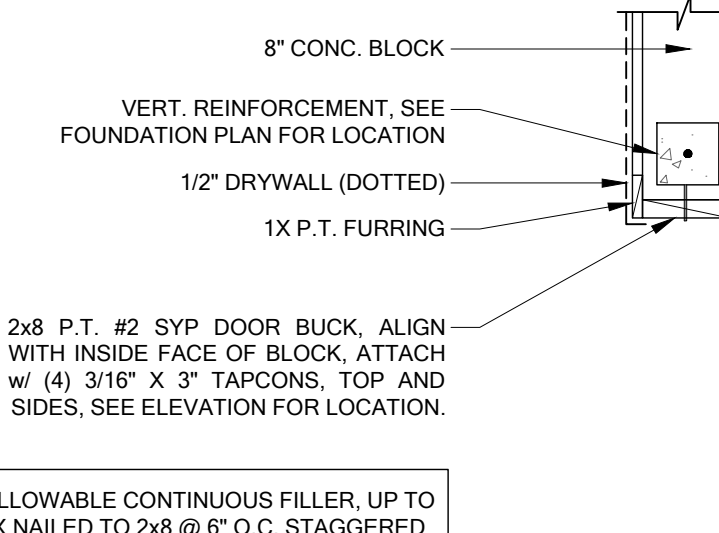
CONTRACTOR NOTE:
FOR INSTALLATION SIZES OF
SLIDING DOOR UP TO 8'-0" X
6'-8" TO 8'-0" X 8'-0" MAX.
(AS PER TEST #96-0608.20)



E SLIDING GLASS DOOR ELEVATION
SCALE: N.T.S.



B DOOR PAN FLASHING
SCALE: N.T.S.



A SLIDING GLASS BUCK DETAIL
SCALE: N.T.S.

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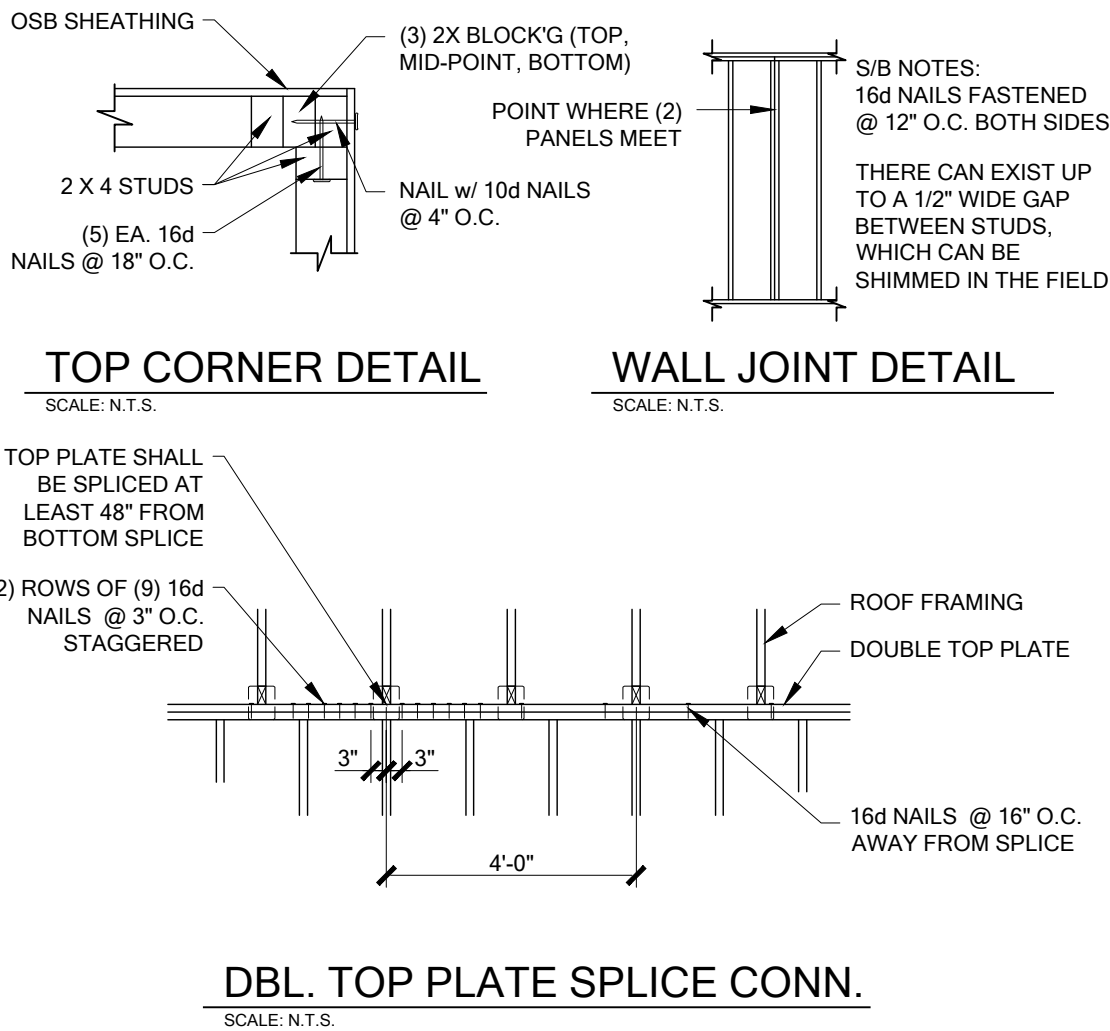
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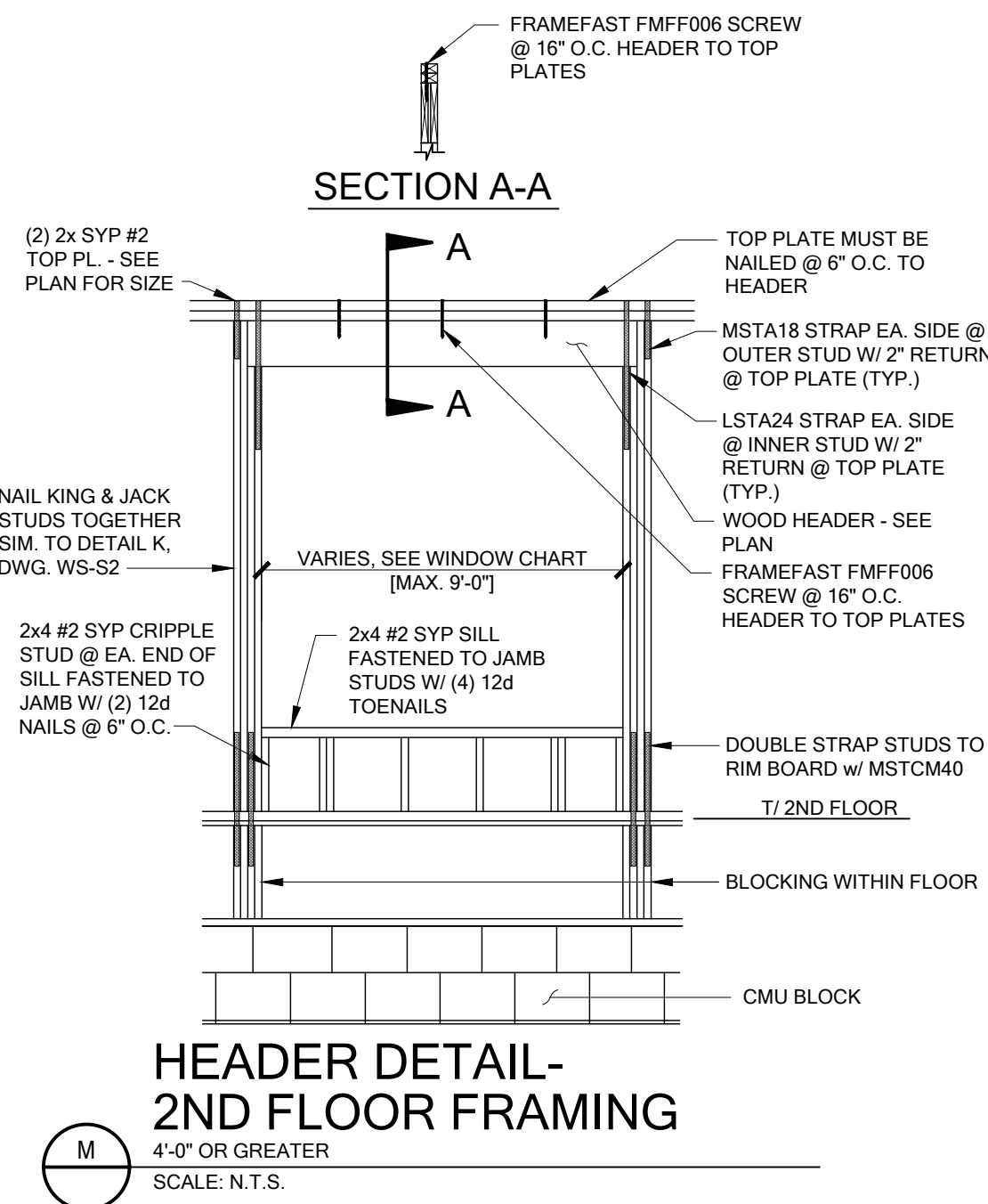
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Community:	Forest Cove	Garage Side:	Right
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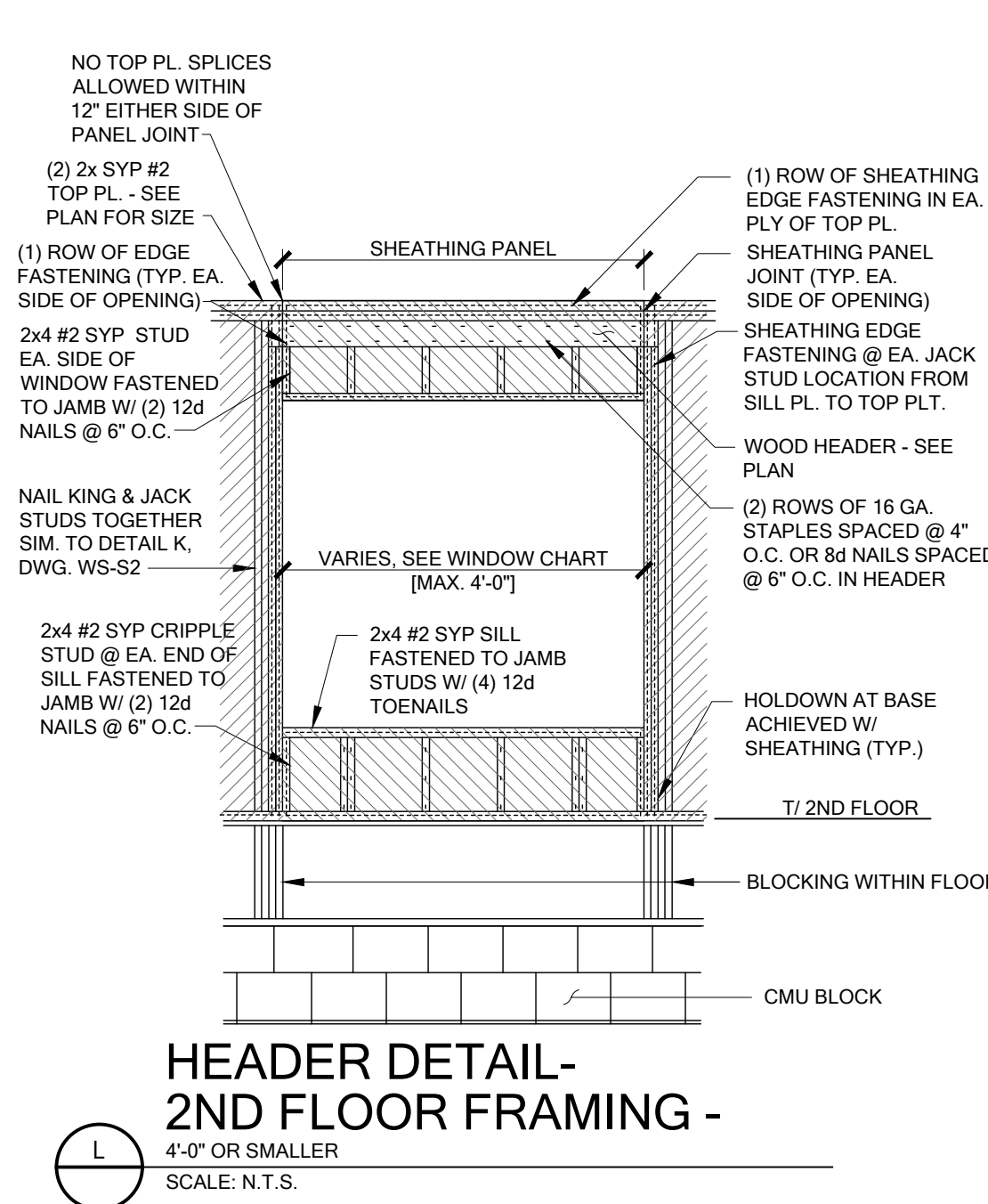
SD-D
DETAILS



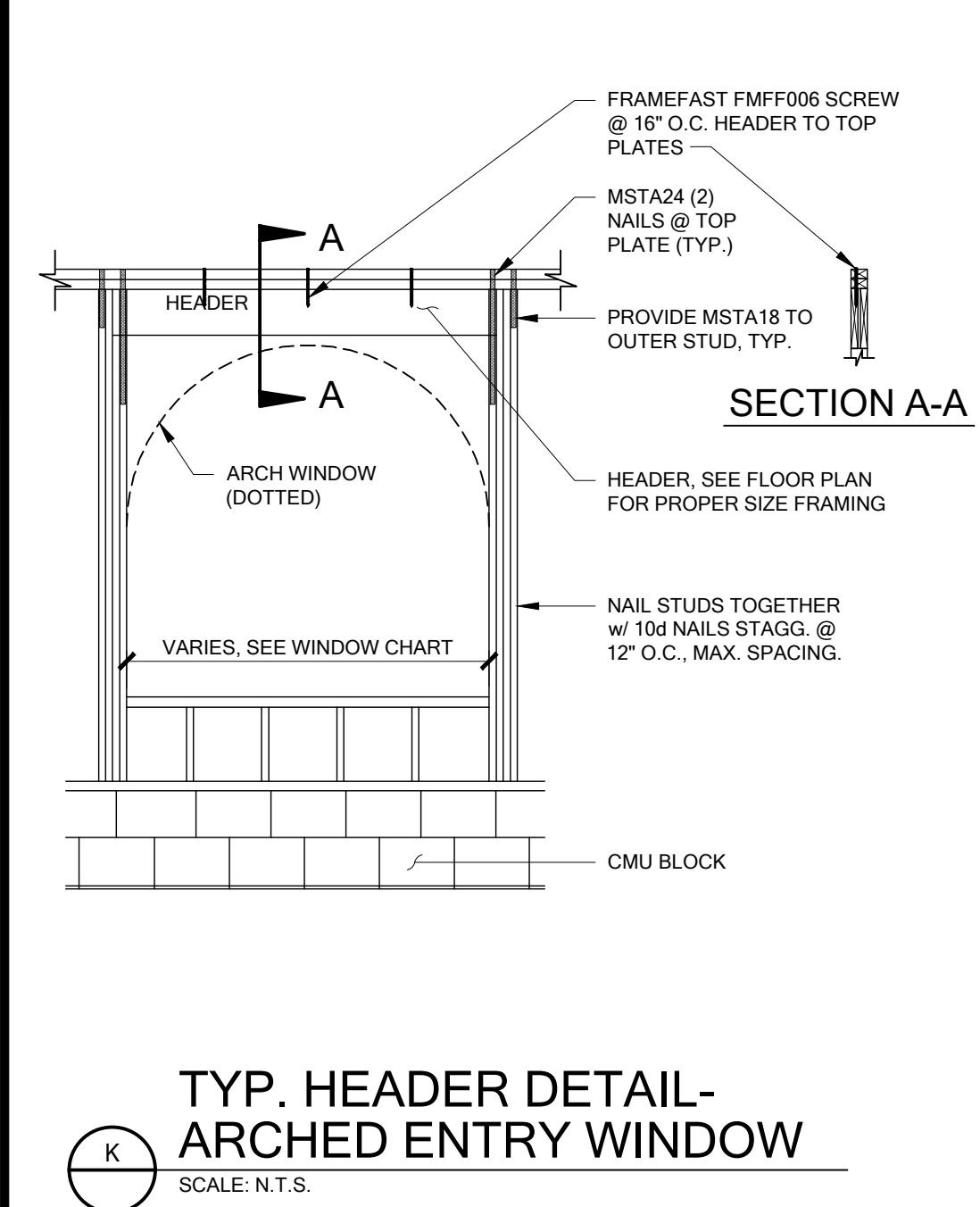
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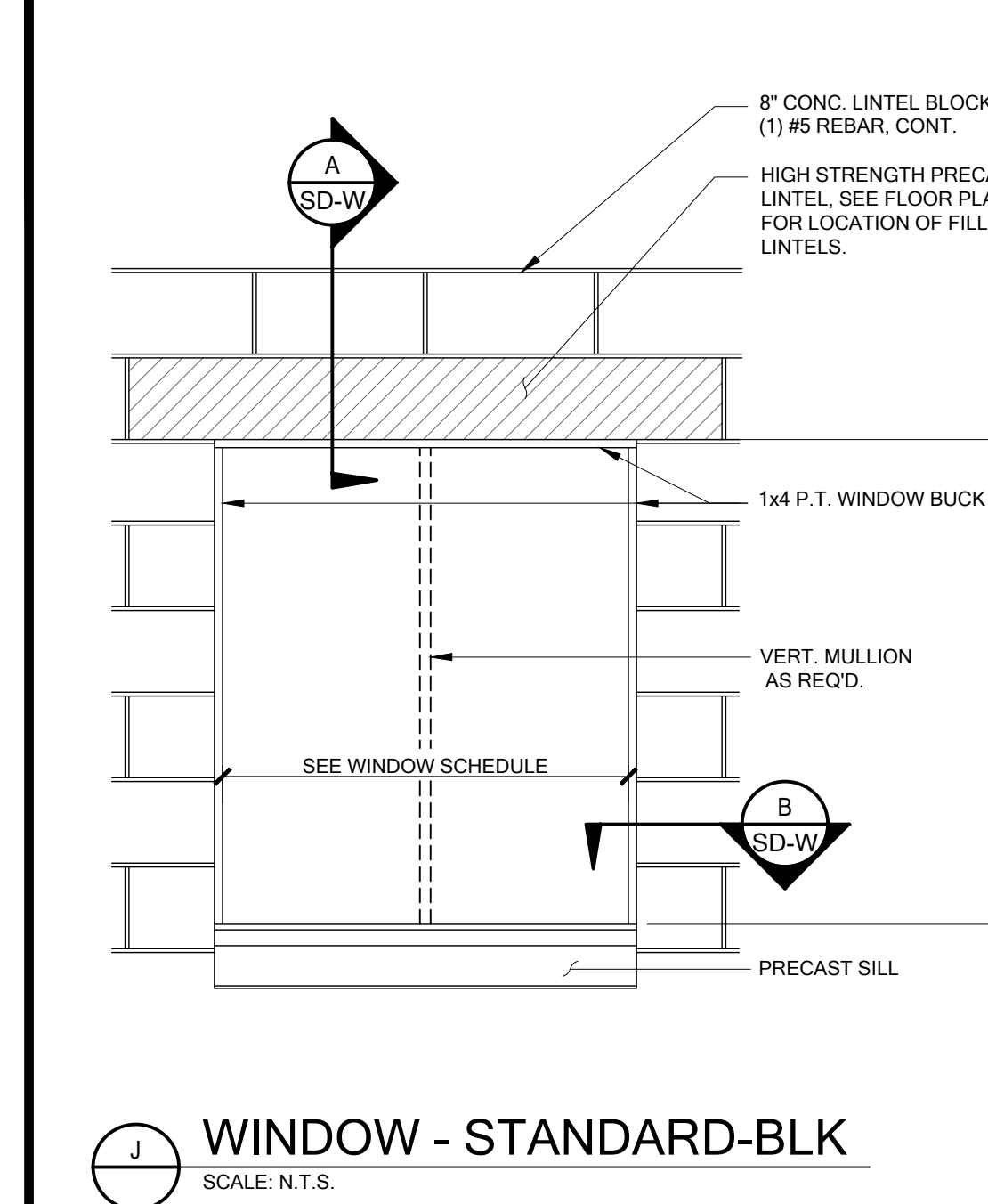
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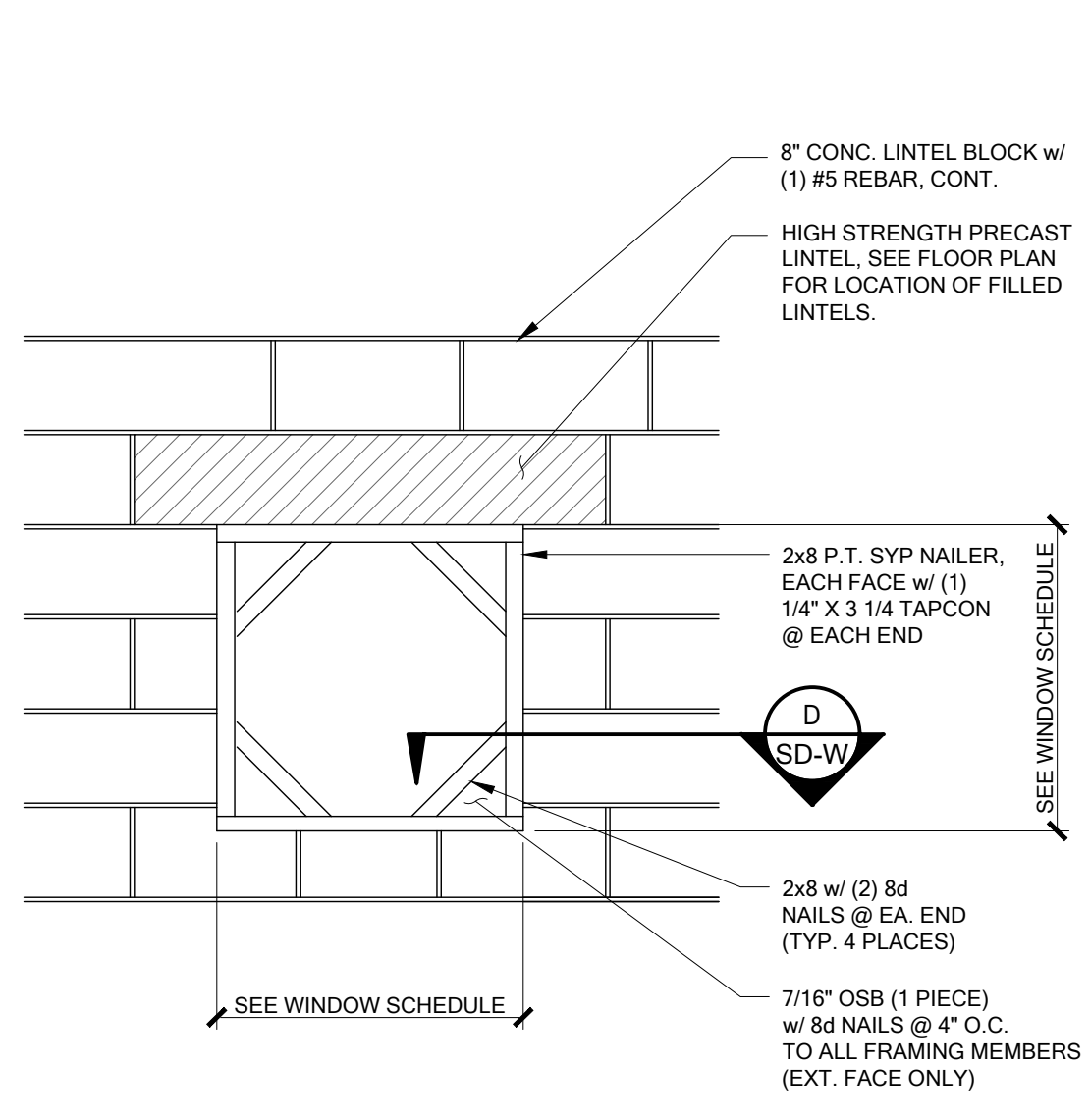
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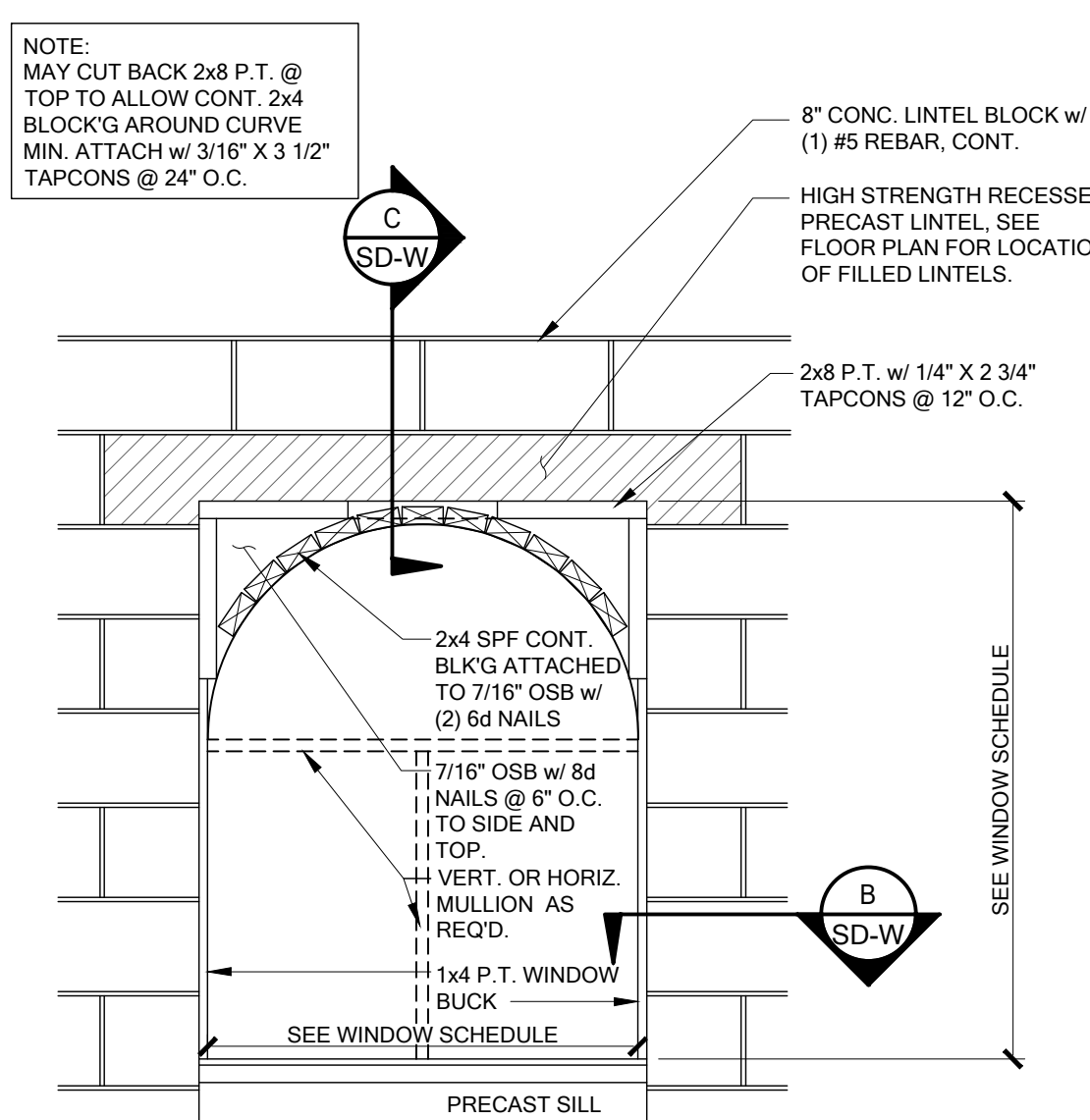
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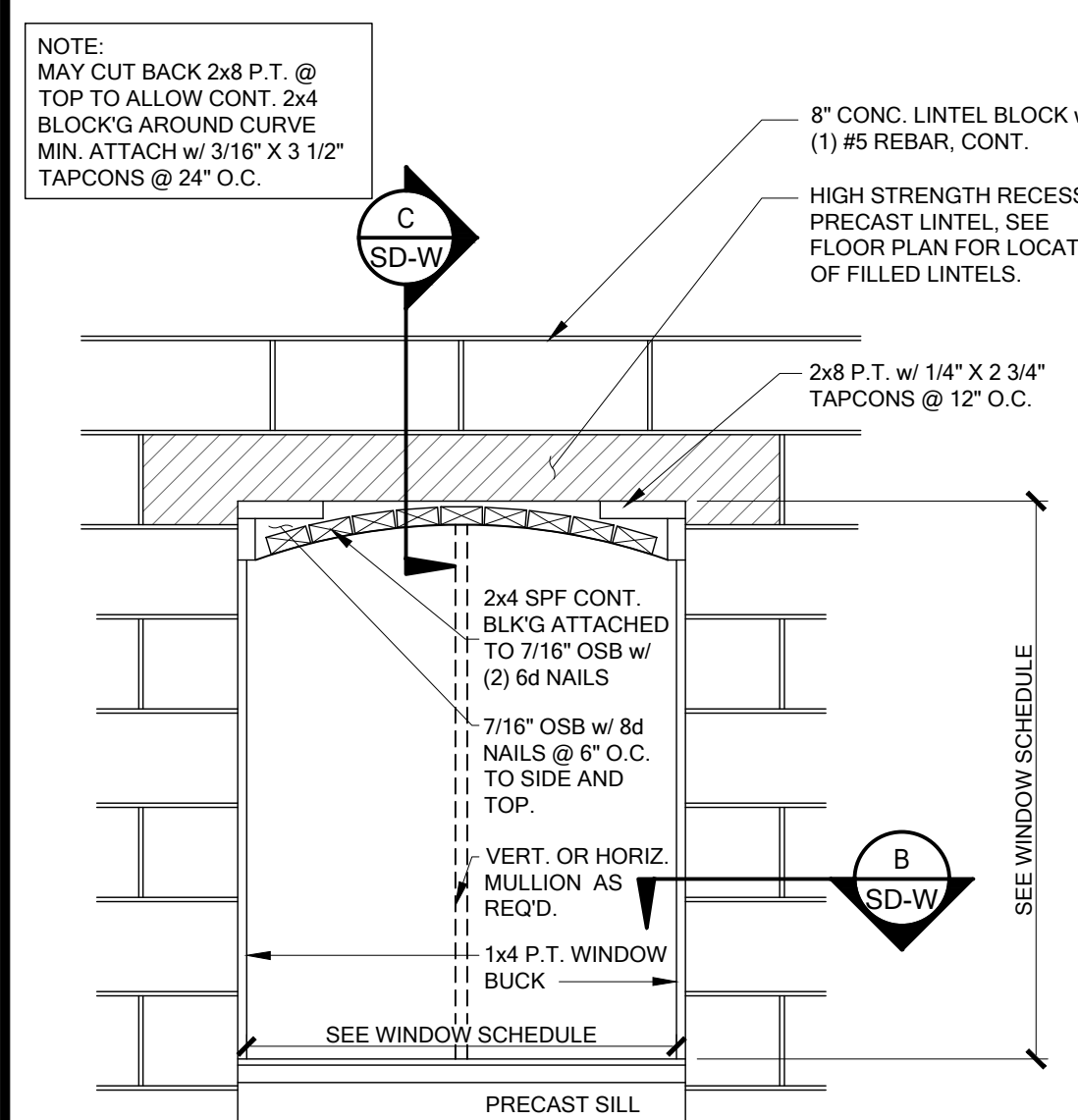
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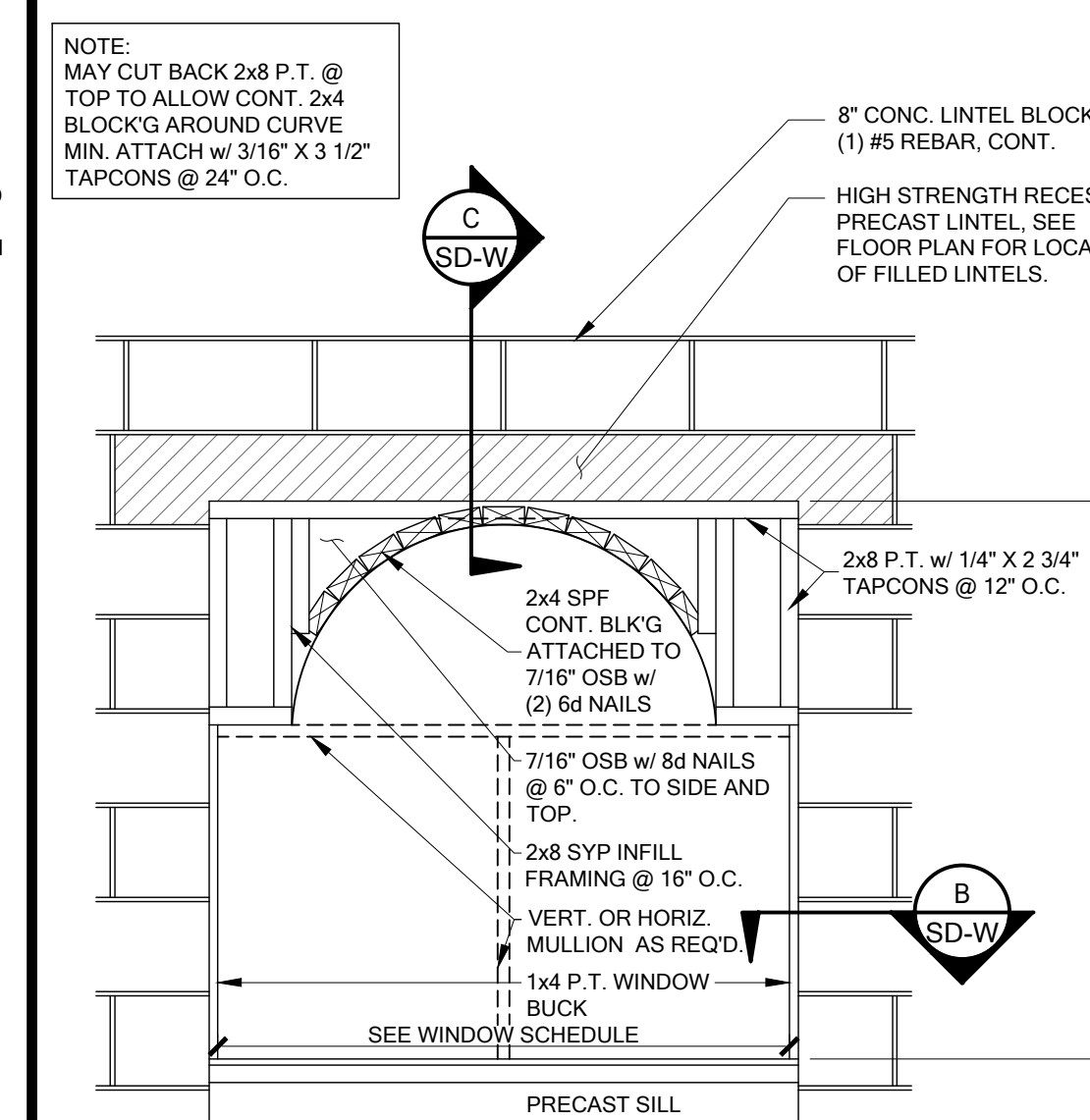
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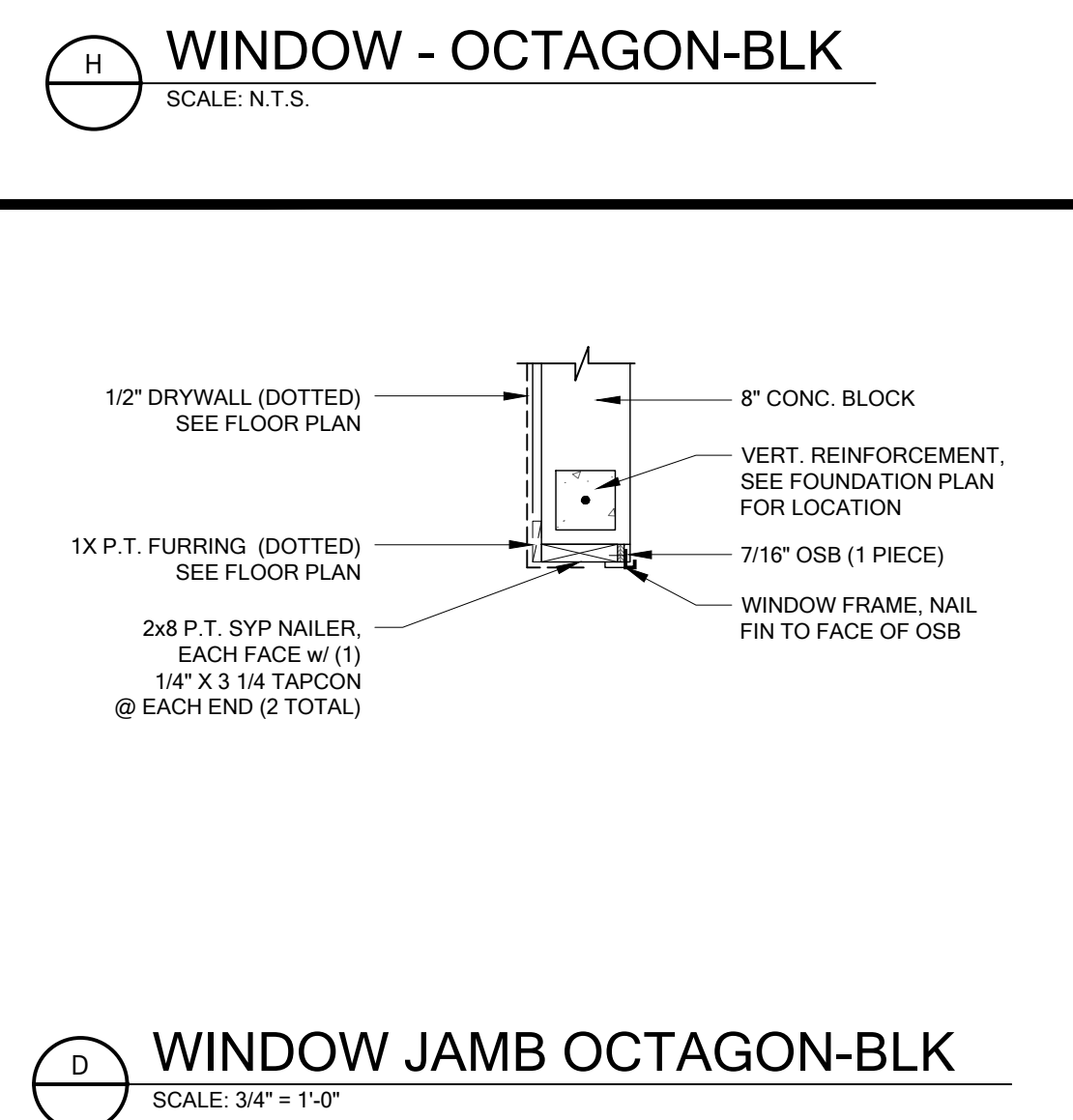
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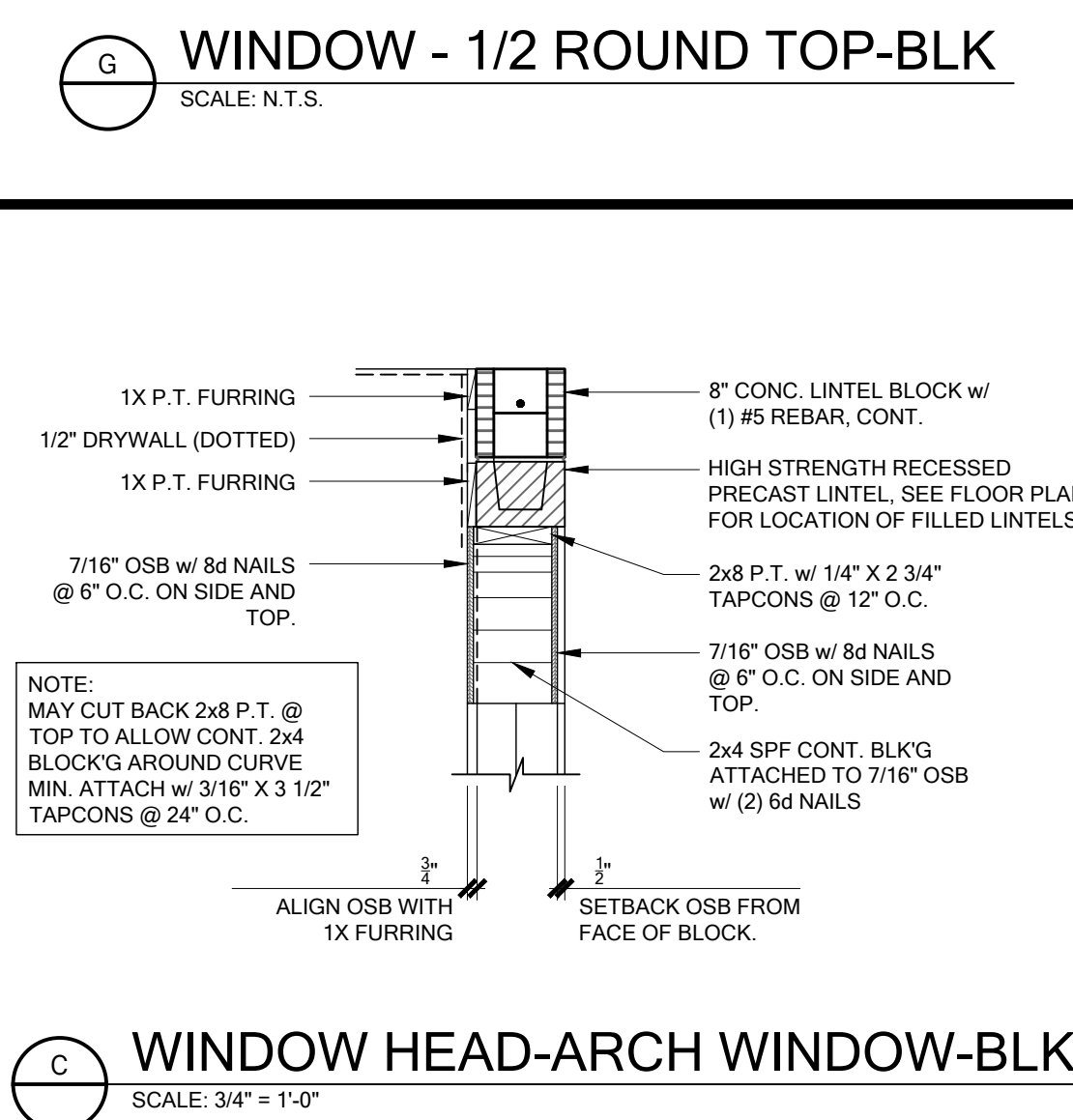
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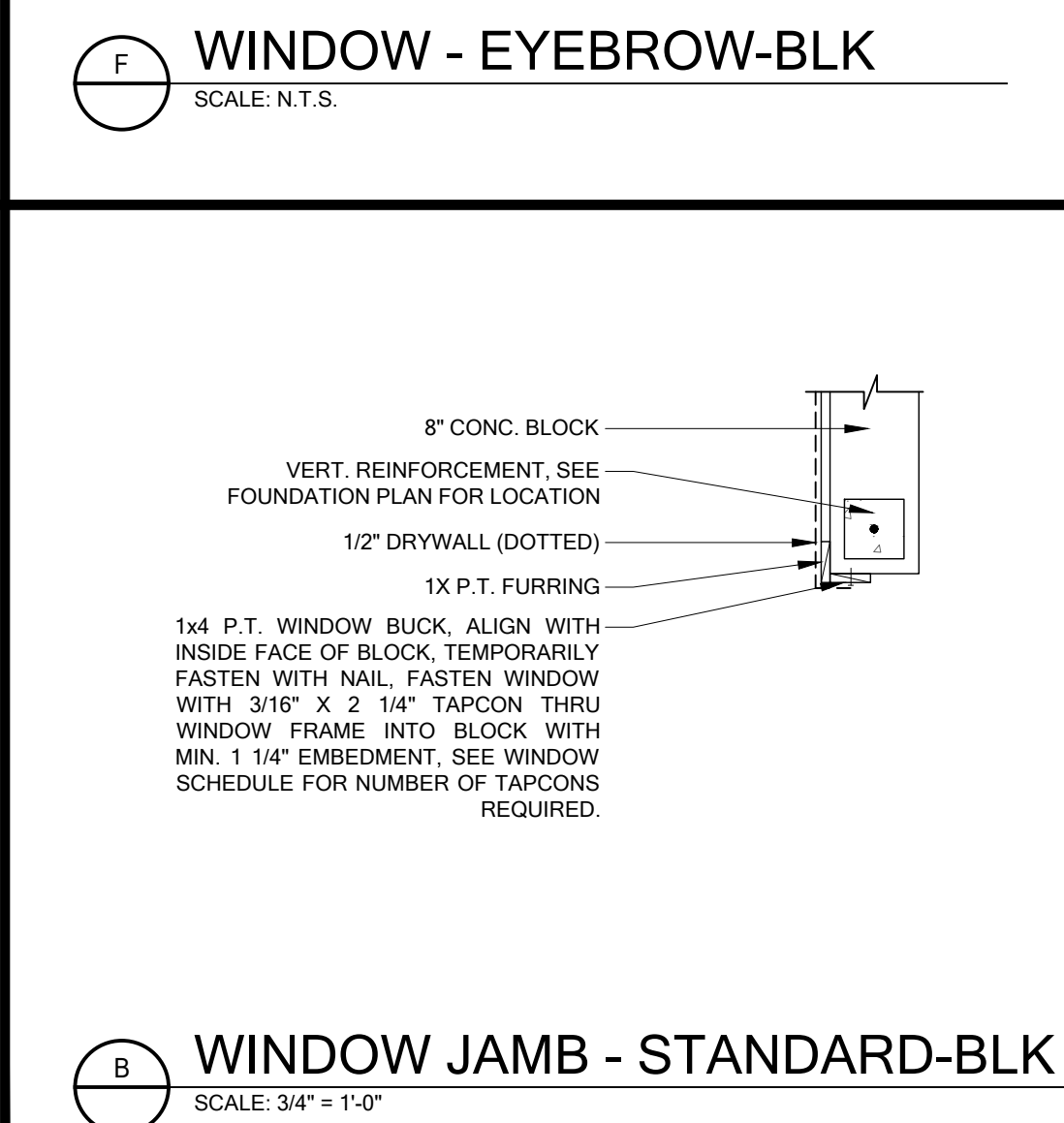
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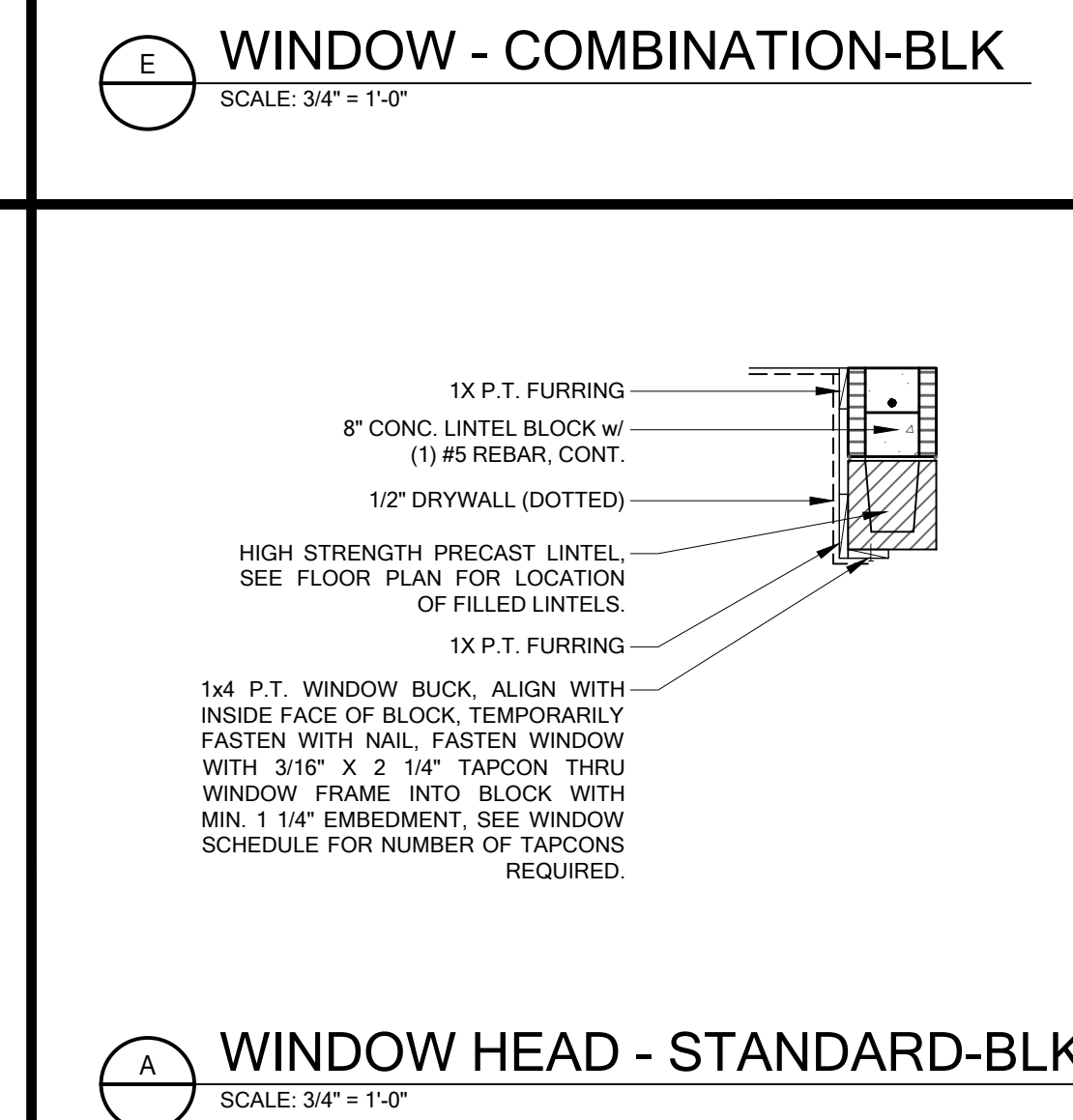
D



C



B



A

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To the best of the Engineer's knowledge, information and belief, the structural plans and specifications contained within these drawings comply with the Florida Building Code 8th Edition (2023) Residential. Engineer's signature and seal is only for the structural engineering portions of the drawing pages bearing Engineer's signature and seal.

CA No. 9161 AA26003115

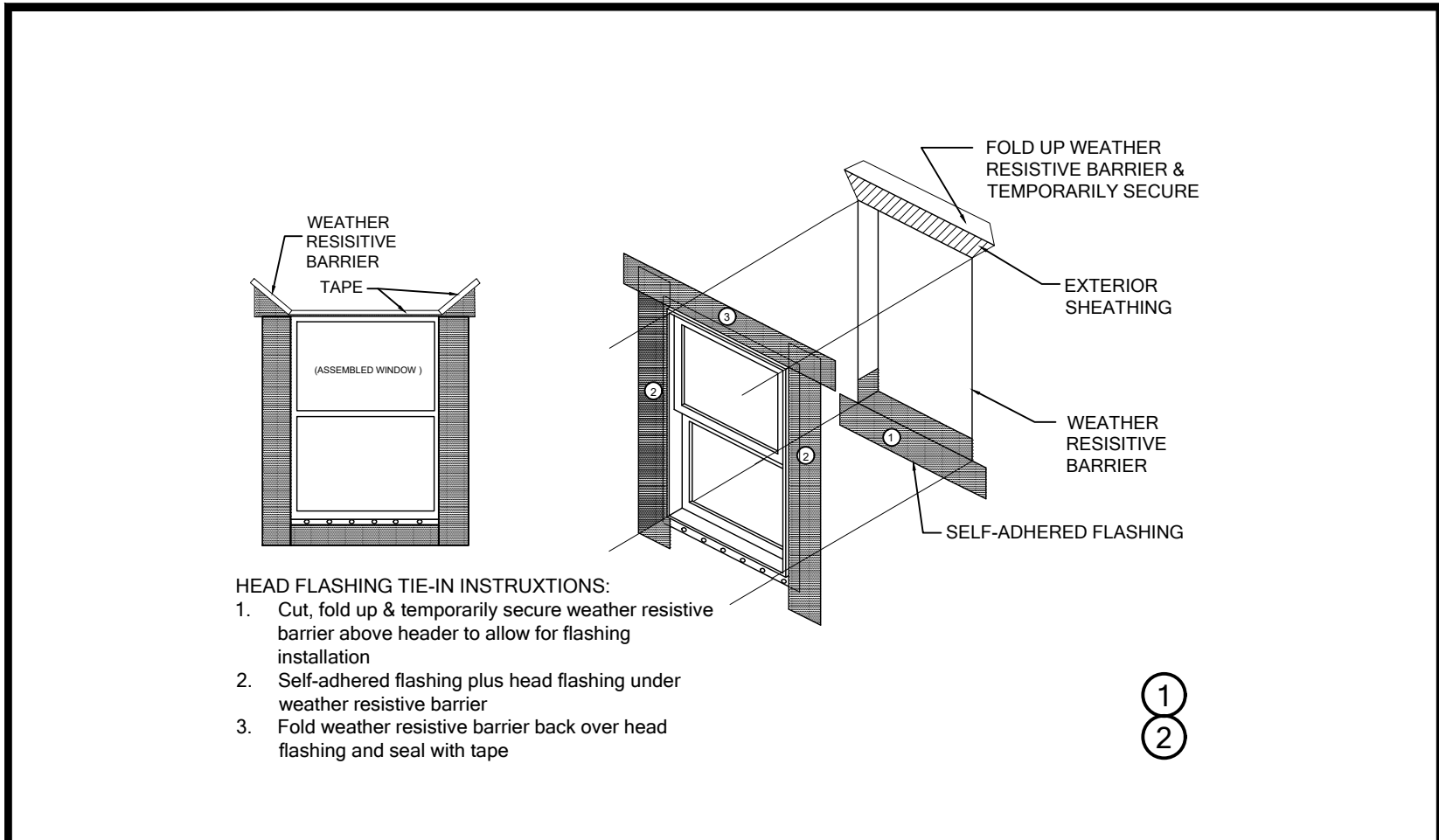
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258 Southhall Lane, Suite 200
Maitland, Florida, 32751
(407) 880 2333

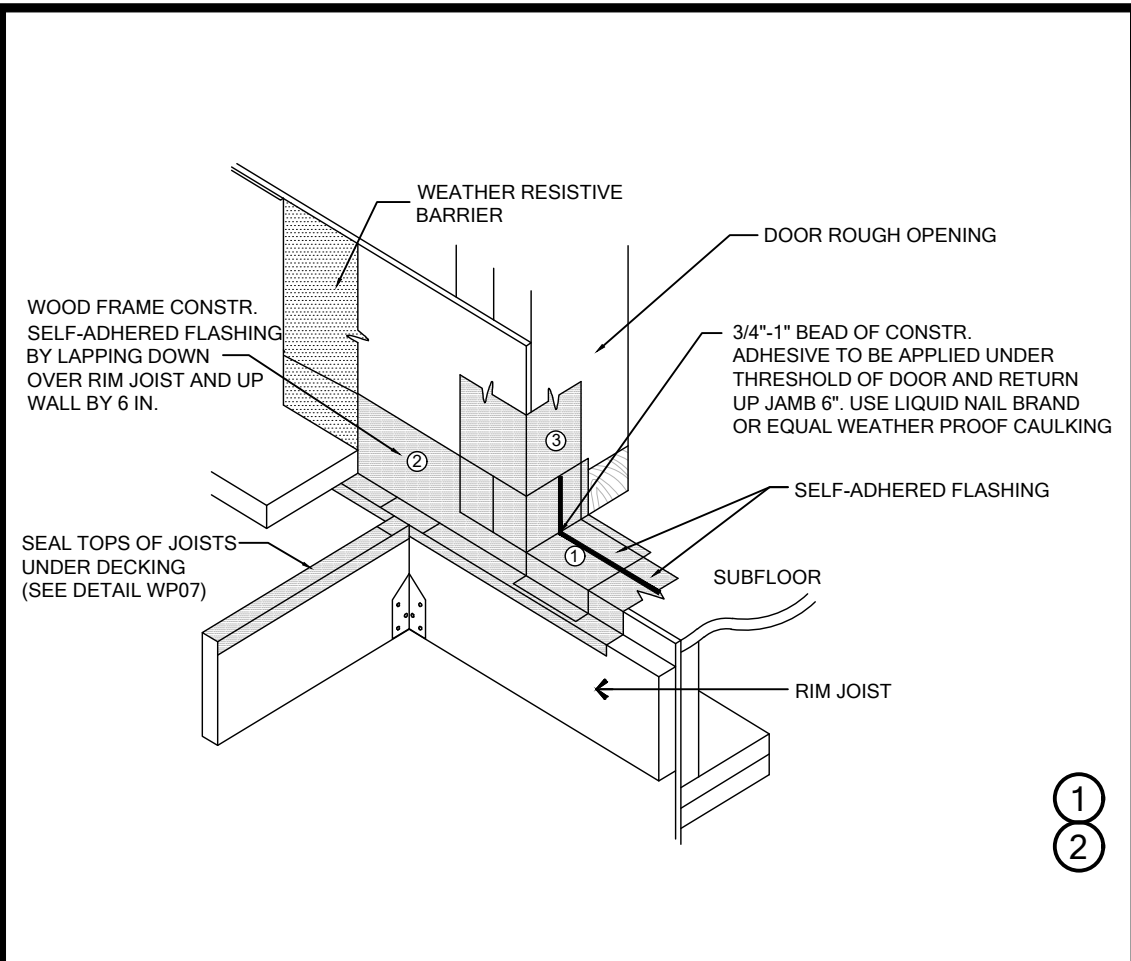
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3999 West First Street
Sanford, FL 32771
(407) 902-9871

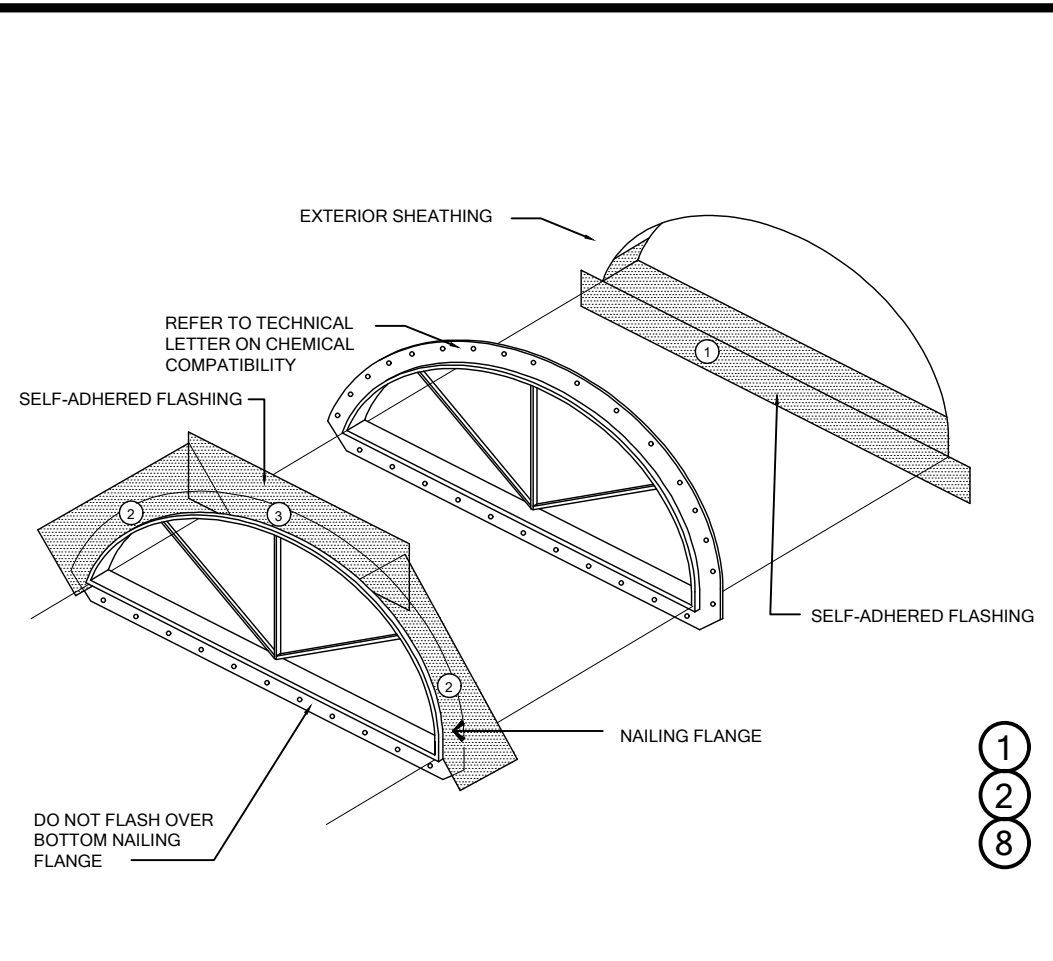
Community: Forest Cove	Garage Side: Right	Plan Name: Livorno	Elev - B
Lot: 9	Block:	Address: TBD Sw Cadence Glen	Lake City, FL 32024
Job no. 9FC00901	Renaissance Series		
Reference No. 25-00446	Sheet		
SD-W			
DETAILS			



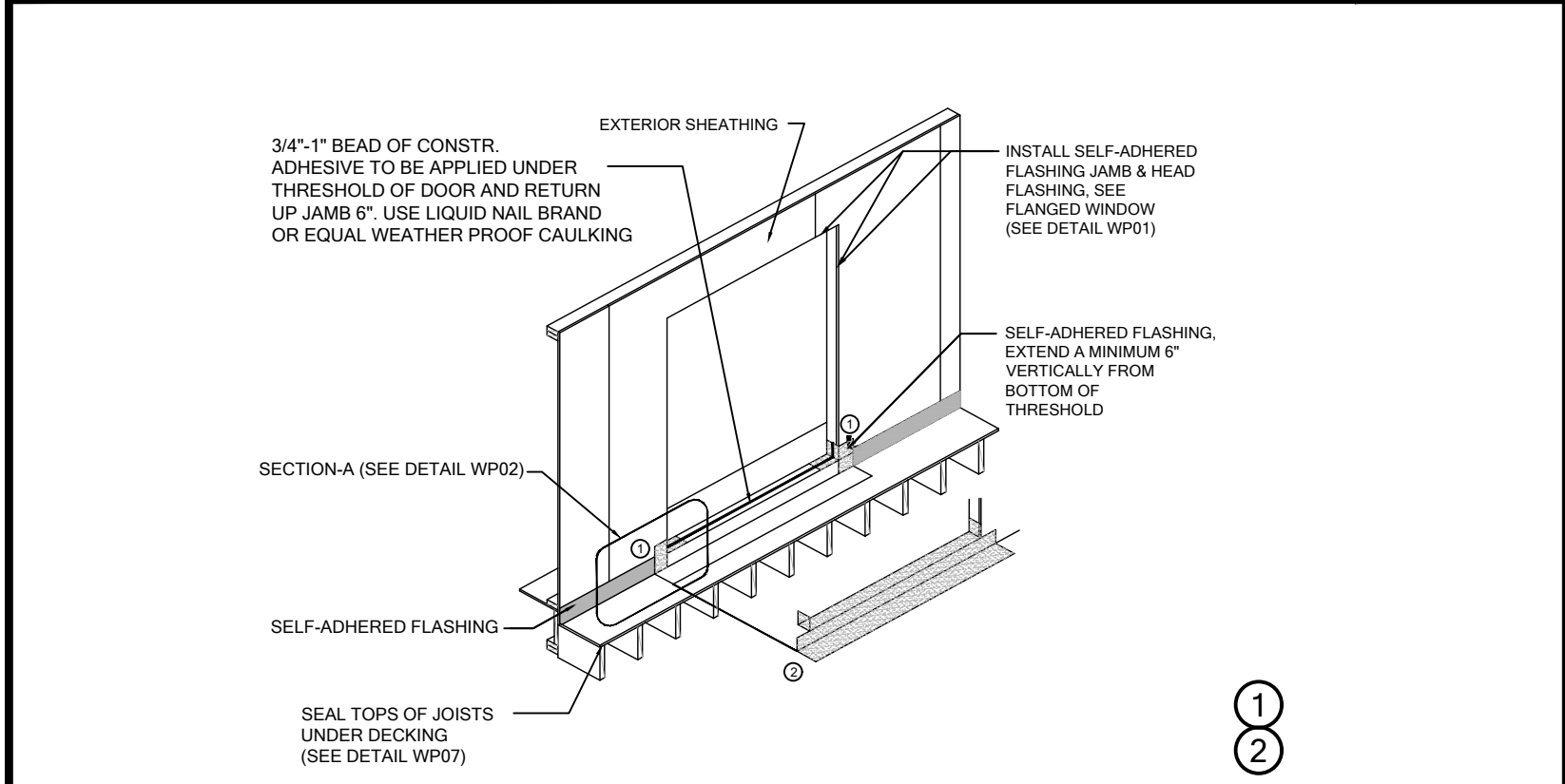
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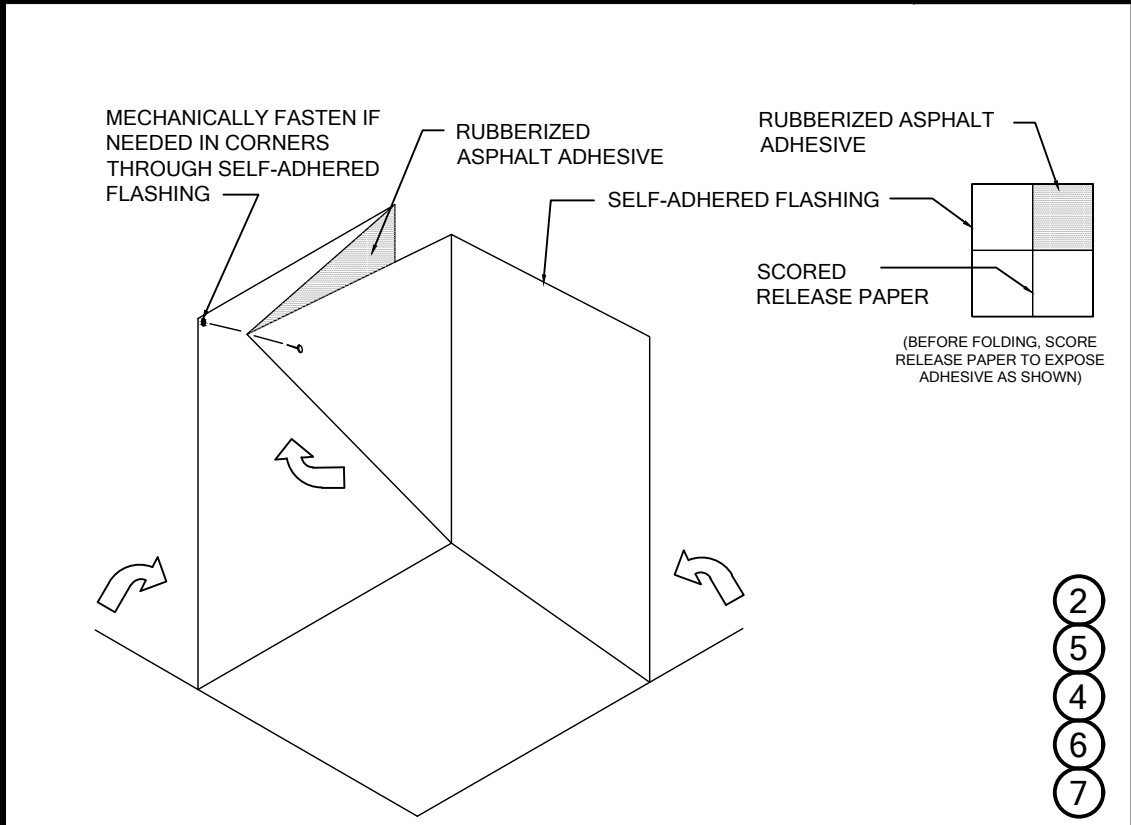
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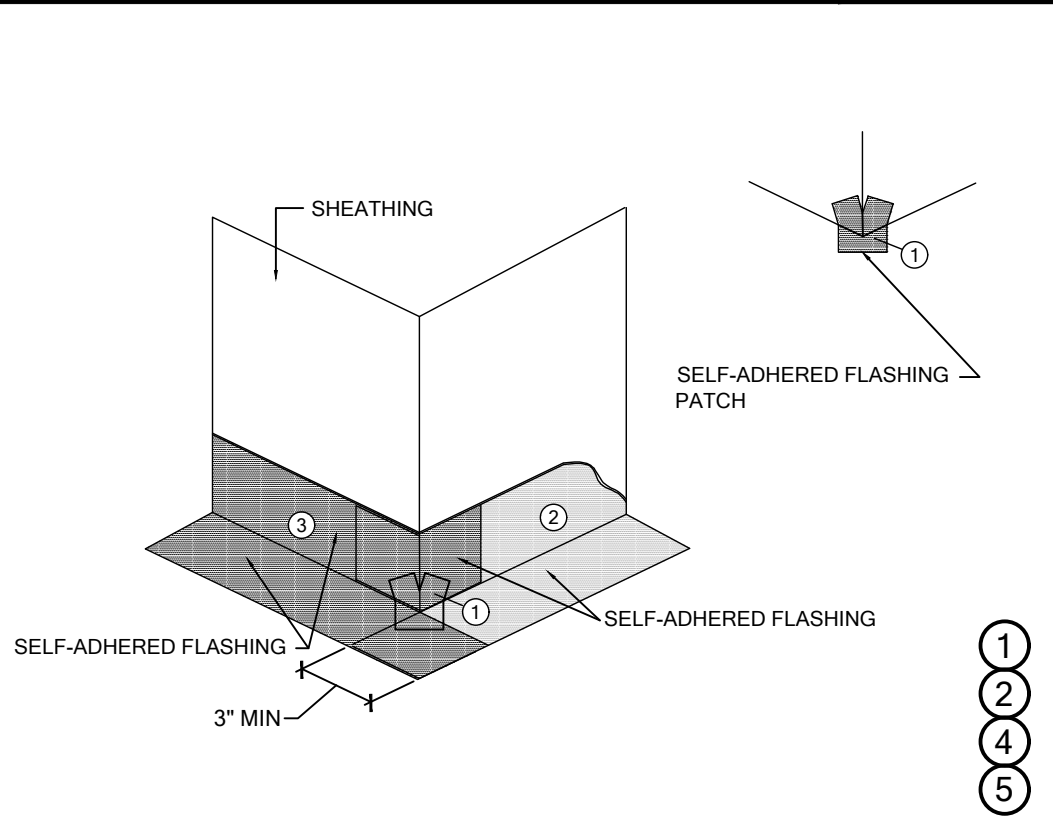
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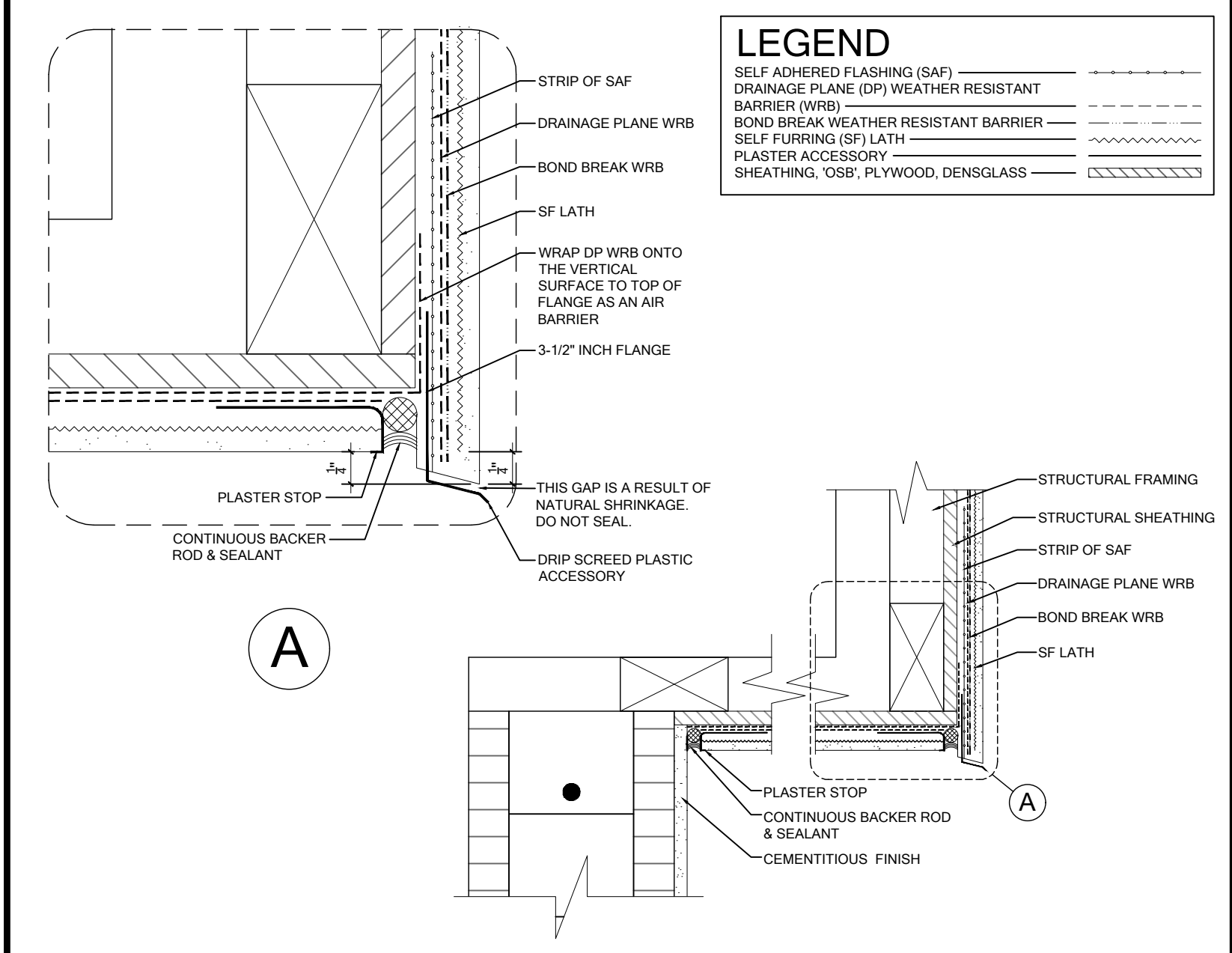
WP04



WP05



WP06



WP07

SELF-ADHERED FLASHING PRODUCTS DETAILS

WATER RESISTIVE BARRIERS ARE REQUIRED BEHIND STUCCO. AS PER FBC-R (CURRENT EDITION)

Detail Instructions
Refer to the number marked as (#) in each detail that corresponds to the numbered items in the list of instructions below:

1. Install self-adhered flashing in order as shown by numbers
2. Install flashing and weather resistive barrier to form water shedding laps
3. Self-adhered flashing can be substituted for building paper
4. Split the release paper using the ripcord (Split release on demand, embedded in the adhesive layer) - for ease of installation and to minimize scoring cuts
5. Remove all release paper per standard installation instructions and adhere to substrate using a square piece of flashing material (6" x 6" Minimum)
6. Fold as shown by arrows
7. Angle of corner may vary, adjust folding of the flashing accordingly to fit tight to corner
8. Mechanically fasten as necessary

FLASHING REQUIREMENTS

R703.1 General. Exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.4.

R703.1.1 Water resistance. The exterior wall envelope shall be designed and constructed in a manner that prevents the accumulation of water within the wall assembly by providing a water-resistant barrier behind the exterior cladding as required by Section R703.2 and a means of draining to the exterior water that penetrates the exterior cladding.

R703.2 Water-resistive barrier. Not fewer than one layer of water-resistive barrier shall be applied over studs or sheathing of all exterior walls with flashing as indicated in Section R703.4, in such a manner as to provide a continuous water-resistive barrier behind the exterior wall veneer. The water-resistive barrier material shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to meet the requirements of the exterior wall envelope as described in Section R703.1. Water-resistive barrier materials shall comply with one of the following:

1. No. 15 felt complying with ASTM D226, Type 1.
2. ASTM E2568, Type 1 or 2.
3. ASTM E331 in accordance with Section R703.11.
4. Other approved materials in accordance with the manufacturer's installation instructions.

No. 15 asphalt felt and water-resistive barriers complying with ASTM E2566 shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51 mm), and where joints occur, shall be lapped not less than 6 inches (152 mm).

R703.7.3 Water-resistive barriers Water-resistive barriers shall be installed as required in Section R703.2 and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. The individual layers shall be installed independently such that each layer provides a separate continuous plane and any flashing (installed in accordance with Section R703.4) intended to drain to the water-resistive barrier is directed between the layers.

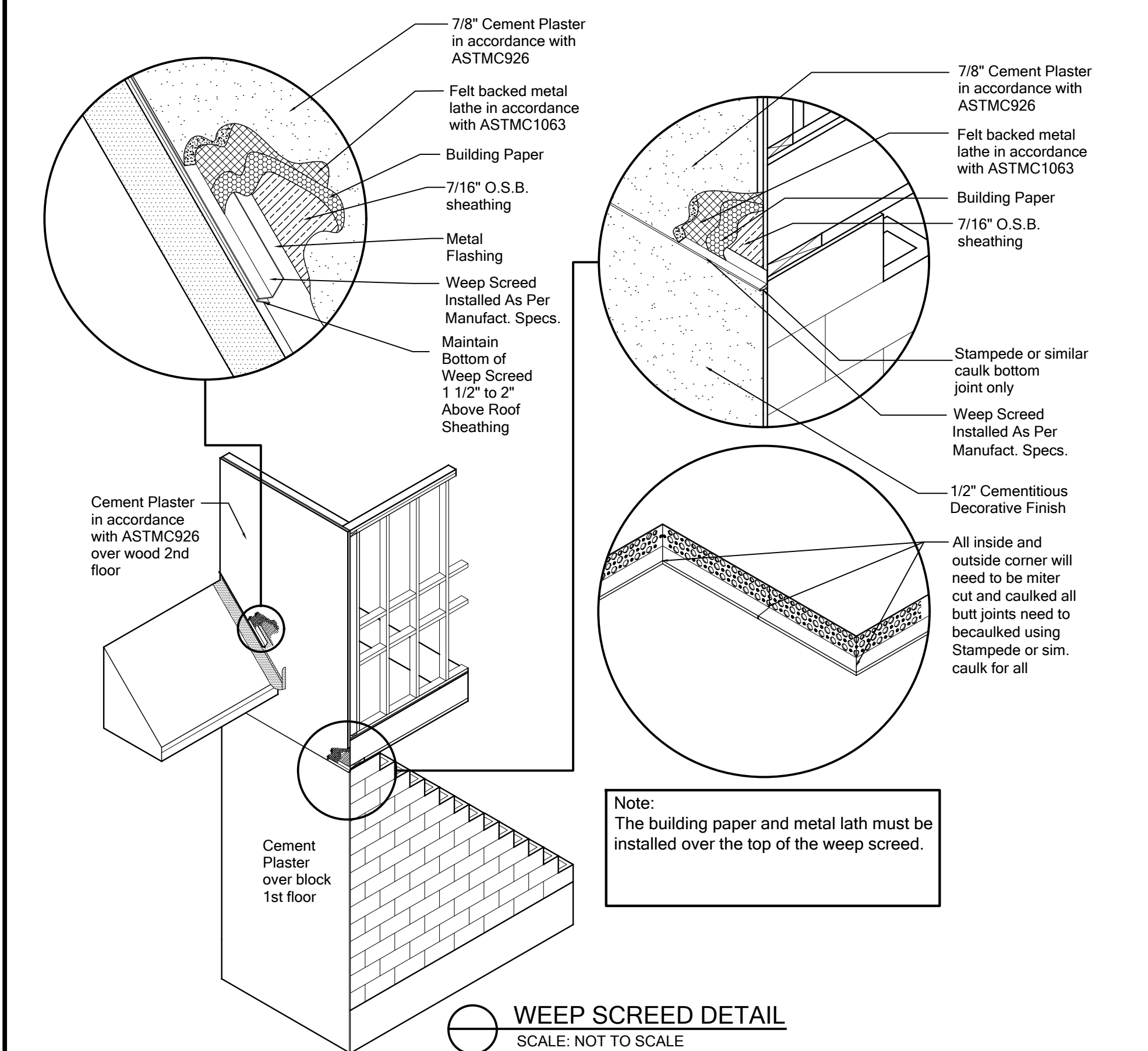
Exception: Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60-minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or designed drainage space.

R703.4 Flashing. Approved metal flashing, vinyl flashing, self-adhered membranes and mechanically attached flexible flashing shall be applied shingle-fashion or in accordance with the manufacturer's instructions. Metal flashing shall be corrosion resistant. Fluid-applied membranes used as flashing shall be applied in accordance with the manufacturer's instructions. All flashing shall be applied in a manner to prevent the entry of water into the wall cavity or penetration of water to the building structural framing components.

Self-adhered membranes used as flashing shall comply with AAMA 711. All exterior fenestration products shall be sealed at the juncture with the building wall with a sealant complying with AAMA 800 or ASTM C920 Class 25 Grade NS or greater for proper joint expansion and contraction, ASTM C1281, AAMA 812, or other approved standard as appropriate for the type of sealant. Fluid-applied membranes used as flashing in exterior walls shall comply with AAMA 714. The flashing shall extend to the surface of the exterior wall finish. Approved flashings shall be installed at the following locations:

1. Exterior window and door openings. Flashing at exterior window and door openings shall extend to the surface of the exterior wall finish or to the water-resistive barrier complying with Section 703.2 for subsequent drainage. Mechanically attached flexible flashings shall comply with AAMA 712. Flashing at exterior window and door openings shall be installed in accordance with one or more of the following:
 - 1.1 The fenestration manufacturer's installation and flashing instructions, or for applications not addressed in the fenestration manufacturer's instructions, in accordance with the flashing or water-resistive barrier manufacturer's instructions. Where flashing instructions or details are not provided, pan flashing shall be installed at the sill of exterior window and door openings. Pan flashing shall be sealed or sloped in such a manner as to direct water to the surface of the exterior wall finish or to the water resistive barrier for subsequent drainage. Openings using pan flashing shall incorporate flashing or protection at the head and sides.
 - 1.2 In accordance with the flashing design or method of a registered design professional.
 - 1.3 In accordance with other approved methods.
 - 1.4 In accordance with FMA/AAMA 100, FMA/ AAMA 200, FMA/WDMA 250, FMA/AAMA/ WDMA 300, FMA/AAMA/WDMA 400 or FMA/AAMA/WDMA 2710.
2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.
3. Under and at the ends of masonry, wood or metal copings and sills.
4. Continuously above all projecting wood trim.
5. Where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction.
6. At wall and roof intersections.
7. At built-in gutters.

THESE DETAILS ARE GENERIC AND MEANT TO SHOW GENERAL FLASHING AND WATERPROOFING METHODS TO BE USED.



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To the best of the Engineer's knowledge, information and belief, the structural plans and specifications contained within these drawings comply with the Florida Building Code 8th Edition (2023) Residential. Engineer's signature and seal is only for the structural engineering portions of the drawing pages bearing Engineer's signature and seal.

CA No. 9161 AA26003115

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MARONDA Homes
3999 West First Street
Sanford, FL 32771
(407) 902-9871

Community:	Forest Cove	Garage Side:	Right
Plan Name:	Livorno	Elev - B	
Lot:	9	Block:	
Address:	TBD Sw Cadence Glen Lake City, FL 32024		
Job no.	9FC00901	Renaissance Series	

Reference No. 25-00446

Sheet **WP**

WATERPROOFING

Overdriven Fasteners in ZIP System® Sheathing

Technical Tip

Nails used to attach ZIP System sheathing to supporting framing members may occasionally penetrate beyond the face of the ZIP System panels. An ideal situation would be where fastener heads are flush with the panel surface. For this reason, the manufacturer of the fasteners used in ZIP System sheathing should be consulted to determine if the fasteners used are designed to be installed through the sheathing and into a framing member like wall studs or joists, with the fastener head penetrating into the integrated moisture barrier.

For roof applications, ZIP System sheathing is code recognized in ICC-ES ESR-1473 as a combination roof sheathing and roof underlayment. When used on a wall, ZIP System sheathing is code recognized in ICC-ES ESR-1474 as a combination wall sheathing, air barrier and water-resistive barrier. Both International and Residential Building Codes specify specific fastener type, size and spacing when attaching wood sheathing to framing members. The fastener type and spacing requirements listed in the codes are based on the assumption that fasteners are installed flush with the sheathing surface. Due to variations in materials and limitations on equipment, this may be difficult to achieve in some situations. According to the TECO Fresh Tip, *Reduction in Shear Capacity Due to Overdriven Fasteners*, shear capacity could be reduced up to 20% depending on the depth and amount of fasteners that are overdriven. Please refer to technical bulletins published by APA and TECO at www.apa-direct.com and tech.bulap.com. For more information about fastener shear capacity, visit www.apa-direct.com. Consult with your local building official or design professional for any additional railing that may be required due to overdriven fasteners.

ZIP System Sheathing has been tested against water penetration in both laboratory and field conditions using standard ASTM levels of specified pressures. Panels were tested with overdriven fasteners at various depths and then compared with panels that were installed with fastener heads flush. The panels with overdriven fasteners satisfied the same performance requirements as the panels installed with fastener heads flush. Overdriven fasteners in ZIP System sheathing do not reduce the water-resistance of ZIP System panels that are attached with overdriven fasteners will not void the ZIP System warranty.

Although overdriven fasteners do not affect ZIP System sheathing's ability to resist moisture, it may reduce the shear capacity of the fastener. Overdriven fasteners can reduce the amount of wind or earthquake loading a shear wall is designed to resist. This possible reduction in shear capacity is not a concern in ZIP System sheathing products with structural OSB® or plywood and 6 **MC**® specific to ZIP System products.

Please contact Huber Engineered Woods at 800.933.9220 with any questions or comments.

Huber Engineered Woods, ZIP® and ZIP System® are trademarks, names, marks, logos, and/or service marks of Huber Engineered Woods, Inc. © 2012. All rights reserved. For more information, visit www.huberwoods.com.

EVALUATION REPORT

Number 544

Originally Issued: 10/20/2017

Revised: 05/14/2024

Valid Through: 10/31/2024

handling or destruction work, also shall be sealed. Panel surfaces shall be dry and free from any significant presence of particles, sawdust, or other debris, or protrusions prior to sealing. The tape is available in rolls of varying lengths and widths and, when used for sealing panel seams, shall be a minimum of 3/8 inch (9.5 mm) wide. The tape shall be centered within $\pm \frac{1}{2}$ inch (12.7 mm) of all panel edges seen from the exterior side of the wall. The ZEP System® Flexible Flashing Tape is a self-sealing, one-piece, tongue-and-groove edge profile, and with a $\frac{1}{8}$ -inch-thick (15.9 mm) panels.

5.0 IDENTIFICATION

Huber Engineered Woods ZEP System® Wall Sheathing is identified by the Huber Engineered Woods name and trademark, the product name, the evaluation report number (ER-544), and the DQC required certification mark for wood structural panels. The DQC Uniform Evaluation Mark for Wood Mark of Conformity may also be used as shown below:

3.2.3 Substrate Preparation for Application of Cement Plaster or Adhered Masonry Veneer: Figures 1, 2, and 3 depict stucco or adhered stone wall assembly details when utilizing ZEP System wall sheathing in accordance with the IRC or IBC.

3.3 Air Permeability: A cock compliant air barrier assembly consisting of ZEP System Wall Sheathing panels installed with minimum girthly 2x4 studs spaced at 16 inches (406 mm) maximum of 24 inches (610 mm) on center and sheathed with minimum $\frac{1}{2}$ -inch-thick (11.1 mm) ZEP System® Wall Sheathing panels, fastened with 2-inch-long (51 mm) 6d common nails, spaced at 6 inches (152 mm) on center at the perimeter and 12 inches (305 mm) on center in the field. The joints between the panels shall be sealed with ZEP System® Flexible Flashing Tape. The air barrier assembly has an air leakage rate of 0.0001 cfm/ft² (0.0005 L/s/m²) and a pressure differential of 0.03 inch water gauge (75 Pa) when tested in accordance with ASTM E2357. The assembly meets the requirements for an air barrier assembly in accordance with Section C402.5 of the IECC.

4.0 PRODUCT DESCRIPTION

4.1 ZEP System® Wall Sheathing Panels: The ZEP System® Wall Sheathing panels are a moisture barrier surface laminated on the exterior side. The panels are installed with ZEP System® Flexible Flashing Tape at ZEP System® Liquid Sealant all seams, which allows the panels to be used to meet the water-resistive barrier requirements in Chapter 14 and Section 2510.6 of the IRC and Section R703.3.3 of the IRC DQ. The wood structural panel substrate complies with the DQ PS-2, and is a medium density phenolic-resin resin. The panels have a resistance equivalent to an ASTM E2536 Type II or 60 minute Grade D water-resistive barrier. The ZEP System Wall Sheathing meets the minimum drainage efficiency of 90 percent when tested in accordance with ASTM E2273. The standard-size panels are nominally 4 feet by 8 feet

(1219 mm) in length. Panels longer than 8 feet (2438 mm) are available. The panels are available in $\frac{1}{8}$ inch, $\frac{1}{4}$ inch, $\frac{1}{2}$ inch, and $\frac{3}{4}$ inch performance categories (11.1 mm, 11.9 mm, 12.7 mm, and 15.9 mm) with either a self-sealing or square edge profile, and with a tongue-and-groove edge profile also available for the $\frac{1}{8}$ -inch-thick (15.9 mm) panels.

6.0 SUBSTANTIATING DATA

6.1 ICC-ES Acceptance Criteria for Water-Resistive Membranes: Factory-bonded to Wood-based Structural Sheathing. Used as Water Resistive Barriers (AC308) Approved January 2004.

6.2 Reports of Hygrothermal Analyses.

6.3 ASTM of air leakage rate testing in accordance with ASTM E2357.

6.4 Report of drainage efficiency of exterior wall installation in accordance with ASTM E2273.

6.5 Test reports are from laboratories in compliance with ISO IEC 17025.

7.0 STATEMENT OF RECOGNITION

This evaluation report describes the results of research completed by IAPMO Uniform Evaluation Service on Huber Engineered Woods ZEP System Wall Sheathing to assess conformance to the code requirements in Section 2510.6 of the IRC and serves as documentation of the product certification. Huber Engineered Woods ZEP System Wall Sheathing is produced at locations noted in Section 2.4 of this report under a quality control program with periodic inspection under the supervision of IAPMO UES.

For additional information about this evaluation report, please visit www.iapmo.org or email us at info@iapmo.org.

Page 2 of 6

Originally Issued: 10/20/2017
Revised: 05/14/2024
Valid Through: 10/31/2024

⊗ Originally Issued: 10/20/2017 Revised: 05/14/2024 Valid Through: 10/31/2024

Originally Issued: 10/20/2017
Revised: 05/14/2024
Valid Through: 10/31/2025

Valid Through: 10/31/2022
 Originally Issued: 10/20/2017
 Revised: 05/14/2024
 Valid Through: 10/31/2024

A cross-sectional diagram of a wall assembly. From left to right, the layers are: 2x2 SYSTEM® SHEATHING (green), DRAINAGE SPACE (white gap), WATER-RESISTIVE BARRIER* (grey), LATH (white), EXTERIOR PLASTER LAYER(S) (light grey), ADHESIVE-BACKED FLASHING TAPE (black), WEEP SCREED (white), and FOUNDATION (grey). Arrows point from the labels to their respective layers.

Figure 2 is a cross-sectional diagram of a ZIP System assembly. The diagram shows a vertical wall and a horizontal roofline. The layers, from top to bottom, are: ZIP SYSTEM SHINGLES, DRAINAGE SPACE, WATER-RESISTIVE BARRIER, LAYER, EXTERIOR PLASTER (LATCH), ADHESIVE-SEALED FLASHING TAPE, and WEATHER-RESISTIVE BARRIER. A vertical arrow on the right points upwards, labeled 'DRAINAGE SPACE'. A horizontal arrow on the left points to the right, labeled 'DRAINAGE SPACE'.

The diagram illustrates a cross-section of a wall and its base. The wall assembly consists of several layers: a ZIP SYSTEM SHEATHING, a WATER-RESISTIVE BARRIER, a LIN (likely lath), and EXTERIOR PLASTER LAYER(S). An ORIENTED-BACKED FLASHING TAPE is applied at the base of the wall. Below the wall is a DEEP SCREED, which is supported by a FOUNDATION.

ZIP SYSTEM® WALL SHEATHING

ZIP SYSTEM® WALL SHEATHING

CSI Sections:
06 16 00 Sheathing
07 25 00 Water Resistive Barriers/Weather Barriers
07 27 00 Air Barriers

LJ RECOGNITION

Huber Engineered Woods ZIP System® Wall Sheathing described in IAPMO UES Evaluation Report ER-544 is a satisfactory alternative to the sheathing prescribed in the following codes:

- 2013 and 2020 Florida Building Code; Building (FBC, Building)
- 2013 and 2020 Florida Building Code; Residential (FBC, Residential)
- 2013 and 2020 Florida Building Code; Energy (FBC, Energy)

2.0 LIMITATIONS

Use of the ZIP System® Wall Sheathing recognized in this report supplement is subject to the following limitations:

2.1 Installation shall be in accordance with the 2021 and 2018 International Building Code and the 2021 and 2018 International Residential Code, as applicable, as noted in EB-544, and the manufacturer's published installation

2.2.2 Use of the ZIP System® Wall Sheathing for compliance with the high-velocity hurricane zone provisions of the FBC, Building, and FBC, Residential, has not been evaluated and is outside the scope of this evaluation report

2.4 For products falling under Section (5)(d) of Florida Rule 61G20-3.008, verification is required that the report holder's quality assurance program is audited by a quality assurance entity, approved by the Florida Building Commission (or the building official when the report holder does not possess an approval by the Commission), to provide oversight and

described in this evaluation report to establish continual product performance.

For additional information about this evaluation report please visit www.nature.com/er or email us at info@nature.org

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0925 David Taylor Drive, Suite 300
Charlotte, NC 28262
(800) 933-9720
www.hubertwood.com

CLIP SYSTEM® WALL SHEATHING

CLIP SYSTEM® WALL SHEATHING

SI Sections:

- 06 16 00 Sheathing
- 07 25 00 Water Resistive Barriers/Weather Barriers
- 07 27 00 Air Barriers

00 RECOGNITION

- 2022 California Building Code (CBC)
- 2022 California Residential Code (CRC)

Limitations

1.1 Use and installation shall be in accordance with ER-544, and the manufacturer's published installation instructions, and the California Building Code or California Residential Code, applicable.

3 Special Inspections, where required for use of ZIP System® Wall Sheathing, shall be in accordance with CBC Chapter 17 or Chapter 17A, as applicable for the building.

HUBER ENGINEERED WOODS, LLC
 One Source Square
 10925 David Taylor Drive, Suite 300
 Charlotte, NC 28262
 800.322.0770

www.huberwood.com

www.huberwood.com

07 25 00 Water Resisting Barriers in Cavity
07 27 00 Air Barriers

ABC and LARC Supplement, has been evaluated for resistance and air leakage in accordance with the LARC, ZIP System® Wall Sheathing is recognized under the following codes:

- 2023 City of Los Angeles Building Code (LABC)
- 2023 City of Los Angeles Residential Code (LARC)

Use of the ZIP System® Wall Sheathing recognizes that the ZIP System Supplement is subject to the following limitations:

2.2 Design criteria shall be determined in accordance with the following:

Spec Home	Plan Name:	ZIP System Details	Garage Side:
	Community:		
	Lot:	Block:	Job no.
	Address:		
	▼ Reference No.		
	Sheet:	ZS-DR	

**ZIP ROOF
DETAILS**

TO THE BEST OF THE ENGINEER'S
KNOWLEDGE AND UNDERSTANDING, THE
STRUCTURAL PLANS AND SPECIFICATIONS
COMPLY WITH THE FLORIDA BUILDING
CODE SIGNED AND SEALED FOR THE
STRUCTURAL PORTION OF THIS DRAWING.

NARCONDA
Homes

3983 West First Street | Sanford, FL 32771 | (407) 302-9871

▼	Plan Revisions Date:
1	1-25-21 Revised to 2020 7th Edition codes
2	1-1-24 2023 8th Edition Code
3	
4	
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6	
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Tech: FRAND

3/22/24



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 Maitland, Florida, 32751
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NOTES: 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE...

DESIGN PRESSURE TABLE INSTRUCTIONS: 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16...

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030

TABLE OF CONTENTS: 1. NOTES, 2. CONFIGURATIONS AND DP CHART, 3. INSTALLATION DETAILS, 4. COMPONENTS.

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MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030

TABLE OF CONTENTS: 1. ELEVATION, NOTES AND DESIGN PRESSURE CHARTS, 2. INSTALLATION DETAILS.

MULLIONS INSTALLED WITH MT000022 CLIP

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GRATZ, PA 17030

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650 WEST MARKET STREET
GRATZ, PA 17030-0370

M-2300 - HORIZONTAL MULLION
CONFIGURATIONS AND DP CHARTS

DESIGN PRESSURE TABLE INSTRUCTIONS: 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16...

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GRATZ, PA 17030-0370

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650 WEST MARKET STREET
GRATZ, PA 17030

TABLE OF CONTENTS: 1. NOTES, 2. CONFIGURATIONS AND DP CHART, 3. INSTALLATION DETAILS, 4. COMPONENTS.

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MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030

TABLE OF CONTENTS: 1. ELEVATION, NOTES AND DESIGN PRESSURE CHARTS, 2. INSTALLATION DETAILS.

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030-0370

M-2300 - HORIZONTAL MULLION
CONFIGURATIONS AND DP CHARTS

DESIGN PRESSURE TABLE INSTRUCTIONS: 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16...

MI WINDOWS AND DOORS
650 WEST MARKET STREET
GRATZ, PA 17030-0370

DESIGN PRESSURE TABLE INSTRUCTIONS: 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16...

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030

TABLE OF CONTENTS: 1. NOTES, 2. CONFIGURATIONS AND DP CHART, 3. INSTALLATION DETAILS, 4. COMPONENTS.

DESIGN PRESSURE TABLE INSTRUCTIONS: 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16...

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030

TABLE OF CONTENTS: 1. ELEVATION, NOTES AND DESIGN PRESSURE CHARTS, 2. INSTALLATION DETAILS.

MI WINDOWS AND DOORS, LLC
650 WEST MARKET STREET
GRATZ, PA 17030-0370

M-2300 - HORIZONTAL MULLION
CONFIGURATIONS AND DP CHARTS

DESIGN PRESSURE TABLE INSTRUCTIONS: 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16...

MI WINDOWS AND DOORS
650 WEST MARKET STREET
GRATZ, PA 17030-0370

Product Approval
MULLIONS
FL18504

Maronda Homes
4000 MARONDA WAY
SANFORD, FL 32771
(407) 321-0064

FLORIDA: THIS STRUCTURE WAS DESIGNED IN ACCORDANCE AND MEETS THE REQUIREMENTS OF SECTION R300 OF THE FLORIDA BUILDING CODE, 8th EDITION (2003). RESIDENTIAL ALL CONNECTORS HAVE BEEN CHECKED TO WITHSTAND ALL APPLICABLE LOADS AND DESIGN CRITERIA STATED ON THE COVER SHEET.

Manufacture
MI Windows
Mullion
SHEET: WIN-M1

FLORIDA PRODUCT APPROVAL FL #15332

REV	DESCRIPTION	DATE	APPROVED
A	ADDED FLANGE INSTALLATIONS	12/10/13	R.L.
B	REVISED INSTALLATION DETAILS	08/03/15	R.L.
C	REVISED INSTALLATION DETAILS	06/21/17	R.L.

NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
- WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED, DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR C_d=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- FRAME MATERIAL: EXTRUDED ALUMINUM 6063-T5.
- UNITS MUST BE GLAZED PER ASTM E1300-04/09, WITH SAFETY GLASS.
- APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
- DOOR ASSEMBLIES INSTALLED WHERE OVERHANG RATIO IS EQUAL OR GREATER THAN 1.0 DO NOT REQUIRE WATER INFILTRATION RESISTANCE.
- OVERHANG RATIO = OVERHANG LENGTH/OVERHANG HEIGHT.
- FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- FOR ANCHORING INTO MASONRY/CONCRETE USE 1/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- FOR ANCHORING INTO METAL STRUCTURE USE #10 SWS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- ALL FASTENERS TO BE CORROSION RESISTANT.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW.
- A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
- B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI
- C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
- D. METAL STRUCTURE: STEEL 18GA, 33KSI OR ALUMINUM 6063-T5 .048" THICK MINIMUM

SIGNED: 06/21/2017

MI WINDOWS AND DOORS LLC
650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 430/440 XIX SGO
143" x 96" REINFORCED WITHOUT ADAPTER
FRAME INSTALLATION DETAILS

SCALE: NTS DATE 10/30/13 SHEET 1 OF 9

L. ROBERTO LOMAS P.E.
1432 WOODFORD RD LENOIRVILLE, NC 27023
434-688-0009 lromas@miwindows.com

Luis R. Lomas P.E.
FL No.: 62514

SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION
3 - 9	INSTALLATION DETAILS

REV	DESCRIPTION	DATE	APPROVED
A	ADDED FLANGE INSTALLATIONS	12/10/13	R.L.
B	REVISED INSTALLATION DETAILS	08/03/15	R.L.
C	REVISED INSTALLATION DETAILS	06/21/17	R.L.

NOTES:

- INTERIOR AND EXTERIOR FINISHES, BY OTHERS. NOT SHOWN FOR CLARITY.
- PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 06/21/2017

MI WINDOWS AND DOORS LLC
650 WEST MARKET STREET
GRATZ, PA 17030

SERIES 430/440 XIX SGO
143" x 96" REINFORCED WITHOUT ADAPTER
FRAME INSTALLATION DETAILS

SCALE: NTS DATE 10/30/13 SHEET 5 OF 9

L. ROBERTO LOMAS P.E.
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434-688-0009 lromas@miwindows.com

Luis R. Lomas P.E.
FL No.: 62514

VERTICAL CROSS SECTION
CONCRETE/MASONRY INSTALLATION

FLORIDA PRODUCT APPROVAL FL # 17894.3

ELEVATION

HEAD DETAIL

FLASHING BY OTHERS

7/16" Min Edge Distance

MINIMUM PENETRATION INTO STUD

SHIM AS REQUIRED

DRY-WALL

#6 X 1-5/8" SCREW (SHOWN WITH 3" SHEATHING) MUST ACHIEVE 1-1/4" PENETRATION INTO STUD.

SILL DETAIL

JAMB DETAIL

7/16" Min Edge Distance

2" x 1/4" CLEARANCE (ALL FOUR SIDES)

SIZE AND DESIGN PRESSURE CHART
FASTENER TYPE AND SPACING SHOWN WILL ALLOW DESIGN PRESSURES UP TO +50/-50 UNITS UP TO 52" x 84"
(SEE TEST REPORTS FOR INDIVIDUAL UNIT SIZE AND APPLICABLE DESIGN PRESSURE LIMITATIONS)

MI WINDOWS & DOORS
Gratz, PA

3500HP Single Hung

INSTALLATION INSTRUCTIONS & FASTENER SCHEDULE - FIN -

SCALE: NONE 1" = 1'

ED12-1000SA

NOTES:

- Installation depicted based off of structural test report B9171.01.
- Wood screws shall satisfy the National Design Specification for Wood Construction for material type and dimensional requirements.
- Wood buck installations are assumed 2x S-P-F (G=0.42) or denser. Buck width shall be greater than the window frame width. Tapered or partial width bucks are not allowed. Wood buck shall be secured to the structure to resist all design loads.
- Wood screw lengths shall be sufficient to guarantee 1-1/4" penetration into wood buck.
- Maximum shim thickness of 1/4" permitted at each fastener location. Shims shall be load bearing, non-compressible type.
- These drawings depict the details necessary to meet structural load requirements. They do not address the air infiltration, water penetration, intrusion or thermal performance requirements of the installation.
- Installation shown is that of the test window for the size shown and the design pressure claimed. For window sizes smaller than shown, locate jamb fasteners 2" from corners and no more than 10" on center. Locate head/sill fasteners 2" from corners and no more than 10" on center. Design pressures of smaller window sizes are limited to that of the test window.

FLORIDA PRODUCT APPROVAL FL #17894.4

ELEVATION

HEAD DETAIL

FLASHING BY OTHERS

7/16" Min Edge Distance

MINIMUM PENETRATION INTO STUD

SHIM AS REQUIRED

DRY-WALL

#6 X 1-5/8" SCREW (SHOWN WITH 3" SHEATHING) MUST ACHIEVE 1-1/4" PENETRATION INTO STUD.

SILL DETAIL

JAMB DETAIL

7/16" Min Edge Distance

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MI WINDOWS & DOORS
Gratz, PA

3500HP Single Hung

INSTALLATION INSTRUCTIONS & FASTENER SCHEDULE - FIN -

SCALE: NONE 1" = 1'

ED12-1000SA

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ELEVATION

HEAD DETAIL

FLASHING BY OTHERS

7/16" Min Edge Distance

MINIMUM PENETRATION INTO STUD

SHIM AS REQUIRED

DRY-WALL

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MI WINDOWS & DOORS
Gratz, PA

3500HP Single Hung

INSTALLATION INSTRUCTIONS & FASTENER SCHEDULE - FIN -

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MI WINDOWS & DOORS
Gratz, PA

3500HP Single Hung

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MI WINDOWS & DOORS
Gratz, PA

3500HP Single Hung

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Gratz, PA

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Product Approval

FL #15332

FL #17894

PRODUCT REL. DATE

1-1-24 revised 2023 Code

REVISIONS:

Maronda Homes

4005 MARONDA WAY
SANDHILLS, FL 32771
(407) 321-0064

FLORIDA:
THIS STRUCTURE WAS DESIGNED
IN ACCORDANCE AND MEETS THE
REQUIREMENTS OF SECTION
R301 OF THE FLORIDA BUILDING
CODE - 8th EDITION (2023) ;
RESIDENTIAL ALL CONNECTORS
HAVE BEEN CHECKED TO
WITHSTAND ALL APPLICABLE
LOADS AND DESIGN CRITERIA
STATED ON THE COVER SHEET.

DESIGNED WIND SPEED:

Vult - 160 MPH

V030 - 124 MPH

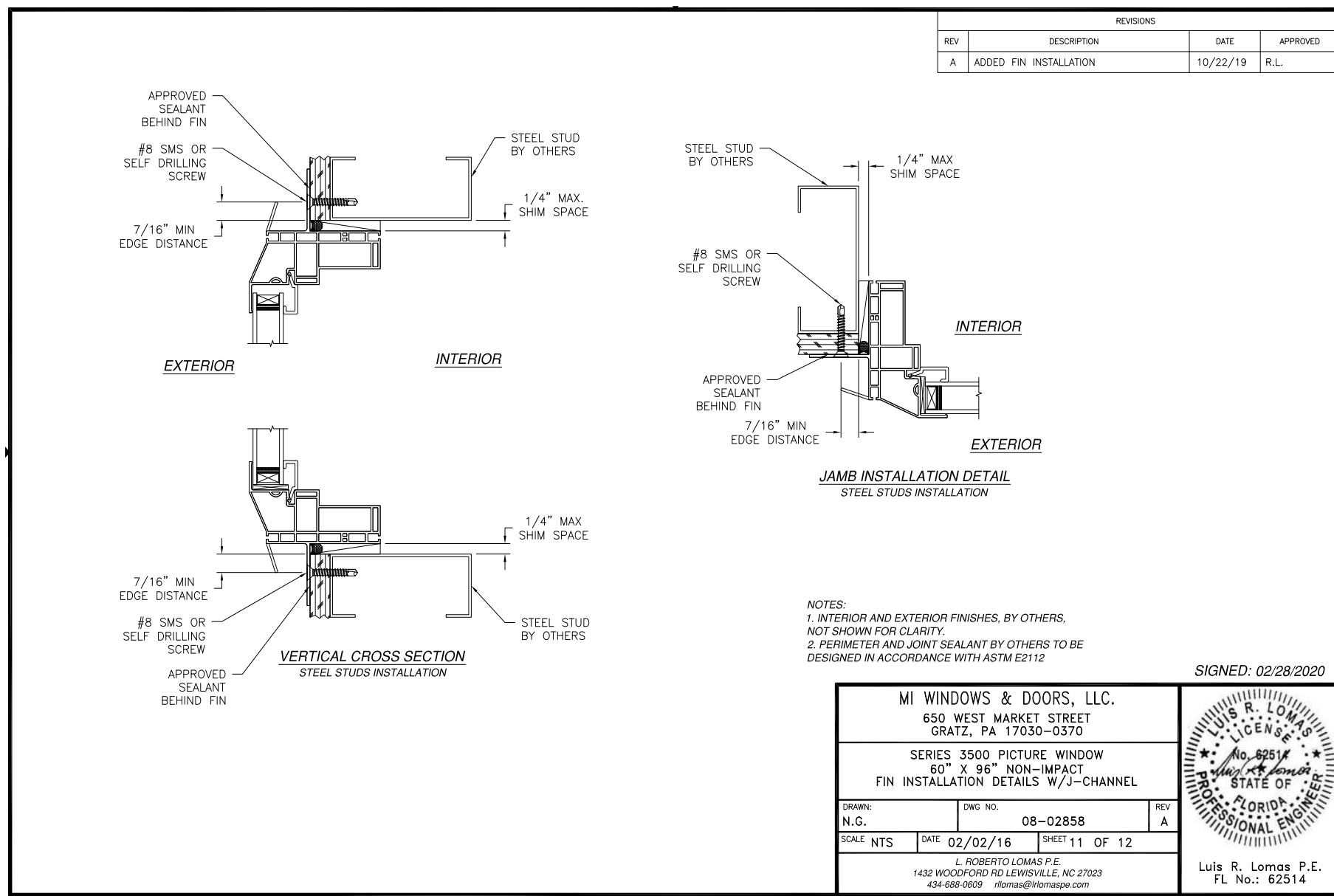
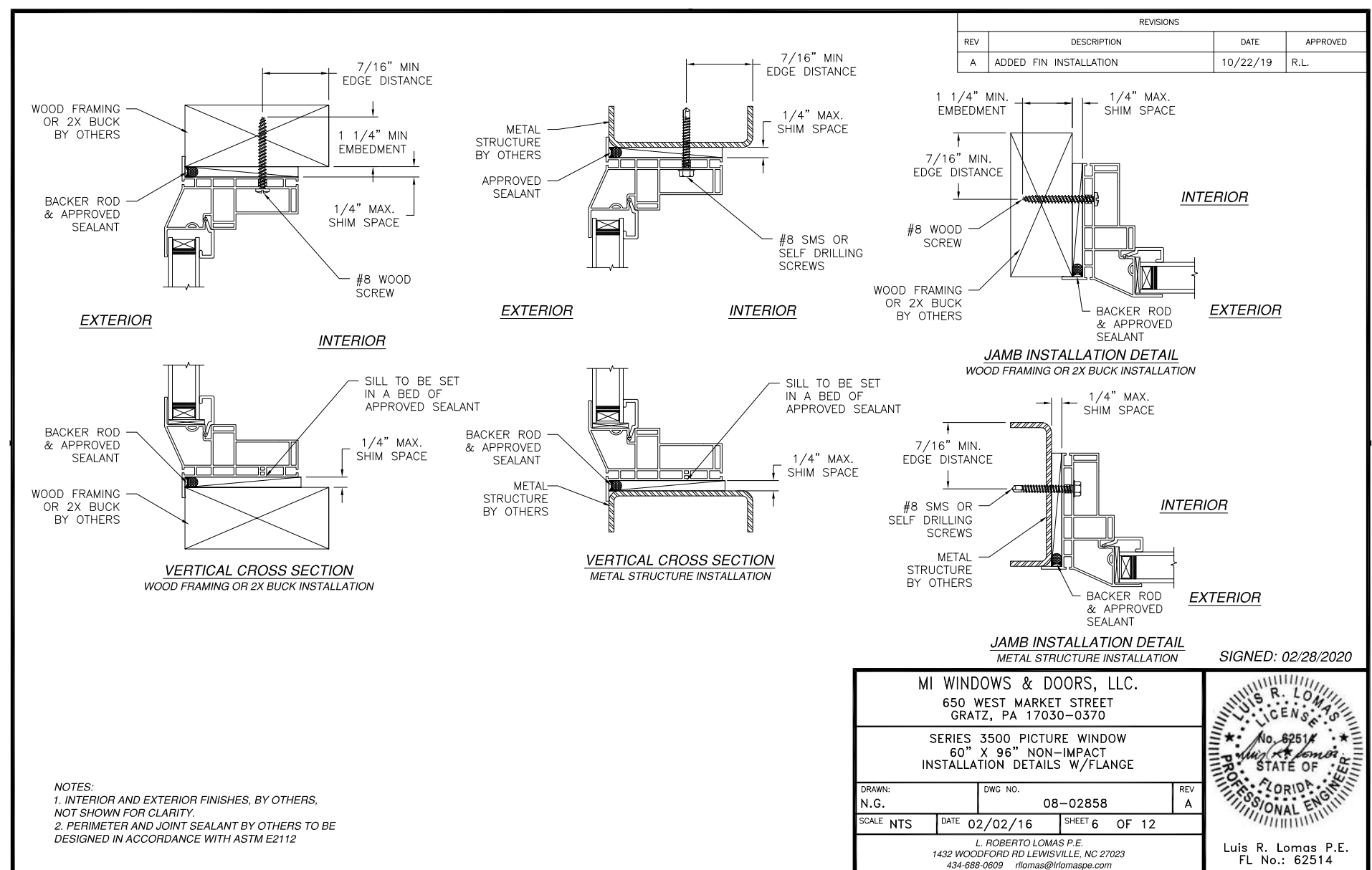
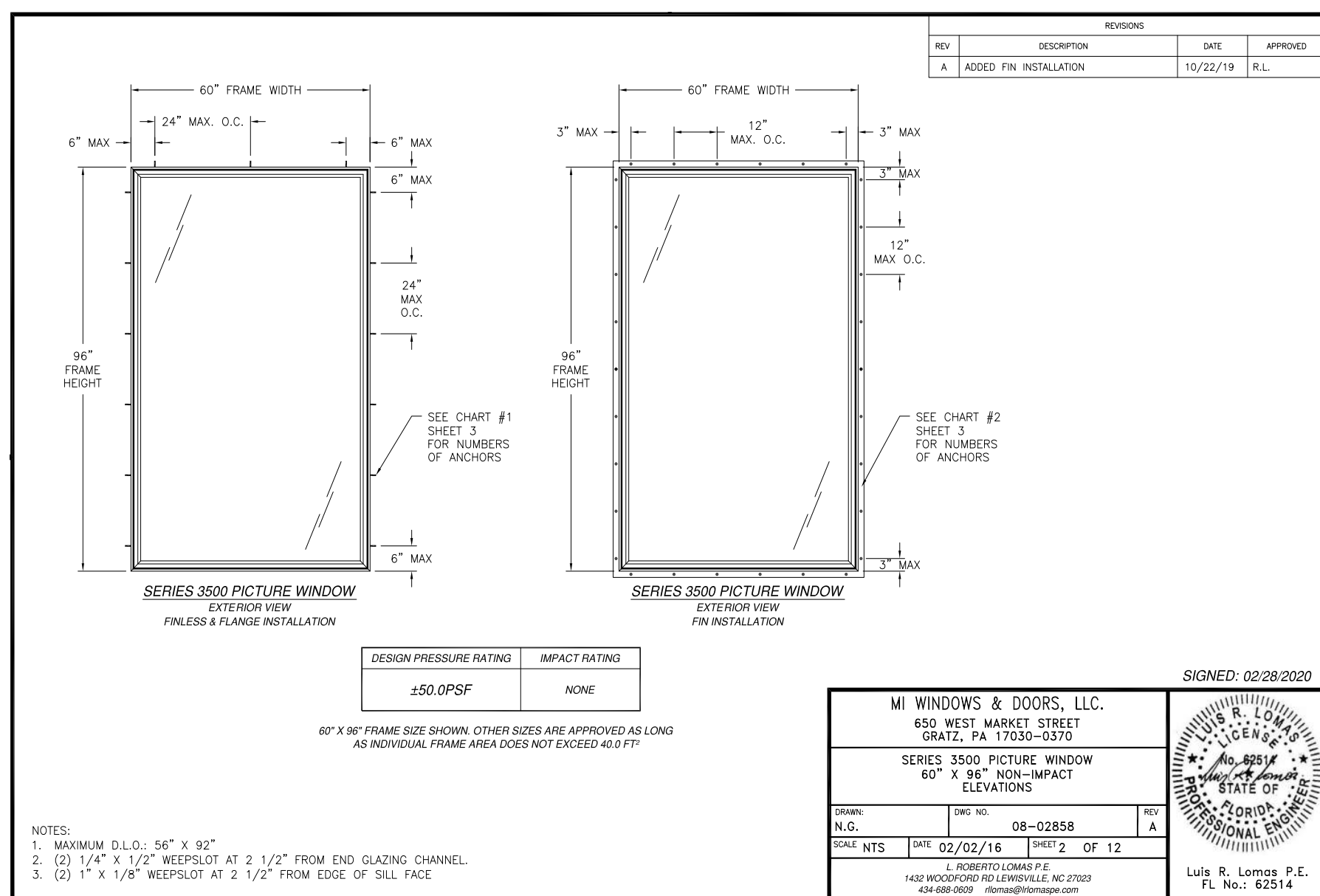
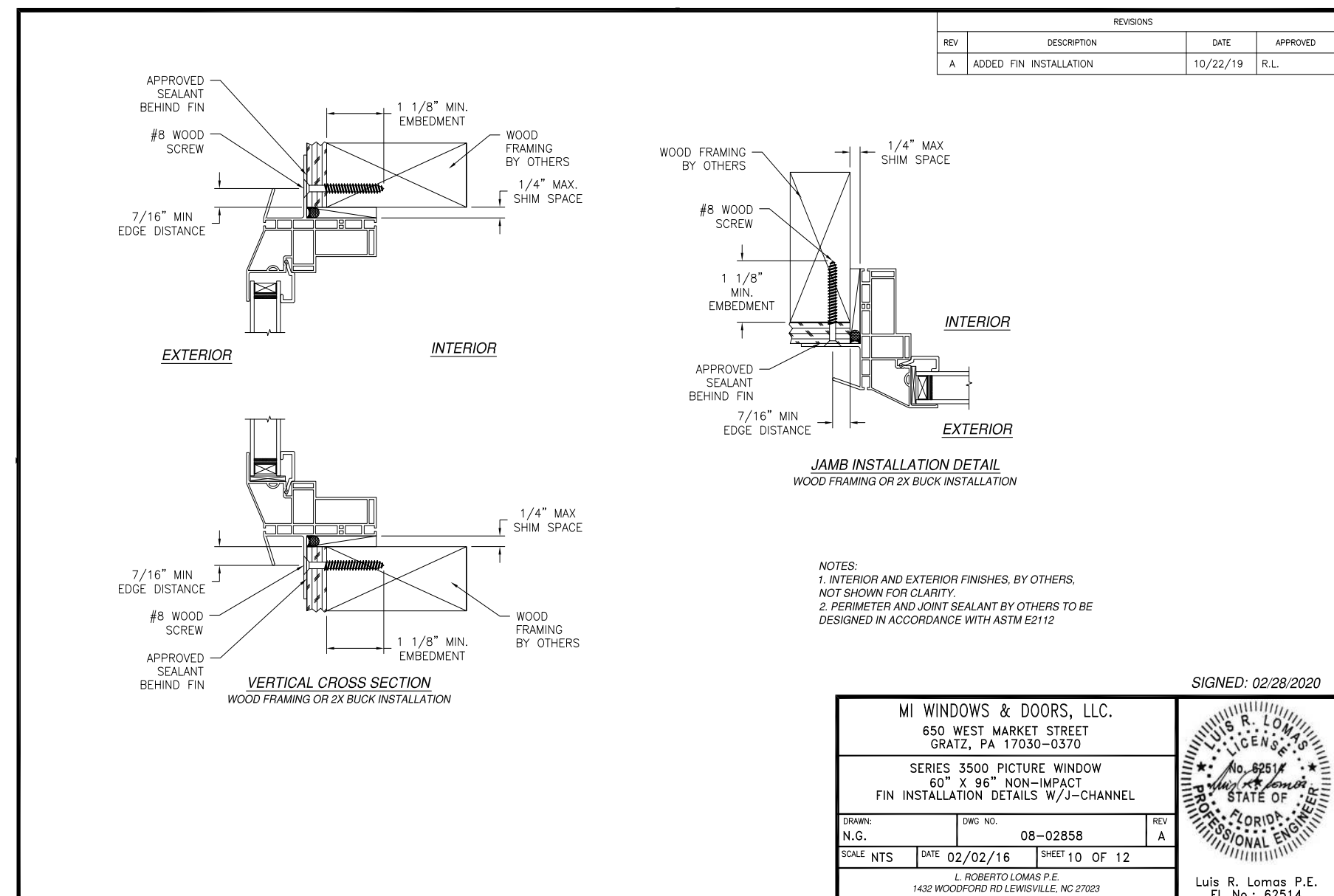
Manufacture

MI WINDOWS SLIDING GLASS
DOORS

MI WINDOWS

SHEET:

WIN-V2



		REVISIONS		DATE	APPROVED
REV	DESCRIPTION			10/22/19	R.L.
A	ADDED FIN INSTALLATION				

		Chart #1																Number of anchor locations required	
		Frame width (in)																	
		24.00	30.00	36.00	42.00	48.00	54.00	60.00	66.00	72.00	78.00	84.00	90.00	96.00					
Frame Height (in)	Height (ft)	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb	Steel Jamb					
24.00	2.0	2	2	2	2	2	2	2	2	2	2	2	2	2					
30.00	2.5	2	2	2	2	2	2	2	2	2	2	2	2	2					
36.00	3.0	2	2	2	2	2	2	2	2	2	2	2	2	2					
42.00	3.5	2	2	2	2	2	2	2	2	2	2	2	2	2					
48.00	4.0	2	2	2	2	2	2	2	2	2	2	2	2	2					
54.00	4.5	2	2	2	2	2	2	2	2	2	2	2	2	2					
60.00	5.0	2	2	2	2	2	2	2	2	2	2	2	2	2					
66.00	5.5	2	2	2	2	2	2	2	2	2	2	2	2	2					
72.00	6.0	2	2	2	2	2	2	2	2	2	2	2	2	2					
78.00	6.5	2	2	2	2	2	2	2	2	2	2	2	2	2					
84.00	7.0	2	2	2	2	2	2	2	2	2	2	2	2	2					
90.00	7.5	2	2	2	2	2	2	2	2	2	2	2	2	2					

		Chart #2																Number of anchor locations required	
		Frame width (in)																	
		24.00	30.00	36.00	42.00	48.00	54.00	60.00	66.00	72.00	78.00	84.00	90.00	96.00					
Frame Height (in)	Height (ft)	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb	4 S Jamb					
24.00	2.0	3	3	3	3	3	3	3	3	3	3	3	3	3					
30.00	2.5	3	3	3	3	3	3	3	3	3	3	3	3	3					
36.00	3.0	3	3	3	3	3	3	3	3	3	3	3	3	3					
42.00	3.5	3	3	3	3	3	3	3	3	3	3	3	3	3					
48.00	4.0	3	3	3	3	3	3	3	3	3	3	3	3	3					
54.00	4.5	3	3	3	3	3	3	3	3	3	3	3	3	3					
60.00	5.0	3	3	3	3	3	3	3	3	3	3	3	3	3					
66.00	5.5	3	3	3	3	3	3	3	3	3	3	3	3	3					
72.00	6.0	3	3	3	3	3	3	3	3	3	3	3	3	3					
78.00	6.5	3	3	3	3	3	3	3	3	3	3	3	3	3					
84.00	7.0	3	3	3	3	3	3	3	3	3	3	3	3	3					
90.00	7.5	3	3	3	3	3	3	3	3	3	3	3	3	3					

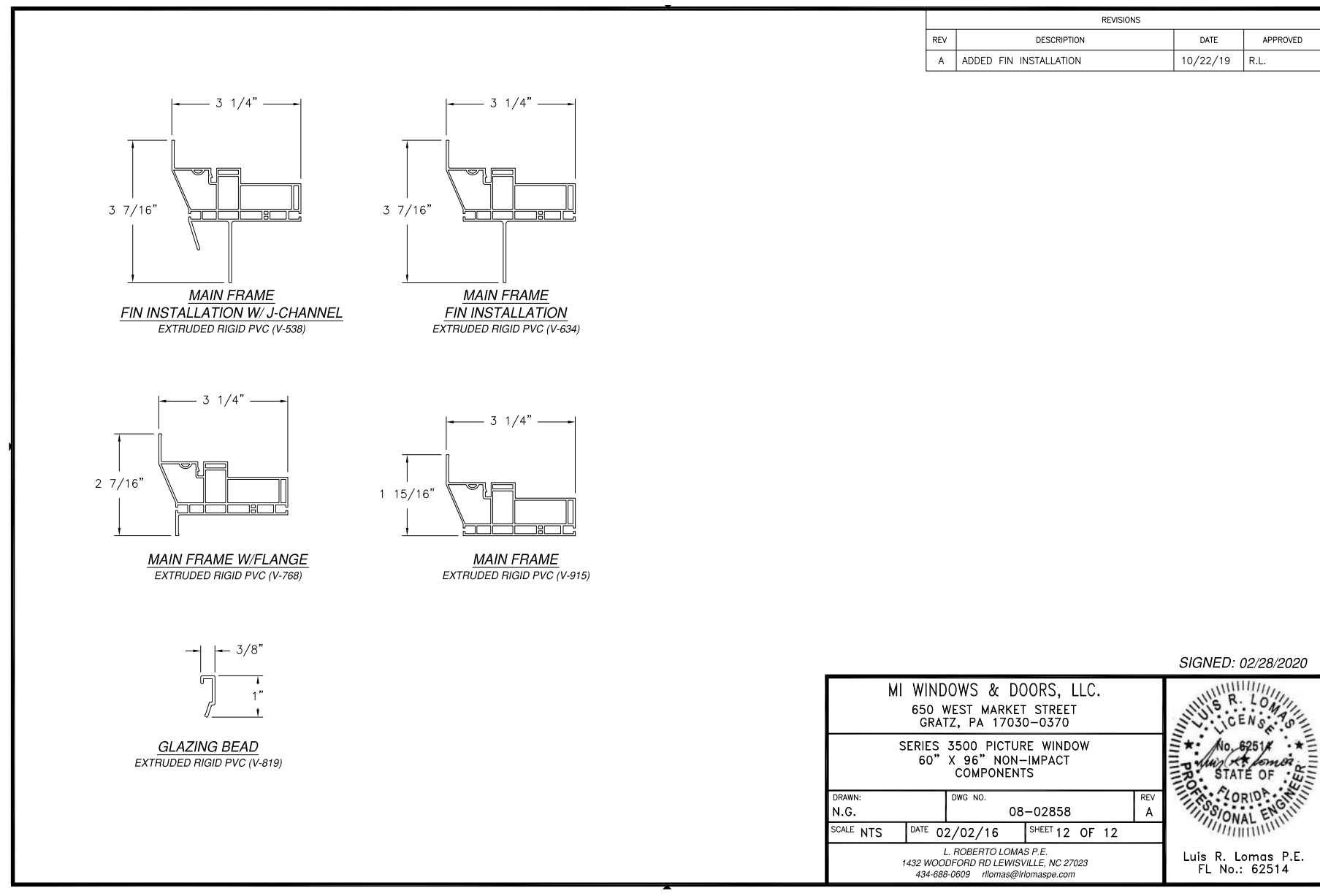
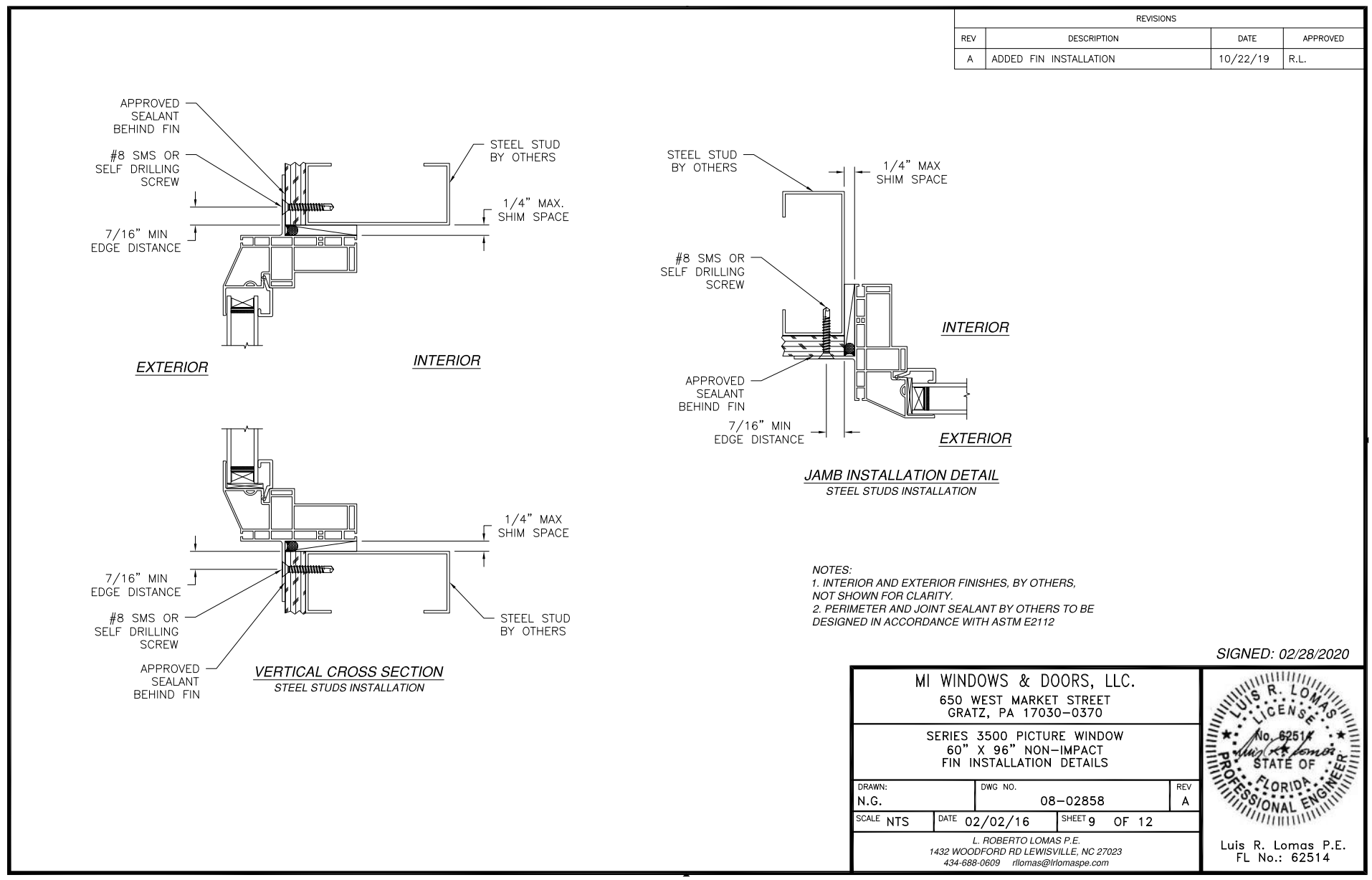
MI WINDOWS & DOORS, LLC.
650 WEST MARKET STREET
GRATZ, PA 17030-0370

SERIES 3500 PICTURE WINDOW
60" X 96" NON-IMPACT
NUMBER OF ANCHORS CHARTS

DRAWN:	DWG NO:	REV A
N.G.	08-02558	
TOTAL NTS	DTE 02/02/16	PRT 5 OF 12

SIGNED: 02/28/2020

Luis R. Lomas R.F.E.



FL GSE